SUMMARY AUDIT REPORT FOR CYANIDE PRODUCTION OPERATIONS

Instructions

- 1. The basis for the finding and/or statement of deficiencies for each Production Practice should be summarized in this Summary Audit Report for Cyanide Production Operations. This should be done in a few sentences or a paragraph.
- 2. The name of the cyanide production operation, lead auditor signature and date of the audit must be inserted on the bottom of each page of this Summary Audit Report.
- 3. An operation undergoing a Code Verification Audit that is in substantial compliance must submit a Corrective Action Plan with the Summary Audit Report.
- 4. The Summary Audit Report and Corrective Action Plan, if appropriate, for a cyanide production operation undergoing a Code Verification Audit with all required signatures must be submitted in hard copy to:

International Cyanide Management Institute (ICMI) 1400 I Street, NW, Suite 550 Washington, DC 20005, USA

- 5. The submittal must be accompanied with 1) a letter from the owner or authorized representative which grants the ICMI permission to post the Summary Audit Report and Corrective Action Plan, if necessary, on the Code Website, and 2) a completed Auditor Credentials Form. The lead auditor's signature on the Auditor Credentials Form must be certified by notarization or equivalent.
- 6. Action will not be taken on certification based on the Summary Audit Report until the application form for a Code signatory and the required fees are received by ICMI from the applicable cyanide production company.
- 7. The description of the operations should include sufficient information to describe the scope and complexity of the cyanide production operation.

Name of Cyanide Production Facility: Cyanco Sodium Cyanide Production Plant
Name of Facility Owner: Cyanco
Name of Facility Operator: Colleen Bronder
Name of Responsible Managers: Colleen Bronder
Address: Chocolate Bayou Plant, Houston area
State/Province: Alvin/Texas Country: U.S.A
Telephone: 832-590-3641 Fax: 713-436-5202 E-Mail:
colleen.bronder@cyanco.com
Location detail and description of operation:

Additional contact person:

Max D. Jones, Director - EHSS & ICMC

Phone: 832 590 3644 Fax: 713 436 5202 max.jones@cyanco.com

Description of operation:

Cyanco International, LLC is part of the international operating Cyanco group. The Cyanco organization has constructed a new plant at the industrial park of the Chocolate Bayou Plant of Ascend Performance Materials at Alvin/Texas. This Ascend plant is producing acrylonitrile as the main product. A co-product of the process is hydrogen cyanide liquid which can be used for the production of sodium cyanide. Cyanco and Ascend have executed long term agreements under which Ascend will supply hydrogen cyanide (99,9 % solution), utilities and services to the new plant. It's capacity is calculated for 55,000 metric tons per year NaCN. The plant produces solid sodium cyanide briquettes and has the capability of shipping product in hopper cars, ISO containers or one metric ton bag/boxes.

The construction work of the new plant has been following the scheduled time-line. The first product NaCN has been brought out on Sept 24th, 2012 (planned: Sept 02nd, 2012). Compared to the basic construction plans, only a few modifications (e.g. installation of demisters on scrubbers) had to be considered. All changes are strictly in line with the permits. So far, the plant produces good quality with high reliability.

Term sheets and service level agreements are defining the different services which are partly mandatory in the context of the industrial zone, such as the service of fire fighting (fire-brigade), emergency response at the Chocolate Bayou Plant area, security service or the service to operate facilities for environmental protection (e.g. deep well disposal).

Specific contracts are regulating the bilateral cooperation between Ascend and Cyanco in operating the new cyanide production plant. The personnel situation is organized in a way that the employees (all together 26 individuals: experienced shift-leaders and trained operators, process engineers and other technical and maintenance staff) are coming from Ascend; they are reporting to the operation managers of Ascend. The control of the operational processes by Cyanco is ensured by the Asset Manager.

The process of planning, constructing and preparing the new plant for operation was supported by the core team of Cyanco's cyanide management. Excellent tools are available, such as the handbook for quality, environment, safety and health (QESH) that fulfils the requirements of the standards (ISO 9001 and 14001, ICMC) as well as Cyanco regulations and Responsible Care guidelines. This manual is completed by additional procedures, working instructions and other documents. Basis of the documentation and a tool to control the documents is the intranet platform CIC (Cyanco Information Centre), a very user friendly medium. For all employees, the documentation is available via CIC. The ESHQ policy of Cyanco includes Guiding Principles of Responsible Care and ICMI. Quality, environmental, health and safety positioning statements are mentioned as well as commitments about customers, neighbours, employees and the public. They are published and communicated to all employees of the company.

The integrated management system of Cyanco is completely in line with the management system of Ascend.

U. Mr. Alinha

Cyanco Production Plant, Houston/TX

Name of Facility

Signature of Lead Auditor

June 04th, 2013_{_}

Auditor's Finding

This operation is		
x in full compliance ☐ in substantial compliance ☐ not in compliance	e *(see below)	
with the International Cyanide Ma	anagement Code.	
* For cyanide production operation Action Plan to bring an operation must be enclosed with this Surimplemented within one year of	ion in substantial compliance in mary Audit Report. The plan	nto full compliance
Audit Company: DQS GmbH; Au Audit Team Leader: Dr. Klinken, Names and Signatures of Other A	Heinz Theo E-mail: okt.kli	inken@t-online.de_
Date(s) of Audit: January 30 th + 3	1 st and April 29 th + 30 th , 2013	
I attest that I meet the criteria for kernel Verification Audit Team Leader, estably and that all members of the audit International Cyanide Management Inst	lished by the International Cyanide team meet the applicable criter	Management Institute ia established by the
I attest that this Summary Audit Rep audit. I further attest that the verifica accordance with the International Cyan Production Operations and using sta environmental audits.	ation audit was conducted in a paide Management Code Verification	professional manner in Protocol for Cyanide
	U. Mr. Michm	
Cyanco Production Plant, Houston/TX Name of Facility	Signature of Lead Auditor	June 30 th , 2012 June 04 th , 2013
Cyanco Production Plant, Houston/TX		June 04 th , 2013
Name of Facility	Signature of Lead Auditor	Date

	esign, construct and operate cyania elease of cyanide.	le production facilities to prevent
Production Practice 1.1:	Design and construct cyanide prosound, accepted engineering pracassurance procedures.	v
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production Practice 1.1

Summarize the basis for this Finding/Deficiencies Identified:

The engineering company to organize and to construct the new cyanide production plant is CDI, an experienced expert in this field. CDI has implemented a field quality control assurance program. All contracts have sections addressing field quality control, using a form with all pertinent construction items. To ensure that every part of the plant was built according to the construction plan the whole NaCN unit was divides into 52 single systems (e.g. lab building or crystallizer). Checklists are completed by subcontractor and witnessed by CDI and, in some cases, the Ascend personnel.

The plant has being constructed in compliance with Ascend specifications for materials of construction. Adequate specifications are used; experiences resulting from other Cyanco operations had been taken into account when planning the new facility. Accepting tests of the different materials were done. CDI construction QA/QC procedures are documented. Finally, turnover books contain QA/QC documentation for construction. Project managers of Cyanco have been joining the daily meetings to control and to follow up the development of the construction phase. A detailed review was conducted regarding materials of construction by the Project Team. The responsible are qualified (e.g. CDI employees: registered professional engineer with high experience; Cyanco: examined engineers with long CN experience).

Pipe specifications and equipment materials are noted on EFD's (Engineering Flow Diagram) and/or on the Piping & Instrumentation Diagram (PID) for the plant, respectively. Safety Instrumented Systems (SIS) have been designed to address hazards identified in Process Hazard Analysis (PHA) and Layers of Protection Analysis (LOPA) process following ISA 84 (Instrument Society of America) for the design of safety instrumented systems.

List of interlocks and process actions are documented and described in detail by interlock database (95 interlocks and 189 process actions are in place). The Delta V control software (Emerson product) includes a safety system for the interlocks by activation via safety logic solver to shut down the process to a safe state independently from its Process Control function.

U. Mr. Llinha

In case of electricity fallout (power outage) the instruments go to fail safe position; a battery backup is in place. Construction and operation of the new facility is based on the Revised Permit By Rule Registration which was prepared by ENVIRON International Corporation at Houston/Texas on December 2011 (Project no. 31-26054B). Redundant level indications and alarms with appropriate controls and interlocks are installed on all vessels and tanks. These installations are included in the list of interlocks mentioned above.

The process area has a concrete surface and is contained within a dike and curbing system. This area is designed to contain a release from process equipment and run-off for up to 12 inches of rainfall. The size of the containment has a dimension to accept the content of the largest tank and the piping equipment in case of leakage without any problem. The plant has been designed for spill prevention in Process Hazard Analysis and containment measures included in the pad design.

Production Practice 1.2:	<u>.2</u> : Develop and implement plans and procedures to opera production facilities in a manner that prevents acciden	
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production Practice 1.2

Summarize the basis for this Finding/Deficiencies Identified:

More than 200 procedures are existing to describe the operation in daily business and to control emergency cases, specific situations or shut-downs as well. These operating procedures are part of the shared documentation with the Ascend documentation system that is fulfilling the requirements of the standards ISO 9001 and ISO 14001 to control documents and records. All anticipating operating conditions were considered.

Specific NaCN emergency procedures are part of this above mentioned collection. Those procedures that were identified to be necessary in the PHA have been included. Consequences of deviation documents are included in the operating procedure manual, available in the control room and on the intranet site.

The NaCN plant utilizes the Management of Change system that is already in place for the Chocolate Bayou site, to integrate the new plant into the existing system. Changes are tracked in the Knowledge Management System (KMS) as a part of the Integrated Management System of Ascend.

Preventive/predictive and periodic maintenance program is being implemented in compliance with the Core Maintenance work practices of Ascend. Planned maintenance is entered into the SAP system (module PM), an IT tool for enterprise resource planning (ERP). The plant uses Emerson Delta V process control system. Each of the process areas has a procedure for monitoring that process area. All instrumentation was checked out during water batching and process simulation. I&E (Instrumentation and Electricity) checked calibration on all instruments prior to installation. Instruments included in SIS are being tested according to interlock check frequency.

The secondary containment area has a sump pump to pump material to a waste tank which is then pumped to the deep well (deep injection technology).

The deep well permit is issued by the Texas Commission on Environmental Quality (TCEQ) on July 7, 2008. This is the permission no. WDW 318 heading "Transmittal of Underground Injection Control Amended Permit". There is no valve from the secondary containment to the plant's outfall. The waste water coming out of the facility is monitored at different control points prior to the deep well. Liquid wastes are disposed of in the permitted deep well. Solid waste is managed by Waste Management (under support by Ascend waste expert) and disposed of off-site (e.g. off-site landfill) in accordance to the applicable rules and regulations. The Chocolate Bayou Plant is cooperating with a professional waste disposal company which is managing waste on site and is able to handle cyanide contaminated waste. All potential wastes and the proper disposal of each have been identified for the unit. The results are summarized under the data file "Waste Profile".

The warehouse is sized to store 30 days of inventory with ridge vents to provide ventilation. All product in the warehouse is stored in sealed containers under safe conditions. Product hoppers are kept under negative pressure and vented to a scrubber system. The ventilation system in the warehouse ensures 12 to 14 turnovers per hour. The staff is wearing personal HCN detectors when working in the operating area. The product is stored in double-layer FIBC packed in plywood boxes under roof in a closed warehouse and kept away from the wet process area. The Chocolate Bayou site operates under the auspices of the United States Coast Guard and the security of the site is described in the Facility Security Plan.

The legal and customer's requirements are regulated in specific procedures for the different types of packaging. Packaging meets all applicable shipping requirements. Loading procedures and checklists ensure packaging is properly loaded and sealed.

<u>Production Practice 1.3</u> :	Inspect cyanide production facili prevent accidental releases.	ties to ensure	their	integrity	and
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production I	Practice	: 1.3	

Summarize the basis for this Finding/Deficiencies Identified:

A walk-through inspection process based on checklists and procedures covering all platforms of the unit is in place. Operators make regular rounds to inspect equipment. Out of service inspection program is in place according to Ascend maintenance work practices (basis of the mechanical integrity program).

Walk-through and out of service inspection programs are in place for secondary containment. RCRA areas (Resource Conservation & Recovering Act) have secondary containment made from coated concrete. Drains to the environment do not exist. A walk-through process and process monitoring are done to ensure that equipment is properly functioning.

These activities are done at least once per shift; this frequency should be sufficient to assure that the equipment is functioning accurately within design parameters. These routine operator rounds are recorded in log sheets. All these above mentioned walk-throughs are summarized in the checklist "NaCN Field Compliance Log". Daily AVO (audio/visual/olfactory) fugitive emission checks and RCRA leak inspections are initiated and documented by those log sheets mentioning leak inspection, open ended lines safety device checks and dedicated flow and record adjustment checks. The processors are well trained to recognize any problem and to react in a sufficient manner. These log sheets indicating date and time of the inspection and the name of the inspector as well. Periodic inspections are done by the Reliability and MTS groups and documented in SAP. Corrective actions will be recorded in SAP.

2. WORKER SAFETY: Protect workers' health and safety from e

<u>Production Practice 2.1</u>: Develop and implement procedures to protect plant personnel from

exposure to cyanide.

x in full compliance with

The operation is

in substantial compliance with Production Practice 2.1

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

An industrial hygiene program has been planned for the NaCN plant. This plan includes area monitors, PPE requirements, personnel monitoring and decontamination. PPE procedures (including PPE decontamination), industrial hygiene exposure monitoring, area HCN monitors and personal HCN monitors help to minimize personnel exposure. The emergency spill and firefighting and medical procedures include PPE requirements and safety precautions for emergency response and waste disposal to prevent secondary exposure.

The plant uses the existing site procedures for System Entry, SP051, as part of the Ascend Chocolate Bayou safety regulations. SP051 describes the opening of material containment systems such as piping, tubing, hoses, vessels etc. and is referring to SP016 (Isolation and Decontamination of Plant Equipment), SP018 (Control of Energy Sources) or SP055 PPE). Lock out – tag out regulations are standard procedures on site. And, the plant uses the existing site procedures for HCN system entry requiring decontamination of equipment, PPE requirements and buddy system.

The NaCN plant utilizes the Management of Change system that is already in place for the Chocolate Bayou site, SP056 (safety procedure).

Processors were involved in the process hazard analysis and processors are reviewing procedures. The operators are involved in Job Safety Analysis and in Process Hazard Analysis as well. HCN vapor monitors are located throughout the unit. Audible and visual alarms are set at 5 ppm.

Cyanco Production Plant, Houston/TX

Signature of Lead Auditor

June 04th, 2013_{_} Date

Name of Facility

Personnel are equipped with personal vapor monitors. Fixed HCN vapor monitors are tested and calibrated as needed on a regular basis. These checks are scheduled and recorded via SAP-PM data base. Plant practice is to calibrate HCN detectors monthly. Records are kept in the SAP system.

Dust collection system is designed for all equipment where dust could exist. The unit is designed to minimize potential for personnel exposure. Supplied breathing air is required for activities involving higher-than-normal potential for HCN or dust exposure.

Employees using the supplied breathing air equipment are trained to wear and to use this equipment; they are running through annual medical fitness tests.

All safety showers are equipped with alarms which enunciate in the control room to notify the colleagues that aid or assistance is necessary.

Processors are required to have radios to keep in contact with the control room.

The NaCN plant has implemented the Ascend Chocolate Bayou Personal Protective Equipment Safety Procedure SP055; this is covering the regulations for changing contaminated clothes. The plant has a washing machine and laundry facility to clean uniforms. Signs are in place to advise personnel of the requirement to enter through control room.

All visitors to the unit must sign in at the control room. Unit orientation includes brief training on chemical hazards and PPE requirements. Proper PPE is required prior to allowing entry to the unit.

The NaCN plant is a no-smoking area. Eating and drinking is prohibited within the process areas.

<u>Production Practice 2.2:</u>	 Develop and implement plans and procedures for rapid and response to cyanide exposure. 	
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production Practice 2.2

Summarize the basis for this Finding/Deficiencies Identified:

The plant has developed emergency procedures for process upsets that might result in cyanide exposures. The plant has also developed emergency procedures for fire-fighting, spills and medical emergency response in accordance to the Ascend format at Chocolate Bayou.

Safety showers and eyewash stations are located throughout the unit where personnel exposure is possible. Fire extinguishers are placed at key locations throughout the unit and are checked on a regular basis.

Procedures for responding to exposure-related medical emergencies are available on the Ascend SharePoint. The emergency response procedures in writing are located in the control room and on the intranet site.

The NaCN plant has fire-fighting, spill and medical emergency equipment in the unit. Tickler files and checklists are developed to ensure that supplies are available and current.

The unit uses the fire/spill emergency notification for the plant and the cyanide detectors to notify the control room where an emergency situation exists. The emergency response equipment is located in cabinets at key locations in the unit. Cabinets are checked regularly to ensure all equipment is present and in working condition. Antidote is stored in the control room.

Cyanco provides the MSDS that they have published for the product. All process piping is labeled with contents and direction of flow. Tanks are identified by tank number; tanks are labeled with name of contents.

Decontamination practices are developed based on exposure risk. Primary containment and PPE are used to prevent skin exposure to cyanide. PPE decontamination is required prior to leaving the process area.

The NaCN unit is staffed with at least one Emergency Response Team member per shift. The surrounding units are also staffed with ERT members. The ERT people are trained and qualified by an external company.

The Chocolate Bayou site has ambulances on site to transport exposed workers to local hospitals. Also, LifeFlight is available. There are two hospitals nearby the Chocolate Bayou Plant: Danbury Hospital and Clearlake Medical Centre. These local hospitals have been given HCN exposure treatment protocol which is also used by the Ascend Medical Department.

The Integrated Contingency Plan (Ascend site) addresses training and drills. Mock emergency drills are to be held on a monthly basis facing different topics and locations. The NaCN plant has utilized the Ascend incident investigation process SP005 (Investigation of ESH incidents) for all incidents including cyanide exposure.

3. MONITORING: Ensure that process controls are protective of the environment.

<u>Production Practice 3.1</u> :	Conduct environmental monitoring to confirm that planned unplanned releases of cyanide do not result in adverse impacts.		01
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production Practice 3.1	

Summarize the basis for this Finding/Deficiencies Identified:

All water including first flush is impounded and sent to intermediate storage and then to deep well injection. The water to deep well is under control (contained, managed, monitored) and should not violate limits. There is no direct discharge to surface water. The process is designed with slab and containment with curbs and dikes to assure that any cyanide contaminated water is impounded and disposed of in the deep well so that groundwater monitoring is not necessary. The site's industrial ground water requirements are governed under Title 30 Part 1 Chapter 350 Subchapter D of the Texas Administrative Code (TAC) otherwise known as the Texas Risk Reduction Program or TRRP.

The NaCN operating unit is located interior to the property owned by Ascend Performance Materials which is governed by TRRP rules as well. Ascend has monitoring wells on site as per TRRP rule requirements for monitoring groundwater, including the solid NaCN production unit. No seepage or groundwater contamination has occurred yet.

In the event that remediation is necessary it would be done immediately in the event of a spill to comply with the site's TPDES permit (TPDES: Texas Pollutant Discharge Elimination System) that is relevant in case of stormwater decontamination. Such a release would be managed under Texas Risk Reduction Program for sampling and remediation.

Atmospheric emissions are permitted by and controlled according to a Permit by Rule registered with the Texas Commission on Environmental Quality (TCEQ). Limits for atmospheric emissions are set by this permit to ensure air quality standards established by the state and EPA. The Permit by Rule registration was prepared by the consulting company Environ, first registration on May 13th, 2011, and final registration and confirmation by TCEQ on Jan 24th, 2012. The registration process is based on VOC and PM (dust) emission calculations, complying on TAC §§ 106.261, 106.262 and 106.472.

4. TRAINING:	Train workers and emergency response personnel to manage cyanide in a
	safe and environmentally protective manner.

<u>Production Practice 4.1</u>: Train employees to operate the plant in a manner that minimizes

the potential for cyanide exposures and releases.

x in full compliance with

The operation is \Box in substantial compliance with Production Practice 4.1

□ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Workers have been trained according to the training program that was developed prior to plant start-up. The responsible developed a training program for the new hired people including a six week orientation training program (classroom) followed by written examinations and field demonstration.

Procedures include PPE requirements, and all processors are trained and are able to demonstrate the proper use of the PPE prior to being assigned to the unit. Due to their experiences and their former job conditions the selected employees basically are familiar with the requirements of chemical industry.

A dedicated training manager with experience in training and cyanide handling has been employed during the start-up phase. The regular plant orientation training takes 6 weeks; after that period the candidates are becoming integrated stepwise into the cyanide facility. Processor qualification requires passing tests for each training module and a field demonstration and a training review board.

<u>Production Practice 4.2</u> :	Train employees to respond to cyanide exposure	s and releases.
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with ☐ not subject to	Practice 4.2
Cyanide releases are incleases are incleases are inclease response system the whole Ascend plant at Emergency release procestraining is required for system continuous improvement process.	ained in accordance with Ascend's records rea	isting ERP system for and periodic refresher inings are part of the
5. EMERGENCY RESP	ONSE: Protect communities and the environment of emergency responsible capabilities.	•
<u>Production Practice 5.1</u> :	Prepare detailed emergency response plans freleases.	^c or potential cyanide
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Practice 5.1
Chemical releases are in Section V. Section V is a documents, for example: Operations Coordinator, unit emergency procedu Referring to ICP Section documents are existing. Specific cases of emergen and the Unit power ou Consequence of Deviation	his Finding/Deficiencies Identified: ncluded in the Chocolate Bayou Integrated Connamed "Emergency Management – On Site Incident Incident Command System (Incident Command Crisis Management Team); V2. Emergency Respore for cyanide release takes into account the V regarding the site response to a major character of the character of the Choracter of the Choracter of the Choracter of the Choracter of the Sponse of the Choracter of	dents". It contains 15 nd, Safety, Emergency conse Operations. The existing documents. Demical release basic wer outage procedure ocolate Bayou Plant.
	Houston/TX Signature of Lead Auditor	To outh 2010
Cyanco Production Plant, Name of Facility	Signature of Lead Auditor	June 04 th , 2013 Date
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The Ascend Chocolate Bayou Integrated Contingency Plan (ICP, Section V) addresses fires, spills and releases and also takes into account all foreseeable emergency contingencies at the site including evacuation of site personnel and potentially affected communities in the event requiring such actions.

Liquid spills are impounded at the unit by design using coated surfaces, curbing and sumps to capture all liquid spills. An engineered water deluge system is in place to contain and capture hydrogen cyanide where it is introduced into the process in the event of a process leak. All runoff from the deluge system is captured in the unit's engineered containment system to prevent any ground water contamination.

All releases will be investigated with recommendations developed to prevent recurrence as per Ascend's incident investigation procedure and Cyanco's internal investigation procedures.

<u>Production Practice 5.2:</u>	Involve site personnel and stakeholders in the	planning process.
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Practice 5.2
The Chocolate Bayou s companies to assure that a including the CAER system Processors are involved a procedures. Important in company (towards the stay The Ascend Chocolate Ba Alvin. The Brazoria Couhospitals are informed of	nis Finding/Deficiencies Identified: ite participates in Community Advisory Panel the community is aware of hazard and the emergen in (Community Awareness + Emergency Response) in the development and review of all procedures in iformation coming out of those meetings are t iff), e.g. via screen in the control room. If you site has Mutual Aid agreements with Ineos, An inty Fire Marshall has approved the fire permit possible medical emergencies from the plant, and institutions are aware about the risks of HCN go the risks of solid cyanide.	cy response process, in including emergency transported into the moco and the City of its for the unit; the the Brazoria County
<u>Production Practice 5.3</u> :	Designate appropriate personnel and commit rand resources for emergency response.	necessary equipment
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Practice 5.3
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Cyanco Production Plant,		June 04 th , 2013
Name of Facility	Signature of Lead Auditor	Date

Summarize the basis for this Finding/Deficiencies Identified:

ICP Core Response Plan Section V. describes the emergency response process, including the incident commander and the responsibilities of the team members.

ERT members receive annual fire and rescue training, as well as monthly training exercises. Designated Incident commanders and ERT members are on site 24 hours. In certain cases, Ascend is performing mock drills together with the neighboured Ineos plant.

Production Practice 5.4:	Develop procedures for internal and external emergency notification and reporting.	
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production Practice 5.4

Summarize the basis for this Finding/Deficiencies Identified:

There are existing various procedures and regulations on site level, see SP-005 Incident Reporting and Investigation, Mutual Aid Agreements or ICP Section IV. Reporting and Notification; this chapter covers the topics notification (with 5 sub-chapters) and reporting (with 10 sub-chapters) in a very detailed manner.

Production Practice 5.5: Incorporate into response plans and remediation measures monitoring elements that account for the additional hazards of using cyanide treatment chemicals.
 x in full compliance with
 □ in substantial compliance with
 □ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Emergency procedures are developed including the management of waste and waste materials generated in the response to a spill or fire, see ICP Section V. Any waste generated with the process area will be disposed of per normal waste disposal procedures.

In the event of spills outside of the contained area, remediation would be done immediately to comply with the site's TPDES permit (TPDES: Texas Pollutant Discharge Elimination System). The only method of treatment of water discharged to the site outfall is by biological oxidation by micro-organisms in an aeration treatment basin. Other methods, including any chemical oxidation, are not in use. A release would be managed under Chapter 101 rules of the Texas Commission on Environmental Quality (TCEQ) and sampling procedures would be developed on a case-by-case basis.

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Cyanco Production Plant, Houston/TX		June 04 th , 2013
Name of Facility	Signature of Lead Auditor	Date

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<u>Production Practice 5.6</u> :	Periodically evaluate response procrevise them as needed.	cedures and capabilities and
The operation is	x in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Production Practice 5.6
The ICP is reviewed on mock emergency drills is	his Finding/Deficiencies Identified: an annual frequency by a subject m regulated in the Integrated Conting itiqued following incidents per ICP S	ency Plan Section XIII. (Training
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Cyanco Production Plant, Houston/TX
Name of Facility

Signature of Lead Auditor

June 04th, 2013 Date