International Cyanide Management Code Certification Audit

Production Facility – Summary Audit Report

PREPARED FOR

Inner Mongolia Chengxin Yongan Chemical Co., Ltd.

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SIGNATURE PAGE

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Production Facility – Summary Audit Report

0782151-04

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ACRONYMS AND ABBREVIATIONS

Acronyms	Description
ICMC	International Cyanide Management Code
ICMI	International Cyanide Management Institute
CPV	Cyanide Production Verification
UNEP	United Nations Environmental Program
MES	Manufacturing Executive System
HAZOP	Hazard and Operability Study
LOPA	Layers of Protection Analysis
DCS	Distributed Control System
SIS	Safety Instrumented System
IBC	Intermediate Bulk Container
WAD	Weak and Dissociable

1.0 OPERATION GENERAL INFORMATION

Name of Production Facility:	Inner Mongolia Chengxin Yongan Chemical Co., Ltd.
Name of Facility Owner:	Inner Mongolia Chengxin Yongan Chemical Co., Ltd.
Name of Facility Operator:	Inner Mongolia Chengxin Yongan Chemical Co., Ltd.
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2.0 OPERATION LOCATION DETAIL AND DESCRIPTION

Inner Mongolia Chengxin was established in 2012. It is a joint-stock enterprise with 600 employees. The company has obtained ISO9001: 2015 certificate, ISO14001: 2015 certificate and ISO 45001:2018 certificate. The cyanide production facility has included 3 Phases:

1) Phase I: The first liquid cyanide production line in Workshop 701 commenced operations in May 2015 which was used as raw material for hydrocyanic acid production.
2) Phase II: The liquid cyanide production line in Workshop 701 and the solid cyanide production line in Workshop 708 commenced operations in December 2019, along with the solid cyanide warehouse 704 and the liquid cyanide tank farm.
3) Phase III: New liquid and solid cyanide production lines in Workshop 709 commenced operations in December 2023 as well as three solid cyanide warehouses and liquid cyanide tank farm.

The company has the right to import and export. The products are sold to many countries and regions, including South America, North America, Africa, Asia and etc.

Inner Mongolia Chengxin is located at North end of Lantai Avenue, Alxa Economic Development Zone, Inner Mongolia, China, the surroundings are as below:

- East: Inner Mongolia Dongfu Fine Chemical Co., Ltd.
- South: Inner Mongolia Jushi Energy Co., Ltd and Wusitai Power Plant.
- West: Jiekang Sterilization Co., Ltd.
- North: China Petroleum Gas Station

West Wuhai Railway Station is about 5.6 km to the east of Inner Mongolia Chengxin. G1817 Speedway is about 2.0 km to the west of Inner Mongolia Chengxin. Wuhai Airport is about 40 km to the north of Inner Mongolia Chengxin.

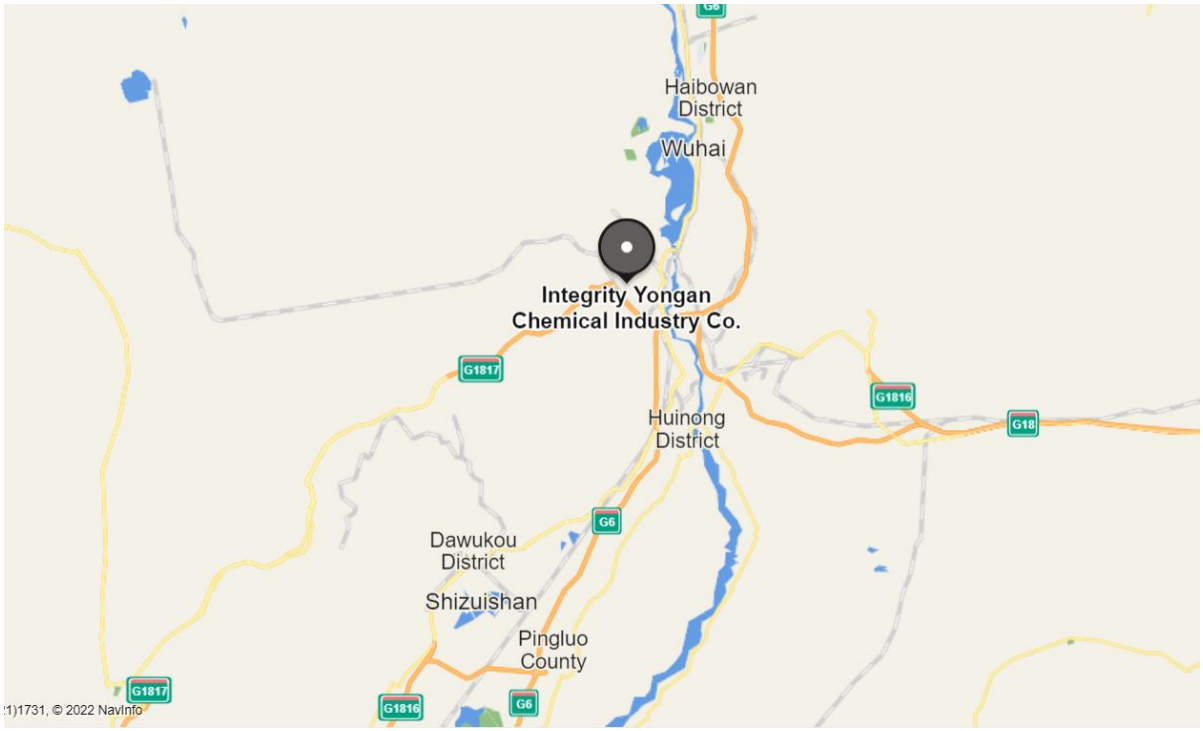

Figure 1: Regional Location Map

The part of the Site used to manufacture liquid sodium cyanide and then convert the liquid sodium cyanide into solid sodium cyanide is referred to in this report as 'the cyanide facility'. The term 'the Site' is used in this report to refer to the entire Inner Mongolia Chengxin facility and includes a large number of manufacturing plants, these manufacturing plants are not subject to this report.

Inner Mongolia Chengxin solid sodium cyanide manufacturing processes include:

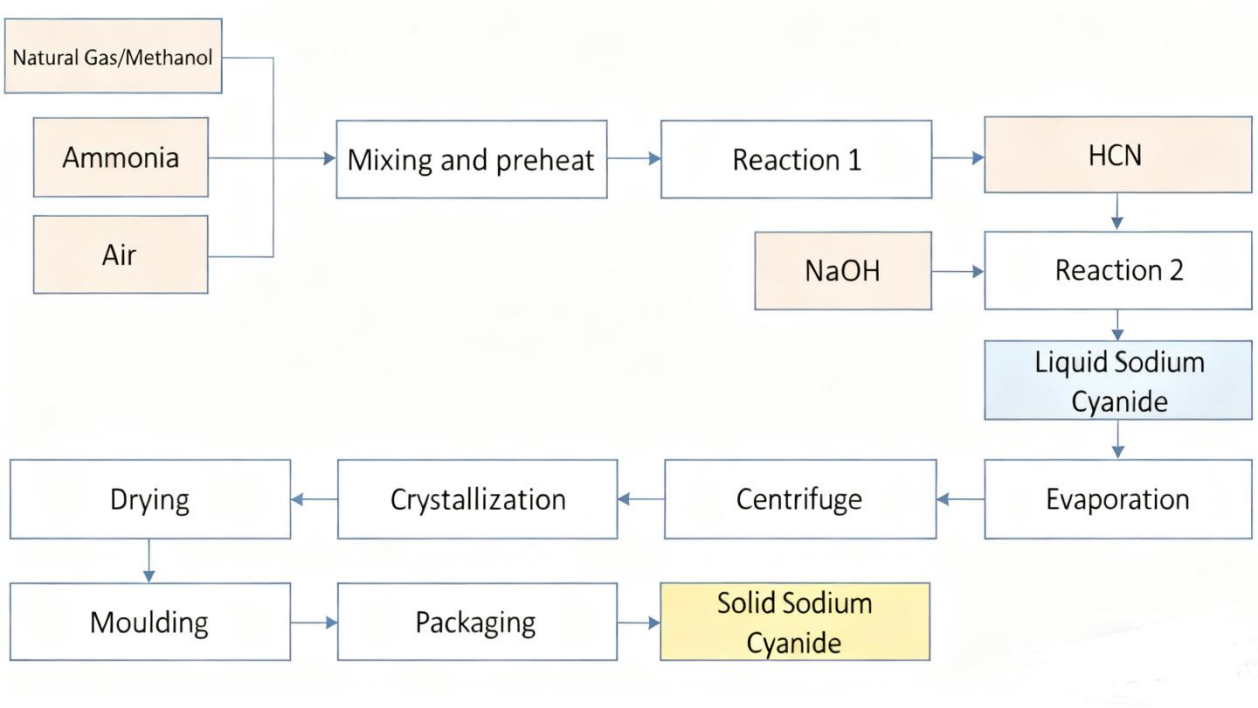

Figure 2: Solid Sodium Cyanide Manufacturing Process

The feedstocks to the cyanide facility are ammonia (stored on Site as liquid ammonia), and liquid alkali. Natural gas is supplied by China National Petroleum Gas Station. General production processes are described as below:

- Mixture and preheat – ammonia (evaporated to ammonia gas), natural gas/methanol and air will be filtered before entered the vessels for preheating and mixing, the mixed gas will be preheated via steam to produce a gaseous mixture.
- Reaction 1 – gaseous mixture then enters the HCN reactor. HCN will be obtained under the action of the platinum-rhodium catalyst net at about 1100 degrees.
- Reaction 2 – HCN is reacted with 30% sodium hydroxide to generate liquid sodium cyanide.
- Evaporation and Crystallisation – liquid sodium cyanide is pumped into two liquid cyanide volume measuring tanks, then be pumped into the vacuum evaporator to remove water and the concentrate is fed to the crystalliser.
- Centrifuge – wet crystals are generated by continuous solid-liquid separation of the concentrated crystal pulp.
- Drying – the sodium cyanide crystal is heated in the dryer to evaporate the residual water, and crystals are dried into dry powder.
- Moulding – Dry sodium cyanide powder is moulded into "pillows".
- Packaging – sodium cyanide is delivered to the tablet tank through an oscillatory conveyor and then weighted in the weighing and packing machine. Products are tested by random sampling and the qualified products are packed with 1,000 kg or 1,100 kg timber boxes

with inner polyethylene liners. The packaged cyanide is stored in the warehouse at the cyanide facility prior to despatch from Site.

The Site has expanded into two additional liquid and solid cyanide production lines in Workshop 709 since April 2023. Also, there are three minor modifications to the cyanide production facilities in 2024 and 2025 as below:

- Add a cyclone metering tank on the third floor of the liquid sodium cyanide plant in Workshop 701
- Replace the condenser north of Sodium Cyanide in Liquid Hydrogen Tank Group 1.
- Add a cyclone separator on the fourth floor for liquid sodium cyanide in Workshop 709

The MOC records have been provided for review.

The cyanide facility is paved with concrete. The liquid sodium cyanide medium tanks, liquid sodium cyanide product tanks and liquid solium cyanide storage tanks are located within concrete bunded areas. The solid sodium cyanide production buildings are both self-bunded with concrete floors, concrete walls and bunds at each doorway. No process wastewater is generated from the cyanide.

Due to the rare raining in the area Inner Mongolia Chengxin located, no separate stormwater pipeline system was designed, all the stormwater is piped into an emergency collection tank (6480m^3) for water quality testing before discharging into the wastewater treatment plant which services the entire Site (i.e. all the other chemical manufacturing plants of Inner Mongolia Chengxin).

The facility operates on 12-hour shifts, 24 hours per day, seven days per week, with three production teams.

No cyanide exposure incidents were noted during the audit period.

3.0 AUDITOR'S FINDING

This operation is

☒ in full compliance

☐ in substantial compliance

☐ not in compliance

with the International Cyanide Management Code.

This operation has not experienced any compliance issues during the previous three year audit cycle.

4.0 AUDITOR INFORMATION

Audit Company:	ERM (Shanghai) Limited
Lead Auditor and Production Technical Expert Auditor:	Hongtao Hu
Lead Auditor Email:	hongtao.hu@erm.com

Names and Signatures of Other Auditors:

Auditor Trainee:

Janet Zhang	Janet Zhang
Name	Signature

Dates of Audit: 4 to 6 November 2025

5.0 AUDITOR ATTESTATION

I attest that I meet the criteria for knowledge, experience and conflict of interest for a Cyanide Code Certification Audit Lead Auditor, 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 Cyanide Code Auditors.

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

Inner Mongolia Chengxin Yongan Chemical Co., Ltd.	Hongtao Hu	16 January 2026
Name of Facility	Signature of Lead Auditor	Date

6.0 PRINCIPLES AND STANDARDS OF PRACTICE

PRINCIPLE 1 | OPERATIONS

Design, construct and operate cyanide production facilities to prevent release of cyanide.

STANDARD OF PRACTICE 1.1

Design and construct cyanide production facilities consistent with sound, accepted engineering practices and quality control/quality assurance procedures.

The operation is
- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 1.1
- ☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 1.1 requiring cyanide production facilities to be designed and constructed consistent with sound, accepted engineering practices and quality control/quality assurance procedures.

Quality control and quality assurance programs have been implemented during construction and modification of cyanide production and storage facilities. The quality control and assurance records have been retained. Appropriately qualified personnel reviewed the facility construction and provided documentation that it has been built as proposed and approved.

Cyanide production facility was designed by Class A qualified companies, which are certified by the Construction Administration of the Peoples Republic of China to design chemical process plants.

The Foundation and Structure of the production lines were constructed by qualified companies, which are certified by the Construction Administration of the Peoples Republic of China.

A qualified engineering supervision company was contracted as the interdependent construction management company for project management of QA/QC, health safety and environment, schedule control, cost control.

Construction Acceptance Reports have been prepared by the construction company, which were reviewed and approved by Inner Mongolia Chengxin, construction company and interdependent construction management company. Stamps of these companies have been chopped on these reports. The conclusion of the cyanide facility is acceptable.

The cyanide facility is mainly comprised by four unites as below:

- Liquid cyanide production unit: Workshop 701
- Solid cyanide production unit: Workshop 708
- Liquid and Solid Cyanide production units: Workshop 709
- Four Solid Cyanide Warehouses
- Two Liquid Cyanide Storage Tank Farm

A quality assurance document has been retained for each tank and vessel confirming adequacy of construction. For the pressure tanks, vessels and pipelines, the quality assurance document has been retained with design details, Usage Registration Certificate, Usage Verification Certificate, Safety Function Supervision and Testing Certificate, periodically verification report.

Quality control and quality assurance records for the construction structure and foundation have been included in the Construction Acceptance Reports, which mainly includes details of:

- Excavation depth, length and width deviation compared to design.
- Soil type and quality tests.
- Level of the compacted surface compared to design.
- Moisture content of compacted soil.
- Survey of position and height of each floor of the building.
- Specification, spacing and connections of reinforcing steel in concrete foundations and slab.
- Concrete formwork location for the walls and floors.
- Concrete surface condition following pours.
- Concrete structure dimensions, deviation from design.
- Brick strength compared to specification.
- Roof impermeability experiment.
- Brick wall dimensions.
- Cement render quality.
- Lightning and grounding test.
- Shim plate Covert records. and
- Concrete quality test.

Quality control and quality assurance records for the construction and installation of the cyanide facility have been included in the Construction Acceptance Reports, which mainly include details of:

- Qualification verification for the special operation: such as welding operator, NDT personnel
- Verification of facility, pipelines installation work method
- Materials qualification and certification verification
- Valve testing.
- Safety valve testing.
- X-ray testing. and
- Pressure testing for valves and piping system.
- Welding records and visual inspection records
- Piping system purge records
- Pipeline electrostatic grounding test record
- Production and installation inspection quality acceptance record of pipeline support and hanger
- Cyanide facility commissioning records.

The Site has expanded into two additional liquid and solid cyanide production lines in Workshop 709 since April 2023. Also, there are three minor modifications to the cyanide production facilities in 2024 and 2025 as below:

- Add a cyclone metering tank on the third floor of the liquid sodium cyanide plant in Workshop 701
- Replace the condenser north of Sodium Cyanide in Liquid Hydrogen Tank Group 1.
- Add a cyclone separator on the fourth floor for liquid sodium cyanide in Workshop 709

The MOC records have been provided for review.

Quality control and quality assurance documentation is available for the cyanide facilities.

The materials used for construction of cyanide production facilities are compatible with the reagents used and processes employed. No changes to the materials or processes employed have been undertaken during the audit period. The materials used for the cyanide facilities comprise the following:

- Pipe work – 304 grade stainless steel
- Reactors – 304 grade stainless steel
- Gas-liquid Mixture vessel – 316L grade stainless steel
- Liquid cyanide volume measuring tank – 304 grade stainless steel
- Mother liquid cyanide tank– 304 grade stainless steel
- Filter – 304 grade stainless steel
- Evaporators – 304 grade stainless steel
- Crystallisers – 304 grade stainless steel
- Centrifuge – 316 grade stainless steel

These materials are recognized as being compatible with the chemicals used to manufacture and store liquid sodium cyanide.

There are automatic systems or "interlocks" to shut down production systems and prevent releases due to power outages or equipment failures.

The cyanide facilities are supplied with electricity by two separate power supply circuits. In the event of failure of one supply the other power supply is able to meet facilities' requirements. The facility is also equipped with a UPS for emergency power outage, which will continue to automatically power the facilities for approximately0.5 hours to shut down production systems and prevent releases.

Controls have been implemented in the event of equipment failure generally comprise alarms to inform that HCN gas being detected or high levels in tanks/vessels. When the alarm is activated, the control room operator switches off the relevant part of the process. The system is not restarted until the cause of the problem has been investigated and rectified.

The Facility has established Distributed Control System (DCS) and Safety Instrumented System (SIS) for the cyanide production process.

The elements of the liquid cyanide part of the plant (Workshop 701) connected to the DCS are:

- High and high-high alarm for pressure and temperature of reactor

- High and high-high alarm for temperature of outlet of reactor
- High and high-high alarm for ammonia, nature gas and air supply rate
- High and high-high alarm for pressure of pumps
- High and high-high alarm for liquid level of liquid alkali intermediate tank
- High and high-high alarm for liquid level of Sulfuric acid metering tank
- Low and low-low alarm for liquid level of Gas-liquid separator
- High and high-high alarm for liquid level of liquid cyanide recycling tank
- High and high-high alarm for liquid level of Ammonium sulphate waste liquid tank.

The elements of the liquid cyanide part of the plant (Workshop 701) connected to the SIS are:

- High alarm and linkage value for temperature of reactor

One of the following linkage values reached, the system automatically shutdowns the feeding outlet valve and opens the vent valve of reactor:

- There are two separate temperature sensors for reactors, one for Reactor Up section, the other for Rector Down section. When Sensor TIZAS010404 in Reactor Up section reaches 1250, or TIZAS010403 in Reactor Down Section reaches 1270 in SIS system.
- Two of the three temperature detectors of DCS reached 1250℃.
- Liquid level of Gas-liquid separator of DCS reached 200mm.
- Inlet pressure of reactor of DCS reached 0.09 Mpa.
- Ammonia/Nature gas rate≥0.9 and≤1.4.
- Air/Ammonia rate≥5.3 and ≤7.98.

The elements of the solid cyanide part of the plant (Workshop 708) with high, high-high, low, low liquid level alarm connected to the DCS are:

- Liquid cyanide tanks
- Mother liquid tanks
- Cyanide wastewater tanks
- The main linkage values for solid cyanide production process are as below:
- When the liquid level of liquid cyanide measuring tank reached 5000mm, switch off the feeding pump in Workshop 701. When liquid level of liquid cyanide measuring tank reached 500mm, switch on the liquid cyanide feeding pump P0201ab in Workshop 701.
- When the liquid level of mother liquid tanks reached 200mm, switch off the mother liquid pump.
- When the liquid level of cyanide wastewater tanks reached 200mm, switch off the mother cyanide wastewater pump.

The elements of the liquid cyanide part of the plant (Workshop 709) connected to the DCS are:

- High and high-high alarm for ammonia flow rate
- High and high-high alarm, low and low-low alarm for catalytic reactor inlet flue gas temperature
- High and high-high alarm, low and low-low alarm for catalytic oxidation electric heating temperature
- High and high-high alarm, low and low-low alarm for ammonia vaporizer outlet pressure
- High and high-high alarm for methanol vaporizer outlet pressure
- High and high-high alarm for liquid level of methanol storage tanks

- High and high-high alarm for liquid level of liquid cyanide storage tanks

The elements of the liquid cyanide part of the plant (Workshop 709) connected to the SIS are:

- High and high-high alarm for pressure and temperature of reactors
- High and high-high alarm for liquid level of methanol storage tanks
- High and high-high alarm for liquid level of liquid cyanide storage tanks
- Reactor molten salt circulating pump malfunction
- Reactor emergency shutdown.

One of the following linkage values reached, the system automatically shutdowns the methanol feeding outlet valve and opens the vent valve of reactor:

- Three out of the 5 groups have been triggered. There are 5 reactor temperature groups, with 10 probes in each group. If any probe triggers a high-high alarm with 520 ℃, the status of that group will be interlocked.
- Reactor pressure reached 100kPa
- Reactor molten salt circulating pump malfunction
- Reactor emergency shutdown

The elements of the solid cyanide part of the plant (Workshop 709) connected to the DCS are:

- Low alarm for condensate storage tank liquid level
- High and low alarm for medium liquid cyanide tank
- High alarm for centrifuge main unit vibration amplitude
- Low alarm for mother liquid tank
- Low alarm for wastewater collection tank
- Low alarm for recycle liquid cyanide tank

In the event of failure of both power supplies, the liquid or gas in the process will stay at its location and not present a risk of loss to the environment. The critical area of the plant is the reactor. In the event of a need to shut the plant down, the cyanide facility's emergency response procedure will be activated. The procedure states that in the event of a power failure, UPS will be automatically activated to supply power to the control system to further shut down the production process.

In summary, in the event of power failure or equipment failure the contents of each vessel and pipe will remain within the vessel or pipe and cannot escape to the environment. There has not been a failure of both power supplies to the cyanide facility in the last three years.

In the event of equipment failures, the operators shut down the relevant part of the plant. The cyanide production facility has not had a situation where it has had to shut down the plant (either manually or automatically) in the last three years, other than planned maintenance.

Also, Inner Mongolia Chengxin conducts HAZOP and LOPA Analysis every three years to assess the process risk of cyanide production facilities.

The cyanide facility areas are covered with concrete pavements to prevent seepage to the subsurface.

The cyanide warehouse facilities have a concrete floor and were observed to be in good condition.

The transfer pipelines for cyanide solutions comprise stainless steel pipes wrapped with insulating compound. The concrete surface beneath the pipelines drains to the cyanide facility's emergency stormwater collection system at the Site's wastewater plant.

Due to the rare raining in the area where Inner Mongolia Chengxin located, no separate stormwater pipeline system designed, all the stormwater is piped to an emergency collection tank (6480m^3) for water quality testing before discharging into the wastewater treatment plant which services the entire Site.

The concrete surface comprises roadways and pedestrian paths and were observed to be in reasonable condition.

The emergency collection tank can only be emptied by activating a transfer pump, available in both automatic and manual modes, to transfer its contents to the wastewater treatment plant that services the entire Site, not solely the cyanide facility.

The Facility has established Automatic Interlock Protection Management Procedure to employ, inspect, test, and maintain systems to prevent the overfilling of cyanide process and storage vessels, including level indicators and high-level alarms.

The filling of each tank or vessel is supervised either by the pump operator or by the control room operator. Upon activation of an alarm the respective operator is able to switch off the relevant transfer pump. During material transfer the operator stands next to the pump switch close to, and in sight of, the flashing lights/alarms and tanks, to enable quick reaction time in the event of the need to switch off the transfer pump.

The Facility has included the main liquid level elements for cyanide production raw materials tanks, medium tanks, reactors, and storage tanks in the DCS and SIS system. And the annual DCS and SIS interlock test records showed they are in good condition to prevent the overfilling of cyanide process and storage vessels.

Secondary containments for process and storage tanks and containers are constructed of materials that provide a competent barrier to leakage and sized to hold a volume greater than that of the largest tank and container of cyanide solution within the containment and any piping draining back to the tank, and with additional capacity for design storm event.

The secondary containment for processing and storage tanks and containers is composed of concrete and concrete-rendered brickwork. The secondary containments are sized to contain at least 110% of the volume of the largest tanks and are paved with concrete. The tanks are also lined with an outer layer of silica compound insulation or metal sheet to minimize the risk of the projectile flowing to the bund boundary in the event of a leak in the upper part of the tank.

The containments were constructed with concrete and were observed to be of suitable quality.

If losses exceed the bund of the absorption tank area, the facility will rely on the stormwater first flush system from the concrete pavement to control the loss. The area outside the bund comprises concrete paved pedestrian way and roadway. All drainage will enter the Site's emergency collection tank with 6480m^3 capacity. The cyanide facility would rely upon the emergency collection tank to collect the loss from the tank. The water in the emergency

collection tank system is sampled and analysed to determine the concentration of cyanide before being transferred to the Site's wastewater treatment plant.

The wastewater treatment plant uses sodium hypochlorite to break down the cyanide when required.

Spill prevention or containment measures are provided for all cyanide solution pipelines.

The pipelines from liquid cyanide workshop to solid cyanide workshop are located on overhead gantries which pass over concrete paved roadways.

There are no buried cyanide pipelines on the cyanide facility.

The pipelines are wrapped with stainless steel and compound, which provides thermal insulation. Cyanide labels and flow direction signs are in place on the pipelines.

There are no leak alarms on the cyanide pipelines.

1-hourly inspections and 12-hourly inspections are undertaken in the cyanide production area. The inspections include pipe work, flanges, pumps, high level alarms and tanks to identify leaks. Records of the inspections are kept.

In the event of loss from a pipeline within a bunded area, the spill would drain to a sump from where the liquid would be pumped to the cyanide wastewater tank for reuse in the process.

The cyanide facility undertakes monitoring of the pipe wall thicknesses every six months. The inspection records note the integrity of the pipe and support structures. The results indicate all pipelines have wall thicknesses greater than 70% of initial wall thickness.

According to the Environmental Management Procedure, Chapter 19, Water Bodies, Soil Pollution Prevention and Remediation Control Procedures, in the event that a leakage of cyanide solution from a pipeline discharge onto concrete paving, which will be drained into nearby wastewater drain, after cyanide breaking treatment with hydrogen peroxide (the volume concentration for hydrogen peroxide is 0.25mg/L) then pump into wastewater treatment plant.

Cyanide is stored with measures to avoid or minimize the potential for exposure of cyanide to moisture and adequate ventilation to prevent the build-up of hydrogen cyanide gas and cyanide dust.

Solid cyanide is stored in two sizes:

- 50 kg plastic bags within steel drums, and
- 1000 kg, 1100 kg within plastic bags within timber intermediate bulk containers (IBCs).

These drums and IBCs are stored in a secure warehouse building prior to dispatch from the Site. The warehouse is enclosed with concrete floor, walls and roof to prevent exposure of cyanide to moisture. The walls of the building are equipped with vents to ventilate the building. The build entry points have large doors which also provide for ventilation of the building during moving IBCs in and out of the building by automatic conveyor belt and trolley. No safety showers or any other water systems in the cyanide storage warehouses.

The fixed HCN monitors have been set up in the entrances and exits of the cyanide warehouses which are connected to the DCS system in control room. The warehouse is fully automated

without staff operation in the warehouse normally. Operator will transfer the IBCs from solid production workshop onto the conveyor belt of the warehouse for storing. The entrance for employee inspections or maintenance is normally locked and accessible only through the security office, which is manned by a security person and fitted with security cameras which transmit to the security office. Visits to the warehouse are logged on paper records in logbooks.

The warehouse building is located within the cyanide facility boundaries which is close to the solid cyanide production workshop. The Site is surrounded by a concrete/brick wall. Access to the Site is only via a manned security gate. Public access is prohibited.

Only solid cyanide is stored in the warehouses, which is separately from incompatible materials.

Liquid cyanide stored in two tank farms (four 500m^3 tanks and four 75m^3 tanks) with separate secondary containment in an open-air environment. One fixed HCN monitors in the area which connected to the DCS system in control room. And the access of the tank farm is locked by two locks which the keys are kept by two individuals. Only authorized personnel can enter the tank farm.

STANDARD OF PRACTICE 1.2

Develop and implement plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.

The operation is	☒ in full compliance with	Standard of Practice 1.2
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 1.2 requiring development and implementation of plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.

The Facility does have plans and procedures that describe the standard practices necessary for its safe and environmentally sound operation.

The facility holds ISO certifications for safety, environment and quality management systems.

The Process Operational Rules is an integrated procedure addressing the full production process.

Operational procedures for posts are included for:

- Raw gas purification
- Reaction
- Ammonia clearance
- Liquid Cyanide

- Desulfurization
- Loading and unloading
- Cycle water
- Evaporation
- Dry
- Forming
- Packaging
- Laboratory test
- Centrifugation
- Forklift
- Discharging.

The procedures do describe the necessary operating practices including pre-start checks, personal protective equipment and contingency measures.

The Facility has developed contingency plans for non-standard operating situations that may present potential for cyanide exposure or releases.

The Facility is automated and operated via DCS with separate control rooms in a separate building for the liquid plant and solid plant which are out of the production area. Emergency shutdown and interlocks are built into the plant design and managed via the DCS for the liquid plant. As noted previously, the solid cyanide part of the cyanide facility does not have any automatic systems to shut down production systems and prevent releases due to power outages or equipment failure. However, the design of the facility inherently means that in the event of power outage or equipment failure the contents of the vessel, tank or pipe will remain in place until power is reconnected, or the equipment re-started. And the facility also has UPS for emergency power outage situations which will continue to provide power automatically for the facilities with approximate 0.5 hours to shut down production systems and prevent releases.

The Process Operational Rules outline the Design Control System (DCS) for the cyanide production process, detailing the measures to be implemented in the event of an upset. The system is equipped with interlocks designed to shut down the process when necessary, ensuring safety and operational integrity.

In the event of cyanide exposure or release, the Site's emergency response plan outlines specific actions to be taken. These documents ensure a well-coordinated and effective response to such incidents.

The Facility has a procedure to identify when cyanide facilities or operating practices have or will be changed from those on which the initial design and operating practices were predicated, which requires review and sign-off by environment, health, and safety management.

The Management of Change Procedure details what changes require this procedure to be implemented. It details what type of work needs to be reviewed and by who, with process changes requiring review by both the department supervisor and the safety engineer and representative from the environment, health and safety department. Safety equipment changes are required to be reviewed by the safety management department. Changes

involving facility change, process change, new project, expansion project, renovation project must be reviewed by the Vice General Manager or Technical Director. The procedure details conducting changes, inspections, acceptance, commissioning and post-work reviews as well as training and communication.

The Site has expanded into two additional liquid and solid cyanide production lines in Workshop 709 since April 2023. Also, there are three minor modifications to the cyanide production facilities in 2024 and 2025 as below:

- Add a cyclone metering tank to the third floor of the liquid sodium cyanide plant in Workshop 701
- Replace the condenser north of Sodium Cyanide in Liquid Hydrogen Tank Group 1
- Add a cyclone separator on the fourth floor for liquid sodium cyanide in Workshop 709

MOC records for these modifications have been provided for review.

Preventive maintenance programs have been implemented and activities documented for equipment and devices necessary for cyanide production and handling

The Facility Management Procedure is an integrated procedure that documents the routine inspection and preventative maintenance requirements for the cyanide facility are shown as below:

- Prepare and submit the Annual Equipment Maintenance Plan, for new year in December of last year
- Prepare and submit the Monthly Equipment Maintenance Plan, before the fifth day of each month.
- Inspection frequency for different kinds of equipment
- Maintenance frequency for main production equipment
- Special equipment internal and external third-party inspection requirement and frequency.

The Equipment Maintenance Plans list and describes the maintenance requirements, location, equipment specification, scheduled date, maintenance duration, responsible person. Equipment maintenance plans and records for cyanide facilities for the audit period were reviewed and correlated with the descriptions of maintenance activities provided by Site engineers.

The Facility will shut down for approximately four days to conduct overhaul annually.

Process parameters are monitored with necessary instrumentation, and the instrumentation is calibrated according to manufacturer’s recommendations.

The procedure requires that the calibration should be conducted according to the planned frequency. After calibration, a calibration notice must be placed on the equipment. The facility maintains annual calibration lists detailing the instruments in the plant that require to be calibrated during the year. The instruments include high pressure gauges, vacuum pressure gauges, numerical temperature displays and flow meters.

Temperature displays and flow meters have been calibrated by Electrical Instrument Department every 6 months.

Inner Mongolia Chengxin has obtained Certificate for Examination of Measurement Standard (Pressure gauge and pressure transmitter) which was issued by Inner Mongolia Alxa Left Banner Quality and Technology Supervision and Inspection Institute. And there are four employees who have obtained the Measurement Calibration Certificates for pressure gauges calibration, so the Facility conducts calibration for pressure gauges every 6 months.

Gas detectors and safety valves have been tested by third parties which have qualification and registered in Inner Mongolia Alxa Left Banner Quality and Technology Supervision and Inspection Institute annually. The testing reports were randomly selected for review during audit. And the calibration records for the instrumentation used to monitor process parameters are required to be retained for three years.

Procedures are in place and are being implemented to prevent unauthorised/unregulated discharge to the environment of any cyanide solution or cyanide-contaminated water that is collected in a secondary containment area.

Water which collects within the secondary containment structures cannot exit the structure unless it is pumped out or otherwise intentionally removed.

The Emergency Response Plan for Environmental Emergencies requires that water which is collected within the secondary containment areas is pumped, via a manually switched pump, and a dedicated wastewater pipe to the emergency collection tank.

Due to the rare raining in the area where Inner Mongolia Chengxin located, no separate stormwater pipeline system designed, all the stormwater is piped to an emergency collection tank (6480m^3) for water quality testing before discharging into the wastewater treatment plant which services the entire Site.

The Facility monitors cyanide in groundwater down gradient of the cyanide facility at two locations. According to the Site representative, the groundwater sampling points of enterprises in the park are all these two groundwater wells, and the government does not allow enterprises in the park to drill groundwater wells in their own Site. One upstream is located around 2.3km from site's northwest boundary and one downstream well is locatedaround 0.1km from site's southeast boundary.

The Facility has established Environmental Management Procedure, CXYA-HBC-ZD, 10 February 2025. Chapter 15 Solid Waste and Hazardous Waste Management Procedure for disposal of cyanide or cyanide-contaminated solids.

The types of solid waste include:

- Activated carbon is generated from the production process
- Fly Ash generated from hazardous waste incinerators
- Online waste liquid
- Waste oil generated in the process
- Personal Protective Equipment (including cyanide waste) mainly includes gloves, masks, protective clothing and other waste contaminants and other wastes with hazardous characteristics.

For the PPE, it will be transferred to incinerator for disposal on Site. For the cyanide contained waste during leakage or unexpected action, it will be decontaminated with hydrogen peroxide or sodium hypochlorite prior to incineration on Site. It will be decontaminated with hydrogen peroxide or sodium hypochlorite prior to incineration on Site. The incineration temperature of

the incinerator is between 800-1600℃, and the melting point of sodium cyanide is 563.7℃. Cyanide can be destructed completely.

As for the fly ash, it will be entrusted to a licensed hazardous waste disposer offsite. Currently, three hazardous waste disposers are contracted with the site: Inner Mongolia Meilijian Qinglan Hazardous Waste Disposal Co., Ltd., Xiajiang (Ulanqab) Environmental Protection Technology Co., Ltd., and Inner Mongolia Xinmengxi Environmental Resources Development Co., Ltd. The valid qualifications and contracts of these three waste disposers were provided for review, and all are valid. Additionally, the waste ledger and offsite transfer records for the fly ash are maintained and can be tracked for up to five years.

The hazardous waste vendor must provide qualifications for the disposal of cyanide-contaminated waste prior to contract signing. Additionally, the Environment Impact Assessment Report of the vendor is publicly available to include specific provisions for decontamination, management, and disposal, as well as the ultimate destination of the disposed material, which complies with local regulations.

There are procedures to ensure that the cyanide is packaged and labelled as required by the political jurisdictions through which the packaged cyanide will pass.

The cyanide facility packages cyanide in accordance with the Chinese standards. Classification and Code of Dangerous Goods (GB 6944-2025) is developed to align with the requirements of the United Nations Recommendation on the Transport of Dangerous Goods – Model Regulations, (2023).

The Standards of GB 19268-2021 and GB 6944-2025 specify the requirements for packing cyanide for export, including the packaging materials and method for inspecting the packaging.

The facility sources their drums and IBCs from a third party that obtains compliance certificates with each supply of the packaging. Cyanide Package, Label Management Procedure specifies the packaging requirements, including that the packaging must meet the Standard for Packing of Solid Cyanide.

The Inner Mongolia Alxa League Customs Bureau inspected the cyanide facility's packaging systems for each supply consignment during the audit period and approved the packaging systems for international transport of the cyanide.

Stored cyanide was observed to be labelled in Chinese and English with global harmonised system GHS pictograms and UN number identifying the product.

STANDARD OF PRACTICE 1.3

Inspect cyanide production facilities to ensure their integrity and prevent accidental releases.

The operation is
- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 1.3
- ☐ not in compliance with

Inner Mongolia Chengxin Yongan Chemical Co., Ltd.		16 January 2026
Name of Facility	Signature of Lead Auditor	Date

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 1.3 requiring inspection of cyanide production facilities to ensure their integrity and prevent accidental releases.

The Facility conducts routine inspections of tanks, valves, pipelines, containments and other cyanide production and storage facilities, including:

- Tanks holding cyanide solutions for structural integrity and signs of corrosion and leakage
- Secondary containments for their integrity, the presence of fluids and their available capacity, and to ensure that any drains are closed and, if necessary, locked, to prevent accidental releases to the environment
- Pipelines, pumps and valves for deterioration and leakage
- Containers used for transportation, where the producer is responsible for their integrity

Tanks and vessels

The facility maintains a register of tanks and vessels and identifies which ones contain cyanide solutions. Inspections on the integrity of the tanks are completed via 1-hourly inspections and 12-hourly inspections are undertaken of the cyanide storage tanks, including pipe work, flanges, pumps, high level alarms and tanks to identify deterioration and leaks. The inspection records are dated.

The inspection records are dated and detail the results of inspection including the following items:

- Tank foundation stability
- Insulation and corrosion prevention materials
- Stairs and fences
- Bund
- High level alarms
- Tank valves
- Tanks signage
- Pipeline connection integrity
- Flanges and valve condition
- Wastewater collection facilities
- Presence of tank corrosion or leakage.

In addition to the 1-hourly inspections and 12-hourly inspections, the wall thickness of the vessels is tested every 6 months.

Secondary containments

A Site inspection confirmed secondary containments are in reasonable condition and evidence of periodic maintenance and patching was observed. The facility has updated its inspection process to better define standards for secondary containments. Minor defects in liquid cyanide unloading area were rectified during the audit.

The tank bund for liquid cyanide has been repaired in June 2022 which looks well during audit.

Discharge from the secondary containment is via a manually operated pump to drums to pour into emergency collection tanks at the Site's wastewater treatment plant, or for a concentrated liquid cyanide spill, to a mobile tanker for re-use at the cyanide facility. Therefore, there is no

requirement to ensure that drains are closed or locked to prevent accidental releases to the environment.

Pipes – 6-monthly Pipe Wall Thickness Testing

The thickness of the wall of cyanide carrying pipes is monitored every six months. The inspection records note the integrity of the pipe and support structures. The inspection records are dated. Records were sighted for selected pipelines from 2022 to 2025.

Containers used for transportation

Before the transportation, the Site will check the containers certificates and inspect the integrity of the containers, emergency response materials.

Inspection frequencies are sufficient to ensure that equipment is functioning within design parameters. Based on interviews, inspection of the facility and content if the inspection records the frequencies are considered sufficient to assure that the equipment is functioning within design parameters.

The Facility has documented inspections that are retained. The documentation identifies specific items to be observed and includes the date of the inspection, the name of the inspector, and observed deficiencies. The nature and date of corrective actions were noted as being documented, and records are retained.

The inspection records have been provided for review during Site visit.

PRINCIPLE 2| WORKER SAFETY

Protect workers' health and safety from exposure to cyanide.

STANDARD OF PRACTICE 2.1

Develop and implement procedures to protect facility personnel from exposure to cyanide.

The operation is
- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 2.1
- ☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 2.1 requiring the Facility to develop and implement procedures to protect plant personnel from exposure to cyanide.

The Facility has developed formal procedures to minimize worker exposure during:

a) Normal facility operations from receipt of raw materials through finished product packaging and shipping
b) Non-routine and emergency operations
c) Maintenance related activities

The Process Operational Rules details formal procedures to minimize worker exposure during normal operations from receipt of raw materials through finished product packaging and shipping. The Safety operation procedures details formal procedures during non-routine and emergency operations.

The production facility is managed via a DCS in two control rooms, one for Workshop 701 and one for Workshop 708 &709. Furthermore, there is a SIS (Safety Instrumented System) in liquid cyanide production control room.

The procedures discussed the PPE that must be worn and to undertake a field level risk assessment prior to commencing work as well as using a lock out tag out system for working on all cyanide facility. It also requires the maintenance team to communicate with the local cyanide department prior to the work commencing and that any unsafe conditions must be reported to the department supervisor.

Safety Production Management Procedures, Chapter 6 details the formal procedures to minimize worker exposure during maintenance related activities.

In addition, Safety Production Management Procedures, Chapter 7 details if the special operations are involved in the inspection and maintenance process, need to apply for a special operation permit. Special operation is mainly shown as follows:

- Working at heights
- Confined space
- Lifting
- Digging
- Machinery maintenance

- On-Site road route change
- Flow isolation plate
- Hot work
- Temporary electricity, and
- Equipment dismantling and scrapping.

The safety permit requires a field level risk assessment to be undertaken prior to the work commencing, the use of a buddy system, records of tagging out, checking of PPE, undertaking flammable and toxicity tests. The permit is signed by the employee, the safety manager and department manager.

According to Cyanide-related Device Maintenance Safety Operation Procedures, piping and other devices involving cyanide must be cleaned up before inspection and maintenance by following actions:

1) Piping and other devices involving cyanide must be cleaned up before inspection and maintenance.
2) Stop the circulating pump, pull the caution tape at the site, and prohibit non-staff and unrelated personnel from entering the production plant area.
3) Open the open material valve, discharge material to the sodium cyanide collection tank and promptly pump it into the sodium chloride intermediate tank.
4) After the remaining material is discharged, close the corresponding discharge valves and make up soft water for cleaning and replacement at least 4-5 times and continuously check the cyanogen content in the cyanide-containing wastewater until the cyanogen is zero, then open the corresponding discharge valves and empty the water.
5) Open the nitrogen valve, purge the remaining residual liquid that has not been released, and empty the system material liquid.
6) Ventilation replacement of the system to ensure that the hydrogen cyanide content and oxygen concentration meet the relevant regulations (hydrogen cyanide gas concentration: 0ppm, oxygen concentration: 19.5%~21%)

The Facility does solicit and considers worker input in developing and evaluating health and safety procedures.

Employees have opportunities to make suggestions regarding the procedures via 'written suggestions' that they can place in suggestion boxes, give to their shift leader who passes it to the supervisor. The company identifies representatives of occupational health and safety affairs, and participates in the communication, participation and negotiation of occupational health and safety affairs, including:

- Formulation and review of risk management policies
- Occupational health and safety objectives formulation and review
- Participate in the review of hazard identification, risk assessment and risk control planning
- Negotiate changes affecting workplace occupational health and safety.

The Major Incident Hazard Special Contingency Plan details the areas where the risk of hydrogen cyanide and cyanide dust is considered high and PPE including either a respirator with a filter (appropriate for cyanide) or with oxygen is worn.

In Sodium Cyanide Personal Protection and Emergency Management Procedure, solid cyanide workshop, solid cyanide warehouse, HCN production facilities, laboratory, liquid cyanide tank

farm and sodium cyanide contaminated waste incinerator has been identified where may be exposed to hydrogen cyanide gas and/or cyanide dust.

During inspections of the facilities workers were observed to be wearing PPE as outlined in the procedures and signage displayed in the work area.

The Facility uses monitoring devices and associated alarms to confirm that controls are adequate to limit worker exposure to hydrogen cyanide gas and/or cyanide dust exceeding 10 parts per million (ppm) on an instantaneous basis or 4.7 parts per million continuously over 8-hour, as cyanide.

A combination of fixed and portable monitors is used at the facility. The fixed monitors are set to alarm at 0.8 ppm for high alarm, 1.6 for high-high alarm and the portable monitors are set to alarm at 4.7 ppm for high alarm and 10.0 ppm for high-high alarm. Portable monitors are used for task specific activities, and the fixed monitors are to provide detection of an issue with the process.

When HCN gas levels trigger the alarm levels, the Site operator shall evacuate the Site area immediately. The emergency treatment personnel must wear air breathing apparatus and wear heavy protective clothing to the Site to find out the leakage source and block the leakage.

The HCN monitoring equipment is maintained, tested and calibrated according to manufacturer's recommendations. The records are retained for three years. There are fixed detectors within the plant area and portable detectors used for task specific activities. Calibration certificates were reviewed for the monitoring equipment.

The Facility has a buddy system which requires employees to work in two for posts involving cyanide exposure. All operators have explosion-proof radio communication to communicate with the associated process control room. Inspectors and workshop directors are also equipped with explosion-proof mobile phones.

The Facility assesses the health of employees to determine their fitness to perform their specified tasks.

All workers have a medical examination every year at the local hospital (Wuhai Occupational Disease Prevention and Treatment Institute). The medical includes checking blood pressure, lung capacity, electrocardiography (ECG), blood, urine, liver scan, nervous system, ear examination, nose and pharynx, blood eosinophil count, pure hearing threshold test air conduction and depending upon the working location and duration of the employee.

The Site has records for each worker detailing the date of the examination and whether they have passed.

Additionally, the site conducts fit tests before using respirators to ensure that individuals are suitable for the half-face respirator, full-face respirator, and Self-Contained Breathing Apparatus (SCBA).

The Sodium Cyanide Personal Protection and Emergency Management Procedure as well as Clothing Change and Clean Procedure detail that all employees are not allowed to take their work clothes out of the work area. They need to take a shower after getting off work and

change their clothes before leaving. Store poison-contaminated clothes separately and wash them thoroughly with a washing machine in the workshop before wearing them.

Visitors are supplied with laboratory coats for use while visiting the facility.

Additional PPE is required in the packaging area including the use of coveralls, gloves and full-face respirators. Personnel leaving the packaging facility must head via changing room for shower and clothes change.

Warning signs advising workers that cyanide is present and that, if necessary, suitable PPE must be worn, are located around the Facility.

Warning signs for both sodium cyanide and hydrogen cyanide are placed in all process and storage areas. The signs include PPE requirements.

Warning signs were observed to be located on the outside of the warehouse buildings at entrance points and within the warehouse on the outside of the IBCs. Warning signs were present at the Workshop 701, Workshop 708, Workshop 709 and Solid Cyanide Warehouse.

According to Sodium Cyanide Personal Protection and Emergency Management Procedure, all personnel are prohibited from smoking, eating and drinking, and having open flames in areas where there is the potential for cyanide contamination. All process and storage areas have signs stating no smoking, no eating or drinking and no open flames.

STANDARD OF PRACTICE 2.2

Develop and implement plans and procedures for rapid and effective response to cyanide exposure.

The operation is	☒ in full compliance with	Standard of Practice 2.2
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 2.2 requiring the development and implementation of plans and procedures for rapid and effective response to cyanide exposure.

The Facility has developed specific written emergency response plans for cyanide exposures and an On-Site Disposal Plan to illustrate detailed treatment procedure after a spill or exposure. The detailed response processes have been specified to cyanide exposure through ingestion, inhalation, and absorption through the skin and eyes in these documents.

The persons interviewed knew to relocate exposed person offsite and remove contaminated clothes, inject exposed person with cyanide resistant injection, rinse the contaminated part with moving water, contact the first-aid clinic and hospital for emergency care.

Showers, eye wash stations and non-acidic fire extinguishers are located at strategic locations throughout the Facility. They are maintained and inspected on a regular basis. The inspection and maintenance details have been specified in Emergency Equipment, Materials Inspection

and Maintenance Procedure. The maintenance items include water supply pressure, water spray pattern, tidiness of the stations.

The Facility has an annual preventative maintenance and inspection programme. Detailed inspection and maintenance requirements have been specified in the Emergency Equipment, Materials, Medicine Inspection and Maintenance Procedure. Minor deficiency observed in the Sulfuric Acid Pump Station and been corrected immediately during audit.

Dry powder fire extinguishers were observed throughout the Facility. No carbon dioxide fire extinguishers were observed throughout the cyanide facility areas.

The Facility is equipped with oxygen, resuscitators, antidotes and communication system or emergency notification method that is readily accessible for use.

Onsite inspection of the facility confirmed that operators are equipped with explosion-proof radio communication devices or explosion-proof mobile phones, and antidotes are stored strategically throughout the plant. Oxygen and resuscitator are available in the medical room on the site. Water is available around the plant through safety showers and fire hydrates.

Personnel interviewed were aware of the location of antidotes and the emergency notification process. Inspection records sampled during the audit period were found to be well organized.

The Facility inspects its first aid equipment regularly to ensure that it is accessible when needed. The first aid and emergency response equipment (including oxygen kits) are stored and tested in accordance with the manufacturer's instructions and replaced as scheduled to ensure their effectiveness at the time of use.

The antidotes' instructions indicate they should be stored at room temperature and protected from the sun. The antidote was stored appropriately and within its expiry date.

The doctors at the Site's first aid clinic inspect the oxygen bottles and resuscitators in the clinic every week.

Fire extinguishers are sent in rotation to an off-site facility and refilling as required by the manufacturer. Fire extinguishers have been inspected and within service duration.

Safety Data Sheets, first aid procedures or other informational materials regarding cyanide safety are provided in the local language understood by the workforce and are available to workers in areas where cyanide is handled.

All signages and procedures are in Chinese, the official language. The SDS has been developed in compliance with global harmonized system (GHS) requirements.

Information boards have been erected at the cyanide handling areas of the plant that detail hazards and precautions. The drum and IBC labels also provide information on cyanide hazards.

Storage tanks, process tanks, containers and piping containing cyanide are identified to be labelled clearly to alert workers of their contents.

The flow direction of the pipes is clearly shown.

The Facility has a decontamination policy or procedure for employees, contractors and visitors leaving the areas where there is a risk of skin exposure to cyanide.

Clothing Change and Clean Procedure have specified the requirement of using and replacing personal protection supplies for employees, visitors, and contractors before and after entering the Cyanide Production Units.

Before leaving work, employees must go to the workshop locker room to change and clean the protective equipment used during their shift and put them in the designated area.

It is forbidden to wear labor supplies home, and the used protective equipment is not allowed to be resold or disposed of improperly. The used labor supplies must be returned to the recycling box designated by the workshop, where they will be handled uniformly. All employees in the cyanide production units have their clothes laundered on site by the department.

Visitors are supplied with laboratory coats for use while visiting the facility.

Additional PPEs are required in the packaging area including the use of coveralls, gloves and full-face respirators. Personnel leaving the packaging facility must proceed to the changing room for a shower and clothes changing.

Interviews and site inspection confirmed that the decontamination procedure is implemented and followed.

The Facility is equipped with on-site first aid capabilities for workers exposed to cyanide, but not higher-level medical assistance. The Site has an on-site first-aid clinic operational 24 hours a day, staffed by two fully qualified doctors.

According to the instruction manual of cyanide antidote provided by the Site, the formulation of cyanide antidote is confidential, which is described as a colorless or light-yellow clear liquid.

The Facility has provided training on the proper use of cyanide antidotes for all employees who may be exposed to cyanide. Based on random interviews with on-site personnel, it has been confirmed that these employees are familiar with the proper use of such antidotes.

The Facility has developed a procedure to transport exposed workers to locally qualified, off-Site medical facilities.

The Emergency Response Plan for Production Safety Accident details the procedure to transport workers to local medical facilities. The Site would use either their own cars or in the case of serious injury or exposure they would call the emergency services at the nearest hospitals (Alxa High-tech Zone General Hospital) located approximately 10 minutes' drive from the Site.

The Facility has made formalized arrangements with local medical facilities of the potential need to treat patients for cyanide exposure, and the Facility is confident that the medical provider has adequate, qualified staff, equipment, and expertise to respond to cyanide exposures.

The Facility has signed a Medical Rescue Cooperation Agreement with Alxa High-tech Zone General Hospital. Alxa High-tech Zone General Hospital is the designated cooperative unit for medical services of the Site. It will undertake the emergency medical treatment of the venue,

provide green medical channels for the Site, and provide 24-hour medical services. Before signing the agreement, Yalin Zhang, Safety Director toured the hospitals and advised that Alxa High-tech Zone General Hospital is satisfied that the facilities have suitable staff and equipment to respond to cyanide exposures.

The Occupational Disease Hazard Status Evaluation report, Occupational Disease Hazard Control Effectiveness Evaluation and Production Safety Accident Emergency Plan are in place to investigate and evaluate cyanide exposure incidents to determine if the operations programmes and procedures, to protect worker health and safety and to respond to cyanide exposures, are adequate or need to be revised.

It details an accident classification system which determines the type of investigation required, and the accident report process and accident communication process. The most serious accident and exposures require investigation by the government or an outside party. For accidents where no working day is lost the investigation is to be undertaken by the cyanide department along with the safety engineer to determine the root cause of the incident.

The accident and treatment report details the accident, the accident analysis, the prevention measures, the person responsible. It proceeds to a corrective measures section which tabulates the hazard, corrective measure, date for implementation and the responsible person.

There have been no cyanide exposure or cyanide release incidents reported during the audit period.

The non-cyanide-related incidents response process has also been specified in the Emergency Response Plan for Production Safety Accident. One fingers injury accident during work occurred in 2024, and the investigation report has been provided for review.

PRINCIPLE 3 | MONITORING

Ensure that process controls are protective of the environment.

STANDARD OF PRACTICE 3.1

Conduct environmental monitoring to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

The operation is
- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 3.1
- ☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 3.1 requiring environmental monitoring to be conducted to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

The Facility does not have any direct wastewater discharge to surface waterbody.

Quarterly monitoring results of discharges from the Site wastewater treatment plant, from 2023 to 2025 are provided for review. The test results of Weak Acid Dissociable (WAD) cyanide are between 0.024 mg/L to 0.121mg/L in last three years, which is conducted in accordance with the standard method in Chinese National Analytical Standard No. HJ484-2009 (Nicotinic acid-pyrazolone spectrophotometric method), with detective limit of 0.004mg/L.

The Facility does not have any direct wastewater discharge to surface water.

The treated effluent from the Site's wastewater treatment plant is discharged to Alxa Economic and Technological Development Park's wastewater treatment plant, and then discharged into the natural water body, Huang River, after being treated.

Due to the rare raining in the area where Inner Mongolia Chengxin located, no separate stormwater pipeline system designed, all the stormwater is piped to an emergency collection tank (6480m^3) for water quality testing before discharging into the wastewater treatment plant which services the entire Site.

Environmental Management Procedure (CXYA-HBC-ZD) details if the concentration of pollutants exceeds the standards, it will be pumped into the Site's wastewater treatment plant, then pumped into the Alxa Economic and Technological Development Park's wastewater treatment plant after treated.

The WAD cyanide concentration of wastewater from the discharge of the wastewater treatment plant is monitored quarterly, and the sampling point is located in the reservoir in front of the discharge. Quarterly monitoring results indicate that the concentrations of total cyanide have been less than 0.5 mg/L for the years 2023, 2024 and 2025.

The total cyanide is tested in accordance with the standard method in Chinese National Analytical Standard No. HJ484-2009 (Nicotinic acid-pyrazolone spectrophotometric method), with detective limit of 0.004mg/L.

The Facility does not have any indirect wastewater discharge to surface water.

The treated effluent from the Site's wastewater treatment plant is discharged to Alxa Economic and Technological Development Park's wastewater treatment plant, and then reused for the factories in the Park after treatment..

Due to the rare raining in the area where Inner Mongolia Chengxin located, no separate stormwater pipeline system designed, all the stormwater is piped to an emergency collection tank (6480m3) for water quality testing before discharging into the wastewater treatment plant which services the entire Site.

Environmental Management Procedure (CXYA-HBC-ZD) details if the concentration of pollutants exceeds the standards, it will be pumped into the Site's wastewater treatment plant, then pumped into the Alxa Economic and Technological Development Park's wastewater treatment plant after treated.

The WAD cyanide concentration of wastewater from the discharge of the wastewater treatment plant is monitored quarterly, and the sampling point is in the reservoir in front of the discharge. Quarterly monitoring results indicate that the concentrations of total cyanide have been less than 0.5 mg/L for the years 2023, 2024 and 2025.

The Facility develops a soil and groundwater monitoring plan and engages a certified 3rd party to conduct soil and groundwater water monitoring.

One upstream groundwater well is set for monitoring on an annual basis, while two downstream groundwater wells are scheduled for semi-annual monitoring. However, only two wells, one upstream is located around 2.3km from site's northwest boundary and one downstream well is located around 0.1km from site's southeast boundary are currently monitored, as the other downstream groundwater well (at east of site and closing to unloading area of sodium cyanide) is dry and cannot be monitored, despite being drilled to a depth of 50 meters according to the site representative's reporting. The site is equipped with 17 sampling points designated for testing soil for cyanide. The Soil and Underground Water Monitoring Report confirms that no cyanide has been detected.

There are no environmental receptors, such as surface water bodies, in close proximity to the cyanide facility. The nearest surface water body is Huang River, which is located 6.9 km east of the Site.

The certified laboratory was entrusted by the Site to undertakes the analyses in accordance with the standard method Chinese National Analytical Standard No. HJ484-2009 (pyridine-barbitone acid colorimetry method). The analytical instrument is calibrated by an independent calibration company on an annual basis.

Based on results of groundwater monitoring in last 3 years, the concentrations of total cyanide were below the Minimum Detective Limit (MDL) of 0.001mg/L. As to soil monitoring, the total cyanide was added to monitoring plan since 2025, the progress is still in progress during audit.

The local regulatory acceptance criterion is 0.05 mg/L total cyanide. The results for the audit period were below the acceptance criteria.

There is no protected drinking water area near the Site, and the groundwater in the area is not used as drinking water for humans or livestock.

Seepage from the Facility has not caused the concentration of cyanide in the groundwater to exceed that necessary to protect its beneficial use.

In Chapter 19 Environmental Protection and Remediation Procedure for Soil and Water Body Contamination of Environmental Management Procedure, remedial activity to prevent further degradation and restore beneficial uses have been specified in event of cyanide contamination to address potential soil and groundwater contamination.

The Facility limits the atmospheric emissions of hydrogen cyanide (HCN) such that the health of workers and the community are protected.

There are Nine HCN point-source emissions at the Facility.

- Two emissions from liquid cyanide generation system and tail exhaust boiler at workshop #701, pretreated by alkali washing, via evaporation process, and then to the atmosphere through a 25 m exhaust pipe.
- One emission from liquid cyanide generation (workshop #709), treated by catalytic oxidation, and then to the atmosphere through a 25 m exhaust pipe.
- Four emissions from solid cyanide generation at workshop #708 and #709, treated by alkali or water scrubber, and then to the atmosphere through a 25 m exhaust pipe.
- Two emissions from the two incinerators onsite, treated by alkali scrubber, and then to the atmosphere through a 50 m exhaust pipe separately.

The Facility engages external qualified agency to conduct HCN monitoring for point source on semi-annual basis and HCN fugitive emission at boundary on quarterly basis.

The HCN emissions are tested in accordance with Chinese National Analytical Standard No. HJ /T 28-1999. Semi-annual monitoring results of Nine HCN point sources from 2023 to 2025 indicated that the concentration of HCN of these point sources ranged from 0.09 -0.24mg/m3, which was below the regulatory compliance limit (0.3 mg/m3). Additionally, fugitive HCN emissions at boundary from 2023 to 2025 were not detected at the site boundary and below the MDL of 0.002 mg/ m^3, which were below the regulatory compliance limit (0.0024mg/).

Monitoring is conducted at frequencies adequate to characterize the medium being monitored and to identify changes in a timely manner.

The frequency of monitoring undertaken at the cyanide facility is:

- Wastewater discharges – quarterly manual monitoring and continuous online monitoring
- Air emissions – semi-annual monitoring for point source emission, and quarterly monitoring for fugitive emission
- Soil quality – annually monitoring
- Groundwater quality – semi-annually monitoring for downstream groundwater, and annual monitoring for upstream groundwater.

These frequencies are in compliance with the legal requirements and considered adequate in the operating circumstances to meet Code requirements.

PRINCIPLE 4| TRAINING

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

STANDARD OF PRACTICE 4.1

Train employees to operate the facility in a manner that minimizes the potential for cyanide exposures and releases.

The operation is	☒ in full compliance with	Standard of Practice 4.1
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 4.1 requiring employees to be trained to operate the plant in a manner that minimises the potential for cyanide exposures and releases.

The Facility provides training to workers to understand the hazards of cyanide and refresher training is periodically conducted. New employees receive three levels of training comprising company, departmental and operational level training.

Company-level training consists of three days of classroom training. All employees receive a booklet titled 'Safety Training material' during the training. These booklets are available after the course in the control room of cyanide department.

Departmental level training consists of three days' training. The training takes place in both the meeting room and on Site to demonstrate the chemical hazards, emergency response and PPE. The new employee will be familiar with the entire operation of the cyanide production plant. For the staff who may come into contact with cyanide, the training will cover the topics of the health effects of cyanide, the symptoms of cyanide exposure, and the procedures to follow in the event of exposure.

Operational level training consists of three days training on Site within the cyanide department relevant to new employee's role. Each employee is paired with an experienced worker who teaches them how to operate the machinery in that area. During the three days they do not operate the machinery independently, culminating in an examination at the end of the three days. In addition, they go through the operating procedures.

Refresher training is provided in the form of monthly training sessions. Each month the safety adviser of the Cyanide Production Units delivers training that lasts approximately two hours.

72 hours are required for the new employee training and 24 hours are required for the refresher training at least.

Interviews with personnel and a review of training records confirmed that workers receive training on cyanide hazards prior to commencing work, along with regular refresher sessions.

The training plan includes training dates and training time, training topic, trainer, training location.

The Facility provides training for workers on the use of personal protective equipment (PPE), including when and where the PPE is required.

PPE training covers all three levels of training (company, departmental and operational). There are specific management and departmental procedures for the selection, storage, use and maintenance of PPE for different operations within the cyanide department.

Interviews with employees confirmed that training on how and when to use PPE is provided.

The Facility trains workers to perform their normal production tasks with minimum risk to their health and safety, and in a manner that prevents unplanned cyanide releases.

The Safety Production Management Procedures and Process Operational Rules outline the requirements for safely undertaking specific tasks, including the use of PPE prior to undertaking certain tasks. New employees are paired with an experienced person to gain practical experience, with supervision from the area supervisor.

According to the Safety Operation Regulations, all employees must complete 72 hours of training for new employees prior to handling cyanide. The training records are provided for review as evidence.

Refresher training in normal production tasks has been provided to ensure that employees continue performing their work in a safe and environmentally protective manner.

Refresher training is provided through monthly training sessions which include cyanide-related work tasks. Each month the safety adviser for the cyanide department delivers training that lasts approximately two hours. A minimum of 24 hours are required for the refresher training to all employees. A test is required for each training.

The training components required for each job are outlined in training materials.

These components include the physical and chemical properties of cyanide, fire prevention, personal protection equipment, emergency response to cyanide exposure and release, critical hazards prevention, and specific training resources related to each role.

As interviewed with Site employees, it is evident that they possess a clear understanding of how to perform cyanide-related tasks and respond effectively in emergencies.

The Facility has 14 personnel with safety management certificates for the whole site. Internal training sessions are provided for the employees by these qualified personnel.

External training sessions are conducted by qualified agencies, including the local safety bureau, the environmental protection bureau, the fire department, and the special equipment management authority.

The Facility evaluates the effectiveness of cyanide training by testing. There are questionaries used for the tiered induction training and are retained for records. Tests are also conducted after the annual refresher training and monthly training.

New employees are paired with an experienced person who demonstrates the tasks and observes the performance of the workers.

STANDARD OF PRACTICE 4.2

Train employees to respond to cyanide exposures and releases.

The operation is	☒ in full compliance with	Standard of Practice 4.2
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 4.2 requiring employees to be trained to respond to cyanide exposures and releases.

The Facility provides training for workers on the process to take in the event of cyanide exposure or release.

Employees receive training on these procedures through various channels, including company-wide, departmental, and operational training sessions, as well as regular monthly and weekly workshops. A team of 14 qualified safety management professionals serves as trainers, ensuring comprehensive instruction and support.

Also, workers are required to attend the mock drills to evaluate the effectiveness of emergency response process. Workers interviewed could describe the response processes including evacuation to an upwind location, use of safety showers, reporting the incident and use of antidote. The Site also has appointed emergency responders who receive training on higher level response actions.

The Facility provides training to workers to respond to cyanide exposure and cyanide releases. Routine mock drills are conducted to test and improve their response skills.

The Facility has conducted mock drills for workers simulating cyanide exposure and release scenarios in Workshop 701, Workshop 708, and Workshop 709. The drills are recorded, and reports evaluate the effectiveness of the exercise along with opportunity for improvements.

Training records are retained for the duration of an individual's employment, documenting the training they have received. The records include the names of the employee and the trainer, the date of training, the topics covered, and how the employee comprehends the training contents.

Training files for employees in cyanide production units were reviewed, which contained evidence of training, including course content, evaluation and certificates. All workers received training on personal protective equipment and emergency response procedures in the event of a spill or exposure in monthly and annual training sessions.

PRINCIPLE 5| EMERGENCY RESPONSE

Protect communities and the environment through the development of emergency response strategies and capabilities.

STANDARD OF PRACTICE 5.1

Prepare detailed emergency response plans for potential cyanide releases.

The operation is	☒ in full compliance with	Standard of Practice 5.1
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.1 requiring a detailed emergency response plan for potential cyanide releases.

The Facility developed an Emergency Response Plan to address potential releases of cyanide that may occur on Site or may otherwise require response.

The following emergency response plans were provided for review:

- Emergency Response Plan for Production Safety Accident outlines general response for cyanide related accidents.
- Emergency Response Plan for Environmental Emergencies details the environmental risk assessment and targets response of cyanide release.
- Special Emergency Plan for Major Hazard Source Accidents, Chapter 4.3.2, 4.3.3, 4.3.5 and 4.3.6 details the emergency response for potential releases of cyanide in Solid Sodium cyanide warehouse, Liquid sodium cyanide tank farm, HCN production facilities and Solid sodium cyanide production workshop, respectively.
- On-site Disposal Plan, Chapter 1 for Emergency Leakage of Cyanide at Hydrocyanic Acid Workshop, Liquid Cyanide Workshop and Chapter 7 for Solid Cyanide Workshop describe response procedures and actions in the event of cyanide spills for each position in the workshops.
- On-site Disposal Plans, Chapter 17 for Emergency Leakage of Cyanide at Storage Area describe response procedures and actions in the event of cyanide spills in storage area.

The emergency procedures do consider the potential failure scenarios appropriate for its site-specific environmental and operating circumstances conditions.

a) Emergency Response Plan for Production Safety Accident, Section 3.4.2.4 states the response in the event of catastrophic release of hydrogen cyanide. When a poisoning accident occurs, the person on Site should immediately evacuate from the Site. Rescuers enter the Site after wearing the positive pressure air respirator or full face heavy protective clothing to avoid rescuer casualties. Quickly move poisoned patients to fresh air, loosen clothing buckles and belts, remove foreign objects from mouth, maintain a clear airway, and pay attention to keeping warm. In the meantime, call High tech central hospital to request an ambulance or sent the patient to the hospital by using the vehicles on duty at the Site. If the poisoned person has difficulty breathing, give oxygen. When breathing and heartbeat stop, immediate artificial respiration (do not use mouth-to-mouth) and cardiopulmonary resuscitation should be

performed. Administer one muscle injection of cyanide antidote (Note: Inject 2ml of the antidote intramuscularly, observe for 3-5 minutes; if symptoms do not improve, repeat with half the dose). Transport the patient to the hospital for treatment immediately.

b) Emergency Response Plan for Environmental Emergencies, section 4.6.2.1 states the response in the event of leakage of hydrogen cyanide in operation and storage area. Once a leak occurs, a warning zone was established based on the impact area of material diffusion and conduct emergency monitoring of water, air, soil, and groundwater. In the case of small leaks from pipelines, valves, or tank bodies, rescue personnel should immediately identify the leak point and use appropriate equipment such as high-pressure leak stoppers, sawdust, bundling straps, adhesive leak sealing tools, and half-couplings to stop the leak. If there is a large leak, immediately organize the transfer of the liquid. Once the liquid level has dropped to a point where there is no spraying phenomenon at the leak point, proceed with sealing the leak. In the meanwhile, collect and safely dispose of the leaked material to prevent the spread of the leaked substance or its entry into the sewer system.

c) Emergency Response Plan for Production Safety Accident, section 3.4.2.1 details the response in the event of a release. If the fire is small, on-site personnel use on-Site dry powder fire extinguishers to extinguish the fire themselves. If the condition meets the fire and explosion special accident emergency plan start conditions, will activate the corresponding plan immediately.

d) On-Site disposal plan for Hydrocyanic Acid Workshop, Liquid Cyanide Workshop and On-Site disposal plan for storage area detail the procedure and emergency actions to be taken in the event of rupture to pipes, tanks or valves.

e) Power outages and equipment failures are addressed in the Safety Production Management Procedures and Emergency Response Plan for the Electrical Instrument Department (CXYA-DYB-YA). This plan outlines the response to power outages affecting the 35kV transformers. The emergency response plan includes a "Power Off Emergency Response Procedure," which states that the facility is supplied with electricity through two separate power circuits. In the event of a failure of one supply, the other power supply can meet plant requirements. Additionally, there are two diesel-fueled power generators (780kW each) on-site for backup power supply.

f) Regarding the overtop of ponds, tanks, and waste treatment facilities, this situation is not applicable, because the only open ponds are emergency ponds that are pumped to in the case of an emergency.

The emergency procedures do describe specific response actions, as appropriate for the anticipated emergency situations, such as evacuating Site personnel and potentially affected communities from the area of exposure.

Emergency Response Plan for Environmental Emergencies, section 4.6.2.1 details the evacuation of all people from the incident area to downwind of the incident to an upwind location. The Site has an evacuation alarm that can be used when required. In the case of potentially affected communities the Site has contact information for the surrounding industrial

Sites, hospital and fire brigade etc., and the phone calls would be made to inform them in the case of an incident.

Emergency Response Plan for Production Safety Accident, Chapter 3.4.2.3.2, details the use of cyanide antidotes and first aid measures for cyanide exposure, i.e. cyanide antidote injections. These antidotes are also kept in emergency material storage areas. The Chapter outlines actions to take in the event of both small- and large-scale leaks including preventing access to the site drainage and using sand or plastic covers to mitigate the risk of hydrogen cyanide emissions. Additionally, it specifies the need to pump all liquid into containers, prohibits the use of copper or aluminum equipment, and mandates the collection of contaminated soil into suitable containers. Furthermore, the chapter addresses incidents during loading and dissolution, emphasizing the necessity to identify and utilize appropriate equipment to effectively contain the leak.

Containment, assessment, mitigation and future prevention of releases are covered in the Emergency Response Plan for Environmental Emergencies, Chapter 6 to detail the prevention of chemical incidents and Emergency Response Plan for Safety Production, Chapter 4 to detail the safety and health assurance after an accident.

STANDARD OF PRACTICE 5.2

Involve site personnel and stakeholders in the planning process.

The operation is	☒ in full compliance with	Standard of Practice 5.2
	☐ in substantial compliance with	
	☐ not in compliance with	

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.2 requiring the Facility to involving site personnel and stakeholders in the planning process.

The Facility has involved its workforce and stakeholders, including potentially affected communities, in the emergency response planning process.

The emergency response procedures were issued to all departments and each department had specific training days where employees were disseminated information from the procedure and had the ability to comment on the procedure. The responsibilities of all departments have been stated in the procedure.

The Site is located in Alxa High-Tech Industrial Development Zone of Inner Mongolia, where closest residents more than 7km away from the site. There are no other specific environmental protection targets such as scenic spots, nature reserves and key cultural relics protection units in the surrounding 3 km radius. The Site communicated with relevant government authorities and neighboring industrial facilities within a 3 km radius for emergency response plan. The representatives from neighboring facilities were invited to site, discussed the major safety

hazards and signed to confirm that they have been informed with the hazards onsite. The signed notification letters were provided for review.

The contact information of internal emergency response team and external stakeholder, including surrounding industrial sites, hospital and fire brigade information, were included in Emergency Response Plan of Production Safety Accident. Relevant government authorities and neighboring industrial facilities were included as below:

- Emergency Management Bureau of Alxa High-Tech Industrial Development Zone
- Fire Rescue Brigade of Alxa High-Tech Industrial Development Zone
- Public Safety Bureau of Alxa High-Tech Industrial Development Zone
- Wustai Office of Alxa Ecological and Environmental Bureau
- Comprehensive Hospital of Alxa High-Tech Industrial Development Zone
- Local Safe Construction Office
- Local First Aid hotline
- Fire hotline
- Surrounding Industrial Sites:
  - Inner Mongolia Yize Pharmaceutical Co.Ltd.
  - High-tech Zone of Inner Mongolia Jie Kang Central Disinfection Distribution Center
  - Wustai 18th Gas Station

The Facility has informed potentially affected communities about the risks associated with accidental cyanide releases and engaged with them directly or through community representatives to determine suitable communications and response actions.

The Site has communicated with relevant government authorities and neighboring industrial facilities within a 3 km radius for emergency response plans. The representatives from neighboring facilities were invited to site, discussed the major safety hazards and signed to confirm that they have been informed about the major hazards onsite. The signed notification letters were provided for review. Therefore, the measures for risk response have been coordinated with the neighboring facilities, and a communication mechanism for risk response has been established.

The Facility has engaged local response agencies such as external responders and medical facilities in the emergency planning and response process.

During the revision and upgrade of the emergency response plans in 2025, the cyanide facility liaised with, and introduced the emergency response plan for the event of liquid or solid cyanide release, discussed with relevant government authorities and neighboring industrial facilities, including:

- Emergency Management Bureau of Alxa High-Tech Industrial Development Zone
- Fire Rescue Brigade of Alxa High-Tech Industrial Development Zone
- Public Safety Bureau of Industrial Park
- Wustai Office of Alxa Ecological and Environmental Bureau
- Comprehensive Hospital of Alxa High-Tech Industrial Development Zone
- Safety Construction Office of Alxa High-Tech Industrial Development Zone

The external responders shown as follows, who may come to Site to assist in the event of an emergency, have signed the mutual aid agreement:

- Fire Rescue Brigade of Alxa High-Tech Industrial Development Zone
- Comprehensive Hospital of Alxa High-Tech Industrial Development Zone

The operation engages in regular consultation and communication with stakeholders to assure that the Plan addresses current conditions and risks as detailed above.

If the impact of the emergency event exceeds beyond the Site area, the emergency leadership team will change to a related government management department.

The operation engages in regular consultation and communication with stakeholders to assure that the Plan addresses current conditions and risks as detailed above.

STANDARD OF PRACTICE 5.3

Designate appropriate personnel and commit necessary equipment and resources for emergency response.

The operation is	☒ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Standard of Practice 5.3

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.3 requiring designated appropriate personnel and committed equipment and resources for emergency response.

The Emergency Response Plans have included the following information:

a and b): The Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) Chapter 2 and Emergency Response Plan for Environmental Emergencies (CXYA-HJYA-2025) Appendix 1, details the following emergency response teams: director, on-Site director, departmental control team, medical team, security team and the support team.

c) Company level and departmental level training in Emergency Response Plan for Environmental Emergencies (CXYA-HJYA-2025) Chapter 8 is undertaken. The emergency response team accepted training in responsibilities, fire information and use extinguisher, on Site emergency procedure training, emergency equipment, including use of SCBAs, administering antidote, hazard identification, different emergency response training, major hazardous sources, management procedure training, hazardous operations training and mock drill training.

d) The Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) Section 6.5.2 and Emergency Response Plan for Environmental Emergencies (CXYA-HJYA-2025) Appendix 1 details 24-hour contact information for company leaders and team members are called by radio. Also, the call-out process for initiating a response to a cyanide-related emergency has been specified in the Emergency Response Plans.

e) The Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) Chapter 2 and Emergency Response Plan for Environmental Emergencies (CXYA-ZXYA-2025) Chapter 2 details the organizational framework for the company level and responsibilities, it details the responsibilities for the director, the on-Site director, the departmental control team, the medical, security team, and support teams.

f) The emergency resource survey report attach to the Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) and Emergency Response Plan for Environmental Emergencies (CXYA-ZXYA-2025) separately detail all emergency equipment and material prepared internally and externally, which include fire extinguishers (dry power and foam), fire hoses, eye wash bottles, shower and eye wash stations, fire hydrants, fire pumps, high temperature emergency clothing, SCBAs, chemical coveralls, gloves, light oil, HCN and ammonia detectors, emergency lighting, masks, chemical resistant gloves, sand drum, shovel, and cyanide antidote.

g) Inspections of fire extinguishers, cyanide antidotes, eye wash bottles, fire hydrants, SCBAs, PPE, gloves, fixed and portable monitors, emergency lighting and masks, are undertaken are details in section 5.3 of Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025), which specifies that these items must be inspected twice per month.

h) The responsibilities of hospital, fire brigade and the emergency management authority who provide advice on emergency response were detailed in section 5.2 of Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) and Section 2.4 of Emergency Response Plan for Environmental Emergencies (CXYA-ZXYA-2025).

The Facility has confirmed that outside entities included in the Emergency Response Plans are aware of their involvement and are included as necessary in mock drills or implementation exercises.

The Site has invited external responders, including local Emergency Management Burau, local Marketing Supervisory and Administrative Burau, Fire Brigade and Hospital attended onsite, to carry out the mock drill for emergency repose plan in June 2025, however only hospital was not attended onsite. The picture of the drill conducted in June 2025 was provided for review.

In addition, the medical staff on duty from the Site has attended all mock drills.

STANDARD OF PRACTICE 5.4

Develop procedures for internal and external emergency notification and reporting.

The operation is	☒ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	Standard of Practice 5.4

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.4 requiring development of procedures for internal and external emergency notification and reporting.

The Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) Chapter 6.5 and Emergency Response Plan for Environmental Emergencies (CXYA-HJYA-2025) Appendix 1 includes procedures and contact information for notifying management, regulatory agencies, outside response providers and medical facilities of the emergency.

The Incident Reporting, Investigation and Dealing Control Procedure (CXYA-CX-16) details the reporting line during incident occurs. The supervisor must be called who reports to the plant manager or vice manager. The plant manager will organize the emergency response team, the outside emergency services and whether to report to the government department and whether to inform the surrounding neighbors.

Contact information for the emergency response team, the on-Site doctor, ambulance, fire and hospital is placed on the safety information adjacent to the tank farms and process control rooms. The Emergency Response Plans have also specified the communicating process with the media in the event of a cyanide emergency.

The Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) Chapter 5.1 Communication and Assurance Section detail the procedure of internal and external communication in the event. And the Communication Procedure (CXYA-CX-06) which details that the supervisor must be called who reports to the plant manager or vice manager. The plant manager will organize the emergency response team, the outside emergency services and whether to report to the government department and whether to inform the surrounding neighbors. The Emergency Response Plan for Production Safety Accident (CXYA-ZXYA-2025) details contact information in the following:

- Fire, hospital and government office (safety department and environmental protection department)
- Surrounding industries.

Contact information for the emergency response team, the on-Site doctor, ambulance, fire and hospital is placed on the safety information adjacent to the tank farms and process control rooms.

The operation has a written procedure for notifying ICMI of any significant cyanide incidents, as defined in ICMI's Definitions and Acronyms document.

The Environmental Accident Management Procedure (CXYA-HBC-ZD. Chapter 4) which has specified the requirement for significant cyanide incidents as: If any significant cyanide incidents occur, Inner Mongolia Chengxin will report to the international trade department of Chengxin Group. International trade department will notify ICMI.

As interviewed, no such significant cyanide incidents have occurred.

STANDARD OF PRACTICE 5.5

Incorporate remediation measures and monitoring elements into response plans and account for the additional hazards of using cyanide treatment chemicals.

☒ in full compliance with

The operation is ☐ in substantial compliance with Standard of Practice 5.5

☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.5 requiring the Facility to incorporate monitoring elements that account for the additional hazards of using cyanide treatment chemicals into response plans and remediation measures.

The Emergency Response Plan for Environmental Emergencies (CXYA-HJYA-2025), describes specific, appropriate remediation measures, such as recovery or neutralization of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris, and provision of an alternate drinking water supply, as appropriate. The Sodium hypochlorite (the concentration is 10%) transferred from other workshops within the Site will be used to treat the leakage for neutralization.

According to Environmental Management System, Chapter 20 Environmental Monitoring Management Procedure, if a spill accident occurs, the soil at the accident area and the surrounding area will be tested after the accident is over, and the contaminated soil will be collected in time and sent to the incinerator for incineration". The final (maximum) concentration allowed in the residual soil is: 135mg/kg, which is Class II limit in the standard of *Soil environmental quality-Risk control standard for soil contamination of development land* (GB36600-2018).

The Water Bodies, Soil Pollution Prevention and Remediation Control Procedures (Chapter 19) of Environment Management Procedures (CXYA-HBC-ZD) Section 4.4 details that remedial measures of groundwater and soil, including remove soil using machinery or manual labor, including excavation, post-treatment, disposal, and reuse of excavated soil across various restoration stages.

The on-site drinking water is separated from the process water supply pipeline. In the event of requirement for drinking water the Site will purchase bottled water. They already have a contract with a supplier. (Connected to municipal water supply network).

There is no surface water on the Site or within 7.5 km of the Site therefore the question (Does the Plan prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water or that could reasonably be expected to enter surface water?) is not applicable.

Emergency Response Plan for Environmental Emergencies, Section 4.5.2 details the emergency monitoring plan for a release. Additionally, the site has monitoring instruments for water in on-site laboratory and HCN gas detectors were installed at production area with cyanide.

The on-Site laboratory has capacity to test water samples for WAD cyanide using EDTA titration and gas chromatography methods. The groundwater was regularly monitored by Ningxia Anpu Monitoring Testing Co. Ltd, in accordance with the *Standard examination methods for drinking water—Part 5：Inorganic nonmetallic indices GB/T 5750.5-2023 (Section 7. Cyanides- 7.1 Isonicotinic Acid - Pyrazolone Spectrophotometric Method*）. Additionally, the Ningxia Anpu Monitoring Testing Co. Ltd has been included in emergency monitoring team, with the contact information appendix 2 of Emergency Response Plan for Environmental Emergencies.

STANDARD OF PRACTICE 5.6

Periodically evaluate response procedures and capabilities and revise them as needed.

The operation is
- ☒ in full compliance with
- ☐ in substantial compliance with Standard of Practice 5.6
- ☐ not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

The Facility is in FULL COMPLIANCE with Production Practice 5.6 requiring the Facility to periodically evaluate response procedures and capabilities and revise them as needed.

The Emergency Response Plans (ERPs) includes provisions for annually reviewing and evaluating its adequacy. The evaluation is undertaken by the vice president, managers, safety engineers, departmental managers and emergency response team members.

The requirements for periodically evaluating response procedures and capabilities have been described in the ERPs. And the revision records have been kept for review during audit.

Mock emergency drills are conducted periodically to test response procedures for various exposure scenarios, and the lessons learned from the drills are incorporated into emergency response planning.

The whole of the Inner Mongolia Chengxin Site undertakes four emergency response drills for Major Hazards each year in accordance with Chinese regulations and the facility's Safety Management System (CXYA-CX-2025).

The cyanide manufacturing facility (Workshop 701, 708 and 709) also undertakes on-site disposal drill once per month.

Examples of the drill reports for the following scenarios over the last three years were reviewed:

- Practice emergency evacuation due to HCN gas release. This mock drill is mainly to simulate the emergency drill of hydrogen cyanide poisoning caused by a leak at the flange connection of the pipe at the root of the intermediate tank of sodium cyanide. Fire response (Emergency drills after a fire, including rescue, disposal of pollutants after a fire, etc.)
- Fire extinguisher training
- Cyanide poisoning response (post-incident handling drills in the event of cyanide poisoning.)
- Light oil spill and fire, which mainly include the mock drill for an environmental release, how to clean up the spilled contaminants and how to deal the fire event which caused by the oil spill.

For each drill the following is recorded:

- Description of emergency scenario
- Record of training attendance and assessment
- Photographs of the event

Independent Emergency Drill Reports are prepared to identify the deficiencies of the ERP, which also simulate the entire emergency response process from the initial emergency callout

notification through to the close-out of the response process. And an updated version to address the deficiencies is prepared after the drill as required.

There are provisions to evaluate the Plan after any emergency and for revising it as necessary. The operation has not had the need to implement the plans during the audit period, but revisions have been made following mock exercises and periodic review to keep the plans updated.

7.0 IMPORTANT INFORMATION

Your attention is drawn to the document titled – "Important Information Relating to this Report", which is included in **Appendix A** of this report. The statements presented in that document are intended to inform a reader of the report about its proper use. There are important limitations as to who can use the report and how it can be used. It is important that a reader of the report understands and has realistic expectations about those matters. The Important Information document does not alter the obligations ERM (Shanghai) Limited has under the contract between it and its client.

APPENDIX A IMPORTANT INFORMATION RELATING TO THIS REPORT

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