CYANIDE TRANSPORTATION SUMMARY AUDIT REPORT

VARVARINSKOYE ON SITE TRACTOR AND TRAILER, KAZAKHSTAN

JUNE 2022

Prepared by Christine Blackmore (Lead Cyanide Auditor)

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CONTENTS

TRANSPORTATION SUMMARY AUDIT REPORT

The International Cyanide Management Code (hereinafter "the Code", "Code" or "the Cyanide Code"), this document, and other documents or information sources referenced at www.cyanidecode.org are believed to be reliable and were prepared in good faith from information reasonably available to the drafters. However, no guarantee is made as to the accuracy or completeness of any of these other documents or information sources. No guarantee is made in connection with the application of the Code, the additional documents available or the referenced materials to prevent hazards, accidents, incidents or injury to employees and/or members of the public at any specific site where gold or silver is extracted from ore by the cyanidation process. Compliance with this Code is not intended to and does not replace, contravene or otherwise alter the requirements of any specific national, state or local government statutes, laws, regulations, ordinances, or other requirements regarding the matters included herein. Compliance with this Code is entirely voluntary and is neither intended nor does it create, establish or recognise any legally enforceable obligations or rights on the part of its signatories, supporters or any other parties.

OPERATION GENERAL INFORMATION

Name of Transport Operation:	VARVARINSKOYE, KAZAKHSTAN
Name of Facility Owner:	POLYMETAL INTERNATIONAL PLC
Name of Facility Operator:	VAVARINSKOYE, KAZAKHSTAN
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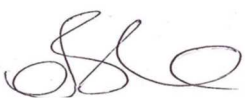


OPERATION LOCATION DETAIL AND DESCRIPTION

Varvaraskoye (Varvara) was first discovered in 1981 in the historic hard-rock gold-mining Urals Fold Belt. Open-pit mining commenced in 2006 and the gold circuit of the processing plant became operational in December 2007, with the copper-gold circuit commencing in March 2008.

Varvara is situated close to a well developed industrial area in north-western Kazakhstan, 130 km south-west of the regional centre of Kostanay and 4 km from the Russian border, with major industrial cities of Chelyabinsk and Magnitogorsk nearby. Varvara is accessible by a network of paved roads from Kostanay, and the railway via the Bataly Junction on the main international rail route (15 km away). Figure 1 Kostanay region Kazakhstan in relation to other regions and countries.

Figure 1: Kazakhstan regional map and bordering countries

In 2009, Polymetal's acquired its first operation in Kazakhstan a gold and copper mine with a modern 4.2 Mtpa processing plant making it an ideal regional processing hub. Varvara comprises of an open-pit gold mine and the Komarovskoye (Komar) high grade gold deposit which Polymetal acquired in 2016. The feedstock (2 Mt/yr) to the mine is transported by rail to Varvara processing plant. See Figure 2 location of Komar and Varvara.

Figure 2: Location of Komar deposit and Varvara processing hub

After Polymetal acquired the asset in 2009, a new strategic plan was undertaken, including the appointment of a new management team and together with Polymetal Engineering, a new mine plan and updated ore reserves estimate. The post-acquisition turnaround plan was successfully completed in 2010. Polymetal made tremendous progress in terms of optimizing the systems and technologies

of the extraction process and ore treatment process, resulting in a substantial increase in productivity. Polymetal also implemented a comprehensive system of grade control, which has significantly improved the output quality.

Environmental Setting

Varvara and Komar are located in the Kostanay region of Kazakhstan, the region is characterized by relatively flat terrain and has the primary rivers of Ayat, Ubagan, Ui, Torgai, Saryozen, and Kara. The closest river to the site (7 km) is the Ayat. The Northern part of Kostanay region is a southeast suburb of the West-Siberian lowland, Varvara is located in the north western part of Kostanay region. Kostanay Region boasts more than 5 thousand lakes.

Woodland areas in the region cover 2,175 km² including 1,512 km² natural plantings, undertaken in agreement with the Soviet Virgin Lands Campaign. In northern part of area chernozems and pine forests (Arakaragai, Amankaragai) prevail; in the central part – chestnut ground with pine forest Naurzimkaragai on the basis of which the same reserve is organized; the southern part is dominated by grasslands and shrublands.

The Kostanay Region is rich in minerals, especially iron ore (magnetite), bauxite and gold deposits. In addition there are deposits of silver, nickel, brown coal, asbestos, brick clay, limestone and silica sand.

Kostanay Region's climate is continental and has four distinctive seasons. Average temperatures: January: -18 to -19 °C, July: 19 to 22 °C. In the winter, the temperature can be as cold as -25 to -30 °C. In summer, the temperature can reach 30 °C. Annual amount of precipitation is 300–350 mm in the northern areas and 240 to 280 mm in the south. The growing season is about 150 to 175 days in the north and 180 days in the south.

Processing Gold

The feedstock for Varvara processing hub is from Komar and Vavara open pits. The ore is has a relatively simple process, see figure 3 below, the block flow diagram of the gold circuit. The process uses cyanidation.

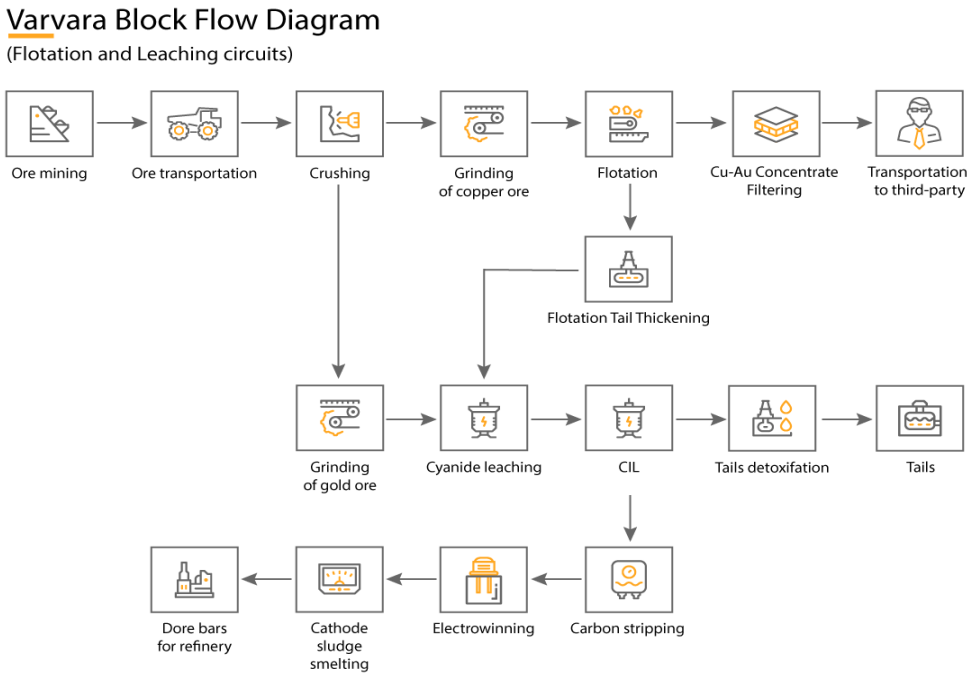


Figure 3: Block flow diagram of Varvara processing hub

Cyanide is transported to site by rail from St Petersburg container port Russia by Russian rail (RZD) to the border with Kazakhstan at Katalay, the cyanide continues it journey on the rail rolling stock but the locomotive is changed to Kazakhstan rail, where it continues to Bataly station. Polymetal Varvara has its own locomotive which collects the rolling stock for the final part of the journey to Varvara.

Varvara has its own platform with the site. Figure 4 below is a flow diagram of the supply chain process.

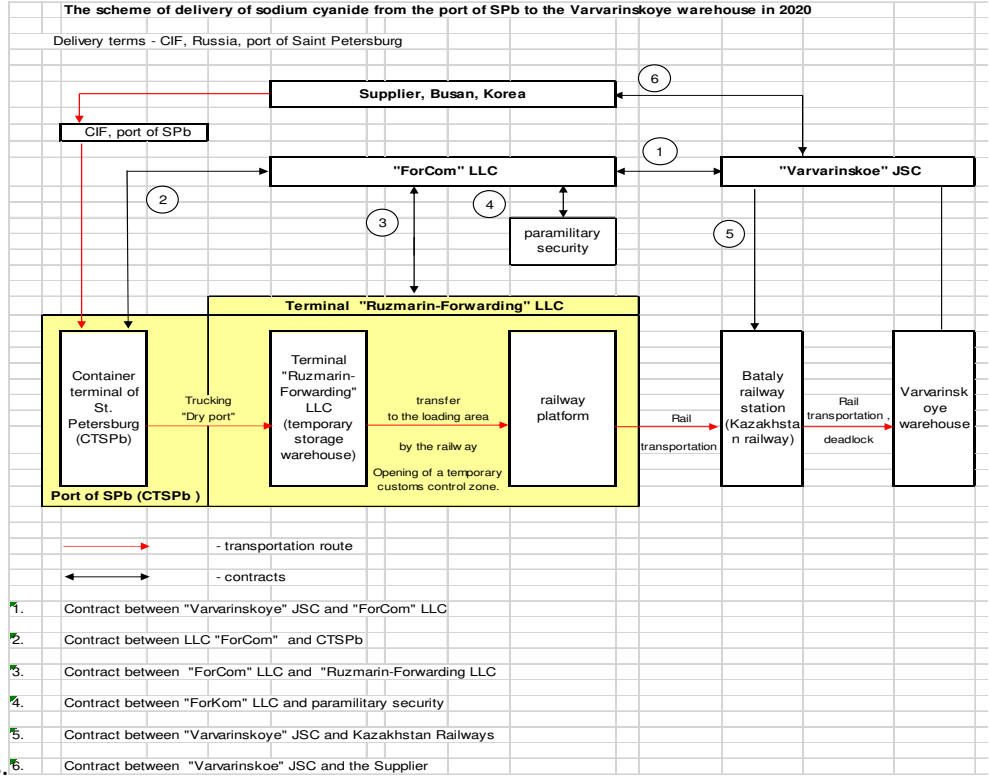


Figure 4: Schematic diagram of the cyanide Supply Chain

On arrival of the cyanide at Varvara platform, the shipping containers are unloaded from the rolling stock and taken to the cyanide storage compound. At no time during the journey from St Petersburg port to Varvara platform are the shipping containers (containing the cyanide boxes) opened or leave the rail rolling stock. Security is provided throughout the journey.

Auditor's Finding

This operation is

- ☒ in full compliance
- ☐ in substantial compliance
- ☐ not in compliance

with the International Cyanide Management Code.

Auditor Information

Audit Company: Wardell Armstrong International

Lead Auditor: Christine Blackmore

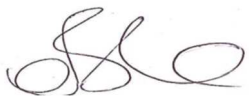
Lead Auditor email: cblackmore@wardell-armstrong.com

Dates of Audit: January 2022

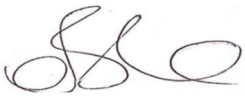
Auditor Attestation

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.

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 Transportation Verification Protocol and using standard and accepted practices for health, safety and environmental audits.



Name of Operation _____ Signature of Lead Auditor Date_____



Principles and Standards of Practice

Principle 1 – Transport
Transport cyanide in a manner that minimises the potential for accidents and releases.

Standard of Practice 1.1
Select transport routes to minimise the potential for accidents and releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

Cyanide Transportation on-site of the Varvarinskoye mine consists of 2 routes: 1) Varvarinkoye Railway Spur – CN Storage Compound and 2) CN Storage Compound – CN Mixing Area at the Processing Plant. Transportation of cyanide containers from the Varvarinskoye Railway spur to the Storage Compound takes place every 6 weeks on the average. Transportation of cyanide boxes from the Compound to the Mixing area takes place on a daily basis.

Cyanide transportation routes within the mine site are selected in such a way as to minimize the potential risks to the people and the environment. “Varvarinskoye” JSC ensures that necessary measures are in place in order to minimize the potential for accidents and releases during the transportation of cyanide from the Varvarinskoye railway station to the Storage Compound and from the Storage Compound to the Mixing Block at the plant. Appropriate risk management measures are in place and are being updated on a continuous basis.

Standard of Practice 1.2
Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

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

Summarise the basis for this Finding/Deficiencies Identified:

All RZD operators and station workers are trained in the handling of dangerous goods and specialized rolling stock and containers. RZD is in possession of a series of emergency response

cards for DGs, cyanide is No. 619. The Card details all the responses necessary that RZD need to take in case of emergency. The Cards have been prepared using international best practices. Emergency Response (ER) cyanide training is aligned to Card 619. Responsibility for the good condition and safe operation of specialized railcars and containers is assigned to specialists in charge of personnel servicing specialized railcars and containers whose names are recorded with the regional state authority registrar Gosgortekhnadzor. Security convoy accompanying DG's comply with the "Regulations and procedures for the protection of goods and objects in railway transport" in which they are fully trained.

Standard of Practice 1.3

Ensure that transport equipment is suitable for cyanide shipment.

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

Summarise the basis for this Finding/Deficiencies Identified:

Loading and unloading of DGs is carried out in accordance with the "Rules for the transport of dangerous goods by railways", "Safety rules for the transport of dangerous goods by rail RD 15-73-94" and "Sanitary Rules for the Organization of Cargo Transportation by Railway Transport". Placement and fastening of dangerous cargo in wagons, flatbed railcars and containers is carried out in accordance with the "Technical conditions for the placement and securing of goods in wagons and containers", approved by the Ministry of Railways of Russia.
RZD use equipment with the appropriate load capacity in accordance with the "Rules for the Technical Operation of Russian Railways" (PTE). The rules detail the specifications required for rolling stock, locomotive, tracks and containers for such as stability, strength and condition for the loads that will be carried.
"Sanitary Rules for the Organisation of Cargo Transportation by Russian Railways" detail the loading weights. The station has a designated platform and crane for off loading and up loading the cyanide. The crane has a documented maintenance record and operating certificate as does the crane operator.
Weights are checked before the rolling stock is loaded, consignment notes have a recorded weight of each container and the crane loading and unloading has indicator lights for the weights being lifted. Security seals are on each container, these contain the unique number which is cross checked at each control station during the rail journey.
To prevent overloading of the railways cars, handling operations at RZD are carried out in accordance with the procedures compliant with the State Order "Methodology on the Development of Technological Norms for the Loading and Unloading of Cargo" №70 dated 10.11.2003 by the Ministry of Railways of Russia.

Standard of Practice 1.4
Develop and implement a safety programme for transport of cyanide.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC implements measures to prevent loads from shifting or overloading of the vehicles. For the transportation of cyanide, "Varvarinskoye" JSC uses heavy duty vehicles such as Belaz and Kamaz which can carry greater tonnages than the maximum permitted cyanide tonnage per vehicle and are maintained appropriately. Drivers deployed for the transportation of cyanide are in possession of the ADR License (DOPOG) which is required by law. Evidence includes vehicle maintenance records and procedures of daily vehicle checks as well as employee medical records. Necessary training and refresher training is conducted regularly apropos the Training Schedule.

UN 1689 classification 6 is shown on the placards. The placards are attached to the 4 walls and a door of the cyanide shipping container, as required by the International Regulations applicable to the transportation of dangerous goods.

"Varvarinskoye" JSC implements inventory controls and appropriate chain of custody documentation to track cyanide during shipment. Cyanide is tracked using the consignment notes as well as internal waybills. In addition, inventory records are kept by the storehouse manager. Material Safety Data Sheets (MSDS) are available in English and Russian languages.

Standard of Practice 1.5
Follow international standards for transportation of cyanide by sea.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Shipment of cyanide by railway are in compliance with regulations concerning the International Carriage of Dangerous Goods by Rail (RID).
RZD do not use maritime transportation.

Standard of Practice 1.6

Track cyanide shipments to prevent losses during transport.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.6
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Communication equipment such as radio is available to the drivers and is tested regularly. There is a stationary landline at the Cyanide Storage Compound. There are no black out areas along the transport routes on the territory of Varvarinskoye mine.

Principle 2 – Interim Storage
Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

Standard of Practice 2.1
Store cyanide in a manner that minimises the potential for accidental releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

There is no interim storage involved during cyanide transport from Varvarinskoye railway spur to the Cyanide Storage Compound and from the Cyanide Storage Compound to the Mixing area. Only permanent Storage Compound is available for storing of the cyanide. The Storage Compound is fenced off and is equipped with necessary emergency and fire-fighting equipment, Emergency Response Plan, working ventilation, cyanide gas monitoring and control system and CCTV. Armed security is present at all times.

The Storage Compound, Mixing Block and the cyanide transport vehicles include warning signs alerting workers 1) that cyanide is present; 2) that smoking, open flames, eating and drinking are not allowed and 3) that personal protective equipment must be worn.

Cyanide is stored separately from other chemicals in specially designed bunkers with concrete floor which minimises the potential for contact of solid cyanide with water, as evidenced by the Auditor during the site visit. Cyanide is stored with adequate and well maintained ventilation (1 operating and 1 back-up), to prevent build-up of cyanide gas. Upon delivery to the Compound in the sealed 20-ft containers carrying 18 cardboard boxes weighting 1075kg each, the boxes are stacked in 2-3 layers in the cells designed specifically for the storage of cyanide. There are two such compartments in the Bunker containing 10 cells, 5 on each side. Every such cell is equipped with the cyanide detectors, working ventilation, leakage sumps, iron sulphate solution, fire fighting equipment and Emergency Cabinet with necessary PPE and medicine.

Principle 3 – Emergency Response
Protect communities and the environment through the development of emergency response strategies and capabilities.

Standard of Practice 3.1
Prepare detailed emergency response plans for potential cyanide releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC has provided the Auditor with detailed Emergency Response Plans for anticipated cyanide releases during the cyanide transport at the mine site and the Storage Compound. The plans consider different scenarios and clearly describe roles for the responders and parties involved into an emergency response. Emergency Response Plans are comprehensive, stipulate for the possible emergency scenarios involving cyanide and outline necessary actions, requirements and roles, as does the relevant Emergency Card. The Auditor notes that the emergency plans contain all necessary information either in the body of the plans or through the separate procedures specifically linked thereto.

"Varvarinskoye" JSC is in possession of the Emergency Response Plan (dated 10/01/2021 valid till 31/12/2021) for the Transportation of Cyanide which is reviewed and updated annually. In addition, Emergency Response Plan for the Toxic Storehouse is available (dated 26/02/2021 valid till 31/12/2021).

Standard of Practice 3.2
Designate appropriate response personnel and commit necessary resources for emergency response.

	■	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.2
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC ensures that necessary resources are committed for the emergency response. Designated personnel receive appropriate emergency response training and inductions and are aware of their roles and responsibilities during an emergency. Mock drills

are conducted as per the internal schedule and involve mine rescue and security personnel. There are clear descriptions of specific emergency response roles and responsibilities for all responders; these include Varvarinskoye personnel, mine rescue services such as "Magen" LLC and "Ort Sondyrushi" SC, on-site paramedics, fire brigade and others. Evidence has been reviewed by the Auditor prior to and during the site visit.

All necessary emergency response equipment is available at each truck during cyanide transportation. This includes a shovel, "Dragger" facemask, gloves, L1 protective suit, and other emergency response tools. "Varvarinskoye" JSC implements procedures whereby emergency response equipment is inspected.

Standard of Practice 3.3
Develop procedures for internal and external emergency notification and reporting.

☒ in full compliance with

The operation is ☐ in substantial compliance Standard of Practice 3.3

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC implements procedures and keeps current the contact information for notifying affected parties of an emergency. These are outlined in internal procedures, including the Emergency Response Plan. The latter contains procedures for notifying ICMI on any significant cyanide accidents that would occur during cyanide transport, as evidenced by the Auditor.

Standard of Practice 3.4
Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment chemicals.

☒ in full compliance with

The operation is ☐ in substantial compliance Standard of Practice 3.4

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC has developed procedures for remediation and neutralisaiton of decontaminated soils as well as management of spill clean-up debris. These have been reviewed by the Auditor and are found appropriate.

There are no watercourses in the immediate vicinity to the cyanide transport route within the mine site area. Therefore, procedures available at Varvarinskoye do not contain prohibition of use of sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that has been released into surface water.

"Varvarinskoye" JSC periodically conducts emergency response drills involving different scenarios, as has been evidenced by the auditor during the site visit. To date, the mock drills have been conducted successfully involving relevant parties with clearly assigned responsibilities, clear communication lines and timings recorded. Mock drill reports have been reviewed by the Auditor and are found fit for purpose.

Standard of Practice 3.5

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

	■	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Mandatory revisions and updates of these procedures take place annually. More frequent revisions may also occur should circumstances require.

"Varvarinskoye" JSC evaluates the Emergency Plan performance on an annual basis unless off-schedule reviews and evaluations are required. Sufficient information and evidence to demonstrate that the existing response procedures and capabilities are periodically evaluated and revised has been provided to the Auditor.

Sufficient information and evidence has been provided to the Auditor to conclude full compliance of "Varvarinskoye" JSC with Transport Practices 1-5.

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Our ref: CAB/KZ10163 *Date*: January 2022

Your ref:

Container Terminal St Petersburg (CTSP) Port
Due Diligence Investigation

The Auditor undertook a Due Diligence investigation of the Container Terminal Saint Petersburg (CTSP) as part of Polymetal Vavara supply chain cyanide audit. Visits to the container terminal and the Dangerous Goods (DGs) storage area are not available. Having undertaken a desk review, discussions with Polymetal representatives and the Auditor`s knowledge of auditing Ports, the Auditor has no reason to suggest that CTSP would not be compliant with the International Cyanide Management Institute Code (the Code) requirements. Below is a brief outline of how the Auditor determined compliance.

Background

Polymetal purchases Vavara cyanide from TONGSUH PETROCHEMICAL CORP. LTD, Korea and uses HYOSUNG CORPORATION, Korea to manage the shipping and documentation logistics for the transit of cyanide. The documentation originates from the producer and travels with the consignment to the final destination of Vavara. Figure 1 shows the main shipping route from Korea to CTSP.

Figure 1: South Korea shipping route to CTSP

St Petersburg container terminal works under the auspices of the International Maritime Organization (IMO) which is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. IMO's work supports the UN Sustainable Development Goals (SDGs). The Russian

Federation (RF) has been a member of IMO since 1958. St Petersburg port is the largest industrial marine port in Russia.

CTSP is in possession of lifetime Licence (No 000586) issued by the Ministry of Transport of the Russian Federation on 27 December 2012 for the implementation of handling operations related to dangerous goods on water transport and in seaports. Classes of dangerous goods permitted by the licence are 2, 3, 4, 5, 6.1, 8, 9 which includes cyanide.

The cyanide is off loaded in CTSP, by Stevedores and taken to the DGs storage area within the port boundary to await customs clearance before being loaded on to Russian Rail (RZD) flat-bed rolling stock for transit to Kartaly (Russia) using a Russian locomotive at Oktyabrskaya station.

Oktyabrskaya (October) station serves the Port of St Petersburg and is part of RZD network. RZD is the second largest rail network in the world, operating more than 86 thousand kilometers (53 thousand miles) of carrier and industrial routes. The October Railway is Russia's oldest railway, stretching from the Leningrad Terminal in Moscow to beyond the Arctic Circle in Murmansk. The October Railway has more than 10 thousand kilometres (6.2 thousand miles) of rail, and its headquarters are located in the Port of St Petersburg.

The Stevedores are specialised in container-handling operations. Figure 2 photos of CTSP rail facility and terminal.

Figure 2: CTSP terminal

The container terminal is a modern handling facility which specialises in handling of all types of containers cargo, including DGs. The terminal is fitted with the advanced high-tech

equipment and automated control system ensuring high productivity of technological procedures. CTSP provides the following services:

- Handling and storage of containerised cargo;
- Handling of IMO cargo (excluding IMO classes 1 and 7, **cyanide is class 6**;
- Handling of oversized and project cargo;
- Stuffing/unstuffing of containers;
- Container depot;
- Container repair; and
- Handling of regular container trains.

The container facility covers an area of 89 hectares and is equipped with eight 50-ton STS Panamax cranes, one 104-ton mobile crane, three 45-ton RMG cranes, 19 50-ton rubber-tyred gantry cranes, 37 straddle carriers, and a fleet of reach stackers, terminal tractors, and empty-handlers. The operation of the cranes and equipment is specialised and would require licenses from the Russian Federation Authorities. Having undertaken qualification checks at other ports and railway terminals using cranes, the Auditor has no doubt that the crane operators are qualified, experienced and trained accordingly. CTSP also have the responsibility of conducting pre-trip inspections and weighing containers. The weight of a cyanide container is provided on the consignment notes.

CTSP has a storage capacity for ten thousand full and 4500 empty 20' containers (TEUs - Twenty-Foot Equivalent Unit). The port has 1757 meters in two rail tracks for container block trains and 422 meters (1384 feet) in one rail track with a covered platform for ten container rolling stock within the port area.

International Maritime Organisation (IMO) Member State Audit Scheme

The IMO Member State Audit Scheme is intended to provide a comprehensive and objective assessment of how effectively it administers and implements mandatory IMO instruments which are covered by the Scheme and also incorporates the following treaties and amendments:

- SOLAS, 1974, as amended (adding a new chapter XIII);
- the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, and the Seafarers' Training, Certification and Watchkeeping (STCW) Code;
- the Protocol of 1988 relating to the International Convention on Load Lines, 1966 (1988 Load Lines Protocol), as amended.

The amendments make the auditing of Member States mandatory, from 2016 eg Russia. The objects of the audit scheme are to ensure that the guidelines provided by the IMO including the IMDG are in place and complied with.

The scheme addresses issues such as conformance in enacting appropriate legislation for the IMO instruments to which a Member State is a Party; the implementation and enforcement of the applicable laws and regulations by the Member State; the delegation of authority to recognized organisations (ROs); the related control and monitoring mechanism of the survey and certification processes by the Member States.

Safety and Security

International Convention for the Safety of Life at Sea (SOLAS), 1974: Regulation XI-2/6 covers requirements for port facilities, providing among other things for Contracting Governments to ensure that port facility security assessments are carried out and that port facility security plans are developed, implemented and reviewed in accordance with the International Ship and Port Facility (ISPS) Code.

The ISPS code came into force under SOLAS chapter XI-2, on 1 July 2004, and forms the basis for a comprehensive mandatory security regime for international shipping. The ISPS code is divided into two sections, Part A and Part B. Mandatory Part A outlines detailed maritime and port security-related requirements which SOLAS contracting governments, port authorities and shipping companies must adhere to, in order to be in compliance with the Code. Part B of the Code provides a series of recommendatory guidelines on how to meet the requirements and obligations set out within the provisions of Part A.

CTSP takes seriously its responsibility to safety and security. The terminal is securely fenced and has restricted access. All employees and vehicles entering the port require a permit for entry and are security checked (searched) before being allowed in. The IMDG chapter 1.4 discusses the preparation of a security plan and the elements required in that documentation. IMDG section 1.4.2.3 also includes "security training" explains "*Security awareness training should address the nature of security risks, recognizing security risks, methods to address and reduce risks and actions to be taken in the event of a security breach. It should include awareness of security plans commensurate with the responsibilities of individuals and their part in implementing security plans".* The Auditor has no reason to suspect that security plans, training and documentation are not in compliance with the IMDG requirements and SOLAS.

As a demonstration of Russia's approach to its safety and security responsibilities the handling of DGs and bunkering at CTSP was suspended over a two month period around the FIFA World Cup in 2018. The instructions were issued by The Harbor Master of St Petersburg port. The security measures applied to all modes of transport associated with the port including railroad, stevedore companies, cargo terminals and bunker suppliers. Similar restrictions were also applied during 2017 (football), that transport and handling of dangerous goods and vessels carrying dangerous goods, classified by the IMDG Code Classes 1-7, were not permitted to enter the port of St. Petersburg. The Auditor believes that this is a proactive action to their responsibilities for safety and security of DGs.

Emergency Response

As with all Emergency Response (ER) requirements in Russia any accidents/incidents are notifiable to the Russian Civil Defense (RCD) who take control and manage all situations. I have no doubt that St Petersburg port will have an Emergency Response Plan which details the protocols and procedures necessary to inform the RCD and what initial response actions should be taken. IMO SOLAS requires an emergency response plan and includes this in their audit scheme. CTSP has a designated Emergency Response team and the Auditor understands that there are medical facilities available on site 24/7. Given the compliance required by IMO, SOLA and ISPS in the Auditor`s opinion CTSP would be compliant with the cyanide Code requirements.

Environmental awareness and protection

The Port of Saint Petersburg has reported a 69% increase in investment on environmental protection measures in 2019. From the beginning of 2019 the port allocated more than RUB 66 million for implementation of its environmental program, twice as much as in the same period of the previous year. The increase was primarily driven by acquisition of new ecological equipment: vacuum cleaning machine for berths, local system for dust suppression in vessels' holds and an eco-friendly hopper with an in-house system of dust suppression. Modernization of the port's environment protection facilities included the reconstruction of water disposal system and rehabilitation of pipelines including renovation of over 400 meters of sewage lines and 13 mainstream sewage wells. Other spends included servicing and maintenance of water treatment facilities and disposal of industrial waste.

Environmental monitoring is undertaken at the port. Air and water quality is under control of specialists from laboratories accredited by the government. Measuring of air samples taken at the border of the port's sanitary protection zone is conducted at least once a month involving eight parameters. Measuring of water samples involving 20 parameters is

conducted on a monthly basis. The monitoring findings show no above-limit impacts from port activities on the natural environment.

As a demonstration of environmental responsibilities: increased air quality samples are in the sanitary protection zone. The monitoring was conducted by a specialized company, the analysis results confirmed the samples complied to air quality standards.

The port set itself a goal on reducing waste and prepared a waste management action plan, which monitored the generation and disposal of waste for 12 months. Following the results from the monitoring, a waste reduction strategy (re-cycling and re-use) was implemented. Findings show that the volume of waste has reduced by 24% and the gross volume by 14.6%. The Stevedore company (St Petersburg) have implemented a set of measures (studies and monitoring) to reduce their impact on the ecosystem, atmosphere, water and land resources for compliance with the rules and requirements of environmental and sanitary legislation.

Other environmental protection measures have included:

- Use of the latest scientific and technical developments in the field of waste disposal. As a result of actions taken over the last two years the volume of emissions per ton decreased by 18% and the volume of enterprise's waste water decreased by 34%. In general, the volumes of emissions from controlled sources do not exceed the statutory maximum permissible emission levels.
- Protection of water resources, including regular monitoring of coastal zone use, cleaning and waste water quality monitoring, monitoring of water quality in the port water area, bacteriological tests of sea water.
- Maintenance and repair works are carried out at wastewater treatment facilities, storm drains sewage pumping stations, the external storm sewer system is being thoroughly cleaned. For its wastewater treatment facilities KTSP uses the latest sorption filters.
- Automatic weather station and tools for measuring the levels of priority pollutants, the environmental stations provide round the clock monitoring of air quality during production activities and provide an opportunity to respond quickly if the maximum permissible emission levels are exceeded or in the event of adverse weather conditions within the scope of the approved action plan to regulate emissions.

Although the above environmental protections do not directly affect the cyanide cargos, they do demonstrate that St Petersburg port are responsible operators and have measures in place to undertake environmental monitoring, therefore the Auditor has no concerns that the port would not be acceptable under the cyanide code guidelines.

In March 2018, Marine Environmental Pollution committee (MEPC) adopted the MEPC.1/Circ.834/Rev.1 *Revised Consolidated Guidance for port reception facility providers and users*, which consolidates in a single document the Guide to good practice for port reception facility providers and users (MEPC.1/Circ.671/Rev.1) and four other circulars related to port reception facilities (MEPC.1/Circ.469/Rev.2, MEPC.1/Circ.644/Rev.1, MEPC.1/Circ.645/Rev.1 and MEPC.1/Circ.470/Rev.1).

IMO has recognized that provision of reception facilities is crucial for effective MARPOL (MARPOL 73/78 Annex III, Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form) implementation, and the MEPC has strongly encouraged Member States, particularly those Parties to MARPOL as port States, to fulfil their treaty obligations on providing adequate reception facilities. The Baltic Sea forms part of the MARPOL protection, therefore St Petersburg will be encouraged to implement their guidance.

The Auditor is confident that CTSP would meet the requirements of the ICMI Code.

CYANIDE TRANSPORTATION SUMMARY AUDIT REPORT
RUSSIAN RAIL, RUSSIAN FEDERATION

JANUARY 2022

Prepared by Christine Blackmore (Lead Cyanide Auditor)

WARDELL ARMSTRONG INTERNATIONAL

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Stoke on Trent, Staffordshire, United Kingdom

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CONTENTS

TRANSPORTATION SUMMARY AUDIT REPORT

The International Cyanide Management Code (hereinafter "the Code", "Code" or "the Cyanide Code"), this document, and other documents or information sources referenced at www.cyanidecode.org are believed to be reliable and were prepared in good faith from information reasonably available to the drafters. However, no guarantee is made as to the accuracy or completeness of any of these other documents or information sources. No guarantee is made in connection with the application of the Code, the additional documents available or the referenced materials to prevent hazards, accidents, incidents or injury to employees and/or members of the public at any specific site where gold or silver is extracted from ore by the cyanidation process. Compliance with this Code is not intended to and does not replace, contravene or otherwise alter the requirements of any specific national, state or local government statutes, laws, regulations, ordinances, or other requirements regarding the matters included herein. Compliance with this Code is entirely voluntary and is neither intended nor does it create, establish or recognise any legally enforceable obligations or rights on the part of its signatories, supporters or any other parties.

OPERATION GENERAL INFORMATION

Name of Transport Operation:	VARVARINSKOYE, KAZAKHSTAN
Name of Facility Owner:	POLYMETAL INTERNATIONAL PLC
Name of Facility Operator:	VAVARINSKOYE, KAZAKHSTAN
Name of Responsible Manager:	Daria Goncharova
Address:	Narodnogo Opolcheniya 2, St. Petersburg, 198216
State/Province:	
Country:	Russian Federation
Telephone:	Tel. +7.812.334.3666, +7.812.677.4325
Fax:	+7.812.753.6376
Email:	Daria Goncharova Goncharova@polymetal.ru

OPERATION LOCATION DETAIL AND DESCRIPTION

Varvaraskoye (Varvara) was first discovered in 1981 in the historic hard-rock gold-mining Urals Fold Belt. Open-pit mining commenced in 2006 and the gold circuit of the processing plant became operational in December 2007, with the copper-gold circuit commencing in March 2008.

Varvara is situated close to a well developed industrial area in north-western Kazakhstan, 130 km south-west of the regional centre of Kostanay and 4 km from the Russian border, with major industrial cities of Chelyabinsk and Magnitogorsk nearby. Varvara is accessible by a network of paved roads from Kostanay, and the railway via the Bataly Junction on the main international rail route (15 km away). Figure 1 Kostanay region Kazakhstan in relation to other regions and countries.

Figure 1: Kazakhstan regional map and bordering countries

In 2009, Polymetal's acquired its first operation in Kazakhstan a gold and copper mine with a modern 4.2 Mtpa processing plant making it an ideal regional processing hub. Varvara comprises of an open-pit gold mine and the Komarovskoye (Komar) high grade gold deposit which Polymetal acquired in 2016. The feedstock (2 Mt/yr) to the mine is transported by rail to Varvara processing plant. See Figure 2 location of Komar and Varvara.

Figure 2: Location of Komar deposit and Varvara processing hub

After Polymetal acquired the asset in 2009, a new strategic plan was undertaken, including the appointment of a new management team and together with Polymetal Engineering, a new mine plan and updated ore reserves estimate. The post-acquisition turnaround plan was successfully completed

in 2010. Polymetal made tremendous progress in terms of optimizing the systems and technologies of the extraction process and ore treatment process, resulting in a substantial increase in productivity. Polymetal also implemented a comprehensive system of grade control, which has significantly improved the output quality.

Environmental Setting

Varvara and Komar are located in the Kostanay region of Kazakhstan, the region is characterized by relatively flat terrain and has the primary rivers of Ayat, Ubagan, Ui, Torgai, Saryozen, and Kara. The closest river to the site (7 km) is the Ayat. The Northern part of Kostanay region is a southeast suburb of the West-Siberian lowland, Varvara is located in the north western part of Kostanay region. Kostanay Region boasts more than 5 thousand lakes.

Woodland areas in the region cover 2,175 km² including 1,512 km² natural plantings, undertaken in agreement with the Soviet Virgin Lands Campaign. In northern part of area chernozems and pine forests (Arakaragai, Amankaragai) prevail; in the central part – chestnut ground with pine forest Naurzimkaragai on the basis of which the same reserve is organized; the southern part is dominated by grasslands and shrublands.

The Kostanay Region is rich in minerals, especially iron ore (magnetite), bauxite and gold deposits. In addition there are deposits of silver, nickel, brown coal, asbestos, brick clay, limestone and silica sand.

Kostanay Region's climate is continental and has four distinctive seasons. Average temperatures: January: -18 to -19 °C, July: 19 to 22 °C. In the winter, the temperature can be as cold as -25 to -30 °C. In summer, the temperature can reach 30 °C. Annual amount of precipitation is 300–350 mm in the northern areas and 240 to 280 mm in the south. The growing season is about 150 to 175 days in the north and 180 days in the south.

Processing Gold

The feedstock for Varvara processing hub is from Komar and Vavara open pits. The ore is has a relatively simple process, see figure 3 below, the block flow diagram of the gold circuit. The process uses cyanidation.

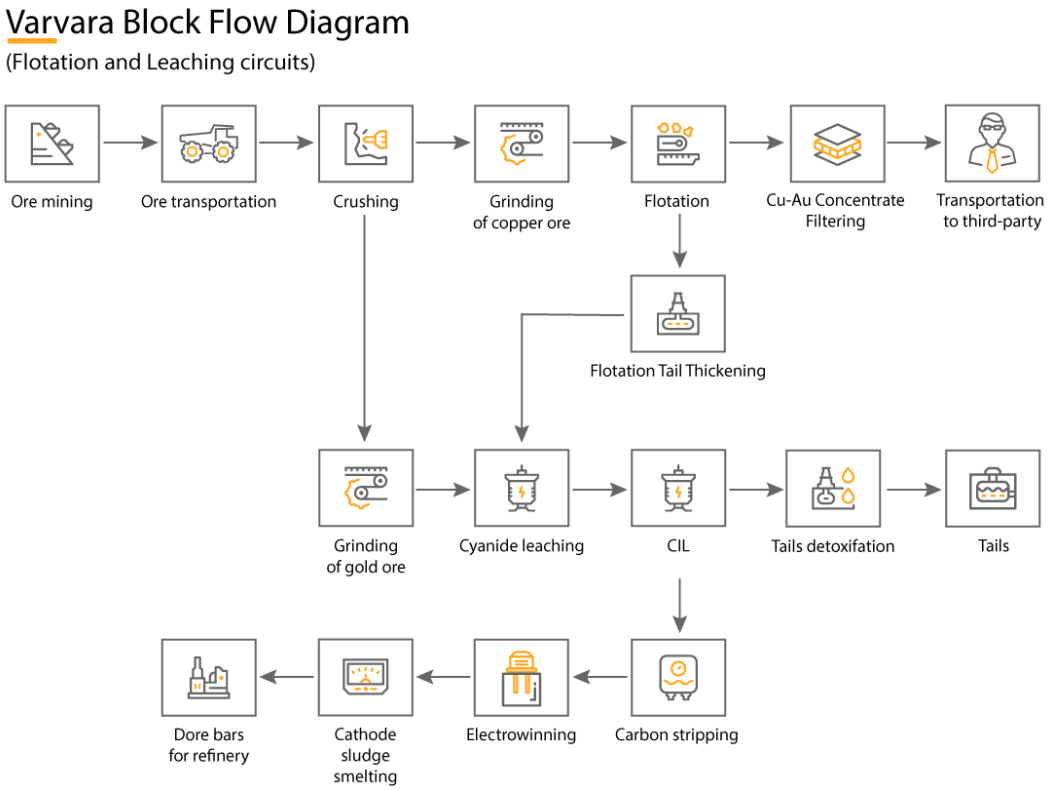


Figure 3: Block flow diagram of Varvara processing hub

Cyanide is transported to site by rail from St Petersburg container port Russia by Russian rail (RZD) to the border with Kazakhstan at Katalay, the cyanide continues it journey on the rail rolling stock but the locomotive is changed to Kazakhstan rail, where it continues to Bataly station. Polymetal Varvara has its own locomotive which collects the rolling stock for the final part of the journey to Varvara. Varvara has its own platform with the site. Figure 4 below is a flow diagram of the supply chain process.

A photographic record and documented evidence is available.

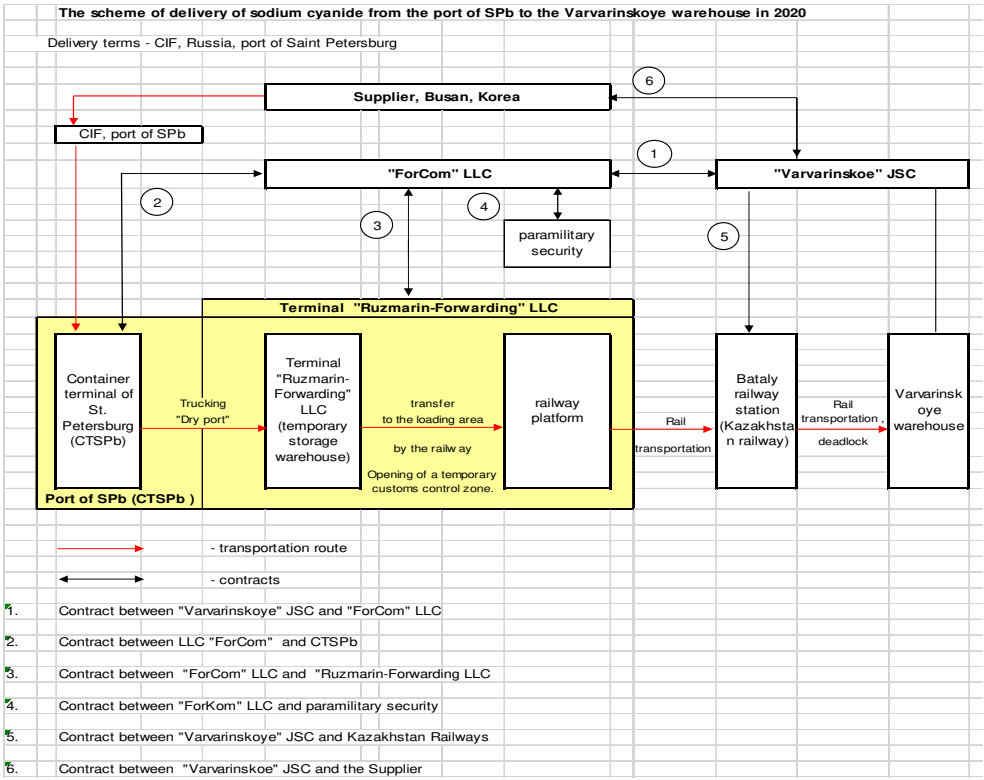


Figure 4: Schematic diagram of the cyanide Supply Chain

On arrival of the cyanide at Varvara platform, the shipping containers are unloaded from the rolling stock and taken to the cyanide storage compound. At no time during the journey from St Petersburg port to Varvara platform are the shipping containers (containing the cyanide boxes) opened or leave the rail rolling stock. Security is provided throughout the journey.

A photographic record and documented evidence is available.

Auditor's Finding

This operation is

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

with the International Cyanide Management Code.

Auditor Information

Audit Company: Wardell Armstrong International

Lead Auditor: Christine Blackmore

Lead Auditor email: cblackmore@wardell-armstrong.com

Dates of Audit: January 2022

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.

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 Transportation Verification Protocol and using standard and accepted practices for health, safety and environmental audits.

Name of Operation_____Signature of Lead Auditor Date _____

Principles and Standards of Practice

Principle 1 – Transport

Transport cyanide in a manner that minimises the potential for accidents and releases.

Standard of Practice 1.1

Select transport routes to minimise the potential for accidents and releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

Russian Railways (hereinafter referred to as "RZD"), select the most appropriate route for the cyanide transport approved by the Russian Federation Authorities (RFA). The route takes into account population density, infrastructure and weather conditions, among other aspects pertaining to transportation of dangerous goods.

The approved route also is in compliance with the "Safety Cover up Scheme" rules of dangerous goods transportation in Russia. Procedures are in place to re-evaluate the route, the operators report railway conditions after the delivery of each cargo, information is also collected on a "black box" recorder (speed limits, operator behaviour etc), this information is given to the shift manager for analysis. At each interim (control) station, the train, rolling stock and cargo are inspected to ensure integrity and safety of the cargo.

Russian Railways OJSC has a contract with Rusmarin-Forwarding LLC on cyanide transport and handling at non-public railway tracks at the Avtovo station whereby Rusmarin-Forwarding is responsible for the safe loading of the cargo with rail car inspection and sign off prior to shipment. Movement of trains on the non-public railway tracks is in compliance with the Standard Code Operating Rules of the Railways №268 as approved by the Ministry of Transport of the Russian Federation and internal procedures of Rusmarin-Forwarding.

At Avtovo, infrastructure maintenance and construction is implemented in accordance with the Standard Code Operating Rules of the Russian Federation Ministry of Transport and internal Procedures of Rusmarin-Forwarding. Handling of dangerous goods is carried out in accordance with the Russian Governmental Standard GOST 22235-10 and applicable technical rules. RZD does not admit defective cargo on to its infrastructure or in absence of required paperwork.

RZD deploys convoy to accompany the DGs throughout the entire journey. Freight forwarder "ForKom" LLC is responsible for the provision of the convoy who remain onboard the designated carriage throughout the entire route. The convoy consists of two trained paramilitary guards who are armed and are in the possession of the Emergency Response Procedures and equipment, including necessary PPE, a first-aid kit, a set of emergency tools and fire extinguishing equipment. ETRAN system at RZD is used to track the status of the cargo from Avtovo to the final destination.

RZD have advised outside responders of their roles in cases of emergency. If an emergency situation arises it is the responsibility of the Russian Civil Defence (MCHS) to manage the situation. In addition, RZD uses specialized emergency organizations to ensure rapid involvement in case of an emergency.

Standard of Practice 1.2
Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

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

Summarise the basis for this Finding/Deficiencies Identified:

All RZD operators and station workers are trained in the handling of dangerous goods and specialized rolling stock and containers. RZD is in possession of a series of emergency response cards for DGs, cyanide is No. 619. The Card details all the responses necessary that RZD need to take in case of emergency. The Cards have been prepared using international best practices. Emergency Response (ER) cyanide training is aligned to Card 619. Responsibility for the good condition and safe operation of specialized railcars and containers is assigned to specialists in charge of personnel servicing specialized railcars and containers whose names are recorded with the regional state authority registrar Gosgortekhnadzor. Security convoy accompanying DG's comply with the "Regulations and procedures for the protection of goods and objects in railway transport" in which they are fully trained.

Standard of Practice 1.3
Ensure that transport equipment is suitable for cyanide shipment.

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

Summarise the basis for this Finding/Deficiencies Identified:

Loading and unloading of DGs is carried out in accordance with the "Rules for the transport of dangerous goods by railways", "Safety rules for the transport of dangerous goods by rail RD 15-73-94" and "Sanitary Rules for the Organization of Cargo Transportation by Railway Transport". Placement and fastening of dangerous cargo in wagons, flatbed railcars and containers is carried out in accordance with the "Technical conditions for the placement and securing of goods in wagons and containers", approved by the Ministry of Railways of Russia.

RZD use equipment with the appropriate load capacity in accordance with the "Rules for the Technical Operation of Russian Railways" (PTE). The rules detail the specifications required for rolling stock, locomotive, tracks and containers for such as stability, strength and condition for the loads that will be carried.
"Sanitary Rules for the Organisation of Cargo Transportation by Russian Railways" detail the loading weights. The station has a designated platform and crane for off loading and up loading the cyanide. The crane has a documented maintenance record and operating certificate as does the crane operator.
Weights are checked before the rolling stock is loaded, consignment notes have a recorded weight of each container and the crane loading and unloading has indicator lights for the weights being lifted. Security seals are on each container, these contain the unique number which is cross checked at each control station during the rail journey.
To prevent overloading of the railways cars, handling operations at RZD are carried out in accordance with the procedures compliant with the State Order "Methodology on the Development of Technological Norms for the Loading and Unloading of Cargo" №70 dated 10.11.2003 by the Ministry of Railways of Russia.

Standard of Practice 1.4
Develop and implement a safety programme for transport of cyanide.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

RZD implements procedures to check the integrity of the shipping container before loading on to rolling stock at the port, each control station and final destination station. RZD have a recording system (KEU-16VTS) where information and subsequent inspections are noted.
Multilevel inspection control is maintained by RZD and all information with regard to the inspections recorded (KEU-16VTS). Inspections include, the container, rolling stock and locomotive, this is undertaken at the port loading to RR, each control station and final destination. All defects are recorded. Repairs/rectifications are undertaken immediately and are reported in a special log. No locomotive or any rolling stock is allowed to leave if there are any defects.
RZD workers receive a medical inspection at the beginning of each shift, including blood pressure, drugs and alcohol testing. All information is recorded and approved before being allowed to work, additionally a train driver has to wear a medical monitoring bracelet, which also transmits the information. Medical records of RZD workers are kept by RZD on an approved system by the Russian State (Rostechnadzor). The bracelets record blood pressure, pulse, falling asleep, leaving the workplace. Train operators have limited working hours which equates to c150km of rail movement time and operate an allocated section of track to work so the driver has knowledge with that particular section and weather conditions that may affect that section of track.

RZD has procedures in place if a train needs to be stopped for such as weather conditions, designated sidings would be used until the tracks are cleared. No containers are unloaded. RZD have teams that clear tracks on a regular basis due to heavy snow.
Locomotives are automated and are fitted with modern equipment such as GPS. Safety features in the train include an automatic stop.
Signage used to identify the shipment as cyanide includes the UN 1689 sign. UN classification placards are placed on the 4 walls of the container and the rooftop. Danger signage and labels on containers is compliant with GOST 14192-96 “Marking of Cargo” and GOST 19433-88 “Dangerous Goods Classification and Labelling”. The rolling stock are fitted with a lock devise to lock the container, as the containers are loaded the locks moved to the closed position. RZD has allocated staff that secures the cargo.
Preventive maintenance programme is implemented at RZD to ensure compliance with the national legislation and internal programme. Workers of the railway transport carry out timely preventive maintenance and repair of railcars and containers intended for the transportation of dangerous goods.

Standard of Practice 1.5
Follow international standards for transportation of cyanide by sea.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

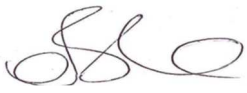
Shipment of cyanide by railway are in compliance with regulations concerning the International Carriage of Dangerous Goods by Rail (RID).
RZD do not use maritime transportation.

Standard of Practice 1.6
Track cyanide shipments to prevent losses during transport.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.6
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Communications blackout spots have been identified by RZD and procedures and systems are in place to accommodate these. Locomotives are equipped with 2 radio communications systems should one fail. In addition the drivers have portable communications. Established procedures are in place in case of emergency.



RZD use ETRAN system to track train movements throughout the journey. When the train arrives at its destination station the consignment notes are recorded in arrival book (GU-42VTS) on the ETRAN system, this generates a delivery note and adds information to the consignment notes, both hard copies and electronic versions are available. On arrival the containers are inspected before passing on to Varvarinskoye JSC. Consignment notes including the delivery and check off records are issued.

Shipping records indicating the amount of cyanide are available. Quantity of cyanide is specified in the accompanying documentation such as Consignment Notes, Transit Declaration, Cyanide Import License, Certificate of Origin, Certificate for the packaging and for the containers. Existing inventory control system and the chain of custody documentation are used to monitor the amount of cyanide during transport. Material Safety Data Sheets are available in English and Russian.

Principle 2 – Interim Storage
Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

Standard of Practice 2.1
Store cyanide in a manner that minimises the potential for accidental releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

No interim storage is involved at this section of cyanide transportation route. Cyanide is kept and transported in 20ft sealed shipping containers. Material used for the container has minimal sorption properties, sufficient strength, is inert to the dangerous cargo being transported, easy to clean-up and, if necessary, neutralize. Material used for securing of goods in wagons and containers is inert with respect to the dangerous goods being transported.

Principle 3 – Emergency Response
Protect communities and the environment through the development of emergency response strategies and capabilities.

Standard of Practice 3.1
Prepare detailed emergency response plans for potential cyanide releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

RZD is in possession of Emergency Response Plan and uses “Emergency Card No. 619”. Availability of Dangerous Goods Emergency Card 619 ensures compliance and is prescribed for railways only. This card is appropriate for the selected transportation route and interim stations and details all necessary information required in case of an emergency with cyanide such as the physical and chemical form of cyanide, response actions and necessary emergency equipment. The card describes the RZD and outside responders roles and responsibilities in order to protect the public and the environment.
In accordance with RID, cyanide belongs to 6.1 hazard class "Poisonous (toxic substances)" and is allowed for transportation only under convoy of consignors (consignees). The convoy

accompanying DGs is in possession of both the Emergency Response Plan and the Emergency Card 619.

Roles of outside responders are identified in the emergency response procedures. All emergency response measures with dangerous cargo must be carried out in accordance with the instructions of the work supervisor, taking into account the properties and toxicity of the cargo and compliance with the safety requirements specified in the emergency card for a relevant dangerous cargo and in accordance with the requirements of the "Safety Rules and Procedures for Emergency Situations with Dangerous Goods during Transportation by Rail CM-407", Company's Standards and "Rules for the Transport of Dangerous Cargo by Rail".

Should an emergency arise, the Russian Civil Defence would take control and manage a situation. Actions and duties of the railway workers in the event of an emergency are set out in RZD ERP and the international rules for the transportation of dangerous cargos. The ERP details such as safety measures, precautions to be observed, ER contact details, roles and responsibilities contact details.

Standard of Practice 3.2

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

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.2
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Emergency Response training is received by all relevant personnel at RZD, this includes train operators, station staff and others. In addition, training procedures and protocols have been prepared in accordance with Card 619. Special-purpose training is conducted as well as inductions for the receiving/offloading staff. Refresher training is undertaken once a week covering aspects pertaining to handling of dangerous goods.
ER equipment is available on trains and also at stations. Emergency Card 619 contains instructions on the use of personal protective equipment. The list of emergency response equipment that must be available during transportation is available at RZD. PPE includes first-aid kit and a set of portable radio stations, masks, gloves, coverall and is provided to relevant workers. Emergency response equipment is inspected regularly and an inventory check list is available.

Standard of Practice 3.3

Develop procedures for internal and external emergency notification and reporting.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.3
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Shift personnel or the locomotive crew inform the duty officer of the railway department about an emergency during the transportation of dangerous cargo. The operative-administrative department of the transportation service should immediately inform the regional bodies of Gosgortekhnadzor of Russia about an accident. Regional bodies of Gosgortekhnadzor are obliged to transmit information about the accident to the central office of the Gosgortekhnadzor of Russia apropos a set format.

Standard of Practice 3.4

Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment chemicals.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Procedures within Card 619 detail remediation and/or neutralization of any spills that would affect the public and the environment. The instructions do not allow the release of any substances into water bodies, sewers or basements. The procedures include disposal methods of contaminated materials such as soils (Ministry of Natural Resources of Russia). Card 619 also includes the resumption of train movements following an accident/incident. Any restoration work that may need to be undertaken is done by the Ministry of Railways of Russia (recovery trains) once the site has been made safe.

Safety Rules For The Transport Of Dangerous Cargo By Rail RD 15- 73-94 (approved by the Decision of Gosgortekhnadzor of the Russian Federation) with Amendment, approved by the Decree of Gosgortechnadzor of Russia contains the main set of H&S procedures at RZD is a guiding set of emergency response procedures.

RZD maintains procedures and current contact information for notifying relevant parties of any emergency. Railways management within each region determine in advance with the regional bodies of Russian Civil Defense (MCHS) a list of organisations which have emergency services or relevant specialists that can take part in the emergency response. The list of such organisations is approved by the local administration at the suggestion of the Railway. In

addition, RZD contracts specialised organisations which are in possession of necessary liciences and certificates to provide emergency response and rescue services.
Systems and procedures are updated in accordance with the mandatory requirements of national and international legislation. H&S statistics are collected and analysed by a designated department – Transport Service Center - in an electronic format. Emergencies and incidents are recorded at each branch of the railway, transport management and the Ministry of Railways of Russia and industrial railway transport in a designated journal. The railway management reports monthly information on the state of safety, emergencies and incidents pertaining to dangerous cargo to the local authorities of Gosgortekhnadzor of Russia (railway transport inspection authorities).

Standard of Practice 3.5
Periodically evaluate response procedures and capabilities and revise them as needed.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Provisions for periodically reviewing and evaluating Emergency Plan's adequacy are in place and are being implemented by RZD at least annually. Mock drills are undertaken throughout each year in accordance with the training programme. The programme is compiled annually, and contains a programme of mock drill for significant and small scale scenarios. The document is comprehensive and is updated annually and also following any incidents/accidents where changes need to be made. All drills have an investigative report afterwards, and where needed procedures are updated.
To ensure compliance with Russian legislation, RZD has developed a set of regulations and training programmes in the field of civil defence and emergency response of natural and man-made nature in peacetime and wartime which are strictly observed. RZD adheres to the requirements of the Russian Government decree No. 841 "On Approval of the Regulations about the training of the population in the field of civil defence", No. 547 "On the preparation of the population in the field of protection from natural and man-made emergencies" and issued an Order on the implementation of training of the Russian Railways employees in civil defence" No. 1048r in order to organize the training of employees in civil defence and protection from natural and man-made emergencies. General training is conducted for each profession based on the Emergency Cards which are to international standards and are contained in RZD Emergency Response Reference Book. Sufficient information has been provided to the Auditor to conclude full compliance of RZD with Transport Practices 1-5.

CYANIDE TRANSPORTATION SUMMARY AUDIT REPORT
LOCATION

JANUARY 2022

Prepared by Christine Blackmore (Lead Cyanide Auditor)

WARDELL ARMSTRONG INTERNATIONAL

Sir Henry Doulton House, Forge Lane, Etruria
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CONTENTS

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OPERATION GENERAL INFORMATION

Name of Transport Operation:	VARVARINSKOYE, KAZAKHSTAN
Name of Facility Owner:	POLYMETAL INTERNATIONAL PLC
Name of Facility Operator:	VAVARINSKOYE, KAZAKHSTAN
Name of Responsible Manager:	Daria Goncharova
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Email:	Daria Goncharova Goncharova@polymetal.ru

OPERATION LOCATION DETAIL AND DESCRIPTION

Varvara — Polymetal's first operation in Kazakhstan — was acquired by the Company in 2009 as a standalone gold and copper mine with a modern 4.2 Mtpa processing plant, excellent transport infrastructure and inexpensive energy, making it a perfect fit for becoming a regional processing hub. Today, Varvara comprises of an open-pit gold mine and the Komarovskoye gold deposit that was acquired in 2016 for US$100 million as a source of high grade, open-pittable ore feed with simple metallurgical properties, expected to replace the lower grade feed at the leaching circuit. The asset is anticipated to increase Varvara's annual gold output by approximately 70 Koz at lower cash costs.

The company now mine, transport by rail and process 2 Mt of Komar ore per year at the Varvara processing plant. This compares with the 1 Mt per annum ore production rate envisaged at the time of the acquisition.

Varvara is situated close to a well-developed industrial area in north-western Kazakhstan, 130 km south-west of the regional centre of Kostanai and 4 km from the Russian border, with major industrial cities of Chelyabinsk and Magnitogorsk nearby. Varvara is accessible by a network of paved roads from Kostanai, and the railway via the Bataly Junction on the main international rail route (15 km away).

Additional 13 km railway spur constructed by Polymetal to facilitate bulk transportation of ore to the Varvara processing plant. The Komar gold deposit is located near the city of Zhitikara and approximately 187 km by rail from Varvara, with the nearest railway spur less than 2 km from the pit.

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After Polymetal acquired the asset, a massive turnaround plan was launched, including the appointment of a new management team and together with Polymetal Engineering, a new mine plan and updated ore reserves estimate. The post-acquisition turnaround plan was successfully completed in 2010. Polymetal made tremendous progress in terms of optimizing the systems and technologies of the extraction process and ore treatment process, resulting in a substantial increase in productivity. Polymetal also implemented a comprehensive system of grade control, which has significantly improved the output quality.

In 2016, in line with its processing hub strategy, Polymetal acquired the Komarovskoye deposit. The asset provides high-grade, open-pittable ounces at lower cash costs that are set to substantially increase production at the Varvara hub.

The territory of region is characterized by rather flat relief with inflows of the rivers: Ayat, Ubagan, Ui, Torgai with inflows of the rivers: Saryozen and Kara. The Northern part occupies the southeast suburb of the West-Siberian lowland, to the south from it is situated Torgai plateau; in the west – wavy plain Zaural plateau and in a southwest Saryarka spurs. River network is rare. Within the limits of the region it is totaled about 310 fine rivers. The largest rivers are Tobol and Torgai. The Tobol river includes the Verhnetobolsk, Karatomar and Amangeldy water basins. In Kostanay Region are more than 5 thousand lakes. Largest of them are located in Torgai dell – Kusmyryn, Sarymoin, Aksuat, Sarykopa. Woodland area 2,175 km² including 1,512 km² natural plantings. In connection with the Soviet Virgin Lands Campaign, much of the area was ploughed for wheat. The Kostanay Region is rich in minerals, especially iron ore (deposits of magnetite ores - Sokolovsk, Sarbaiskoe, Kachary and brown soolits iron ores – Ayatsk iron ore pool, Lisakovsk deposit). The total stock of magnetite's ores and hematite's makes 15,7 billion tons, of them easy enrich and not demanding enrichment – 5,7 billion tons. Especially bowels are rich in iron ore, brown coal, asbestos, fire-resistant and brick clay, flux and cement limestone, glass sand, a building stone and others. Opened 19 deposits of bauxite, 7 – gold, on one of silver and nickel. In northern part of area chernozems and pine forests (Arakaragai, Amankaragai) prevail; in the central part – chestnut ground with pine forest

Naurzimkaragai on the basis of which the same reserve is organized; the southern part is dominated by grasslands and shrublands.

Kostanay Region's climate is continental, with strongly pronounced alternation of four seasons. Average temperatures: January: -18 to -19 °C, July: 19 to 22 °C. In the winter, the temperature can be as cold as -25 to -30 °C. In summer, the temperature can reach 30 °C. Annual amount of precipitation is 300–350 mm in the northern areas and 240 to 280 mm in the south. The growing season is about 150 to 175 days in the north and 180 days in the south.

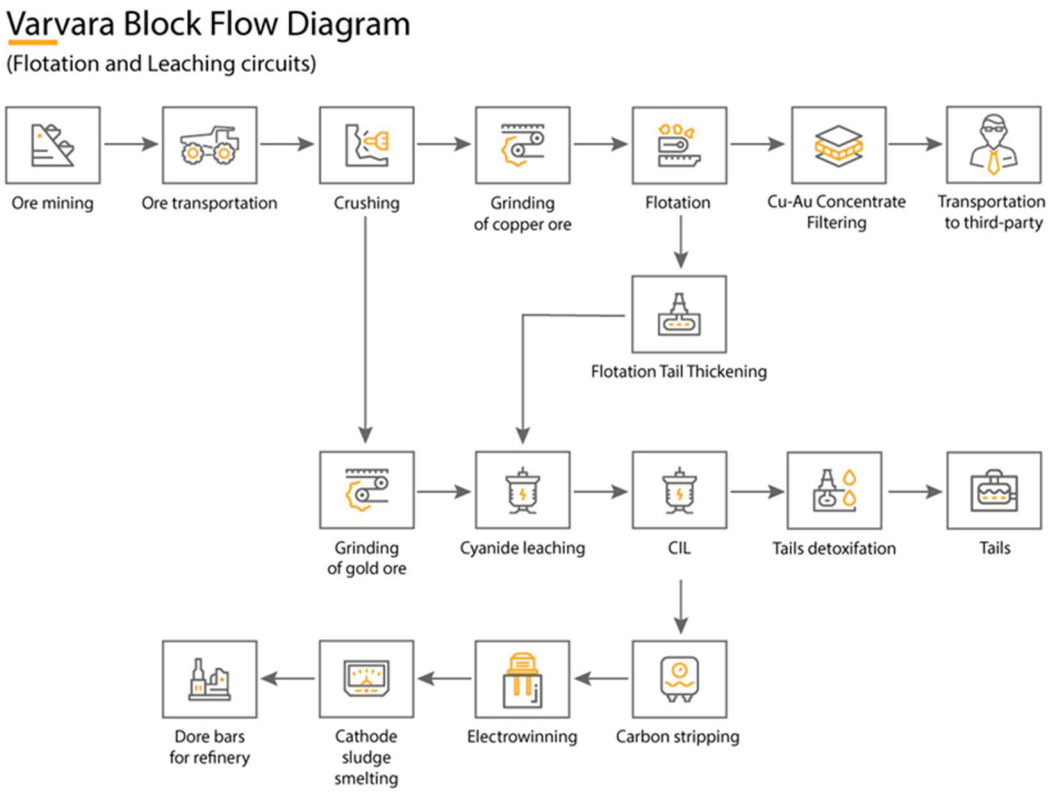


Figure 3: Block flow diagram of Varvara processing hub

Cyanide is transported to site by rail from St Petersburg container port Russia by Russian rail (RZD) to the border with Kazakhstan at Katalay, the cyanide continues it journey on the rail rolling stock but the locomotive is changed to Kazakhstan rail, where it continues to Bataly station. Polymetal Varvara has its own locomotive which collects the rolling stock for the final part of the journey to Varvara. Varvara has its own platform with the site. Figure 4 below is a flow diagram of the supply chain process.

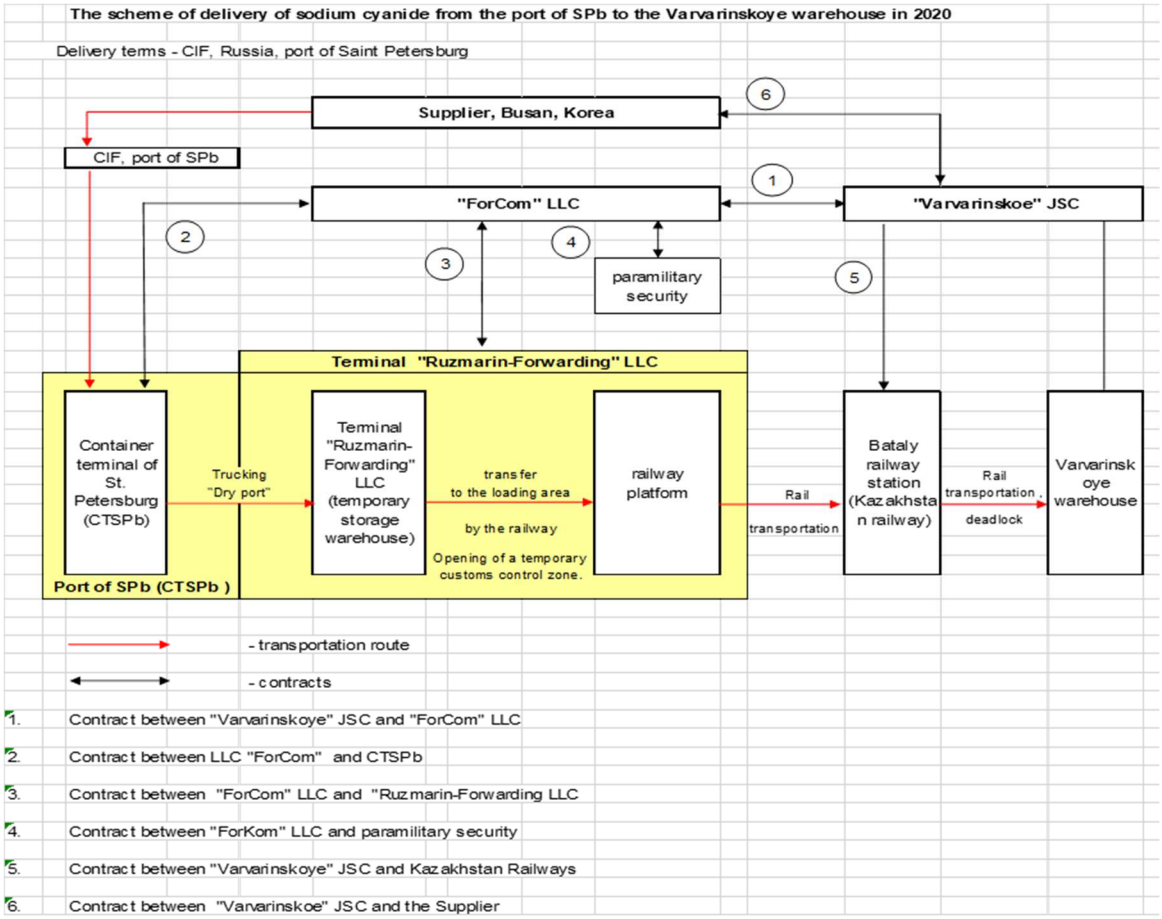


Figure 4: Schematic diagram of the cyanide Supply Chain

On arrival of the cyanide at Varvara platform, the shipping containers are unloaded from the rolling stock and taken to the cyanide storage compound. At no time during the journey from St Petersburg port to Varvara platform are the shipping containers (containing the cyanide boxes) opened or leave the rail rolling stock. Security is provided throughout the journey.

A photographic record and documented evidence is available.

Auditor's Finding

This operation is

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

with the International Cyanide Management Code.

Auditor Information

Audit Company: Wardell Armstrong International

Lead Auditor: Christine Blackmore

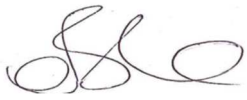
Lead Auditor email: cblackmore@wardell-armstrong.com

Dates of Audit: January 2022

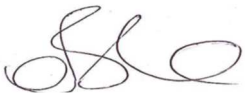
Auditor Attestation

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.

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 Transportation Verification Protocol and using standard and accepted practices for health, safety and environmental audits.



Name of Operation _____ Signature of Lead Auditor Date _____



Principles and Standards of Practice

Principle 1 – Transport
Transport cyanide in a manner that minimises the potential for accidents and releases.

Standard of Practice 1.1
Select transport routes to minimise the potential for accidents and releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

Kazakhstan Temir Zholy (hereinafter "KTZ" or "Kazakh Railways") select the most appropriate route for the cyanide transport which takes into account population density, infrastructure, terrain and weather conditions to minimize the potential for accidents and releases. The route is state approved and considers the feedback of the communities and other important stakeholders. KTZ has advised outside responders of their roles in case of emergency whereby Kazakh Civil Defense shall be involved to manage any large scale incidents. At each interim (control) station, the train, rolling stock and cargo are inspected to ensure integrity and safety of the cargo.

Standard of Practice 1.2
Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

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

Summarise the basis for this Finding/Deficiencies Identified:

Kazakhstan Temir Zholy uses only trained and qualified personnel to operate its locomotives and railway infrastructure. Observing the internal procedures is mandatory for the locomotive and shunting crews, as well as the dispatchers and other personnel involved.

Standard of Practice 1.3
Ensure that transport equipment is suitable for cyanide shipment.

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

Summarise the basis for this Finding/Deficiencies Identified:

Freight forwarder "ForKom" LLC provides freight forwarding services to "Varvarinskoye" JSC which include two trained security guards to accompany the dangerous goods throughout the journey. The cargo is environmentally insured.

Standard of Practice 1.4
Develop and implement a safety programme for transport of cyanide.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

During transportation KTZ maintains the consignor's packaging; appropriate signage is used to identify the shipment as cyanide (UN 1689). For each locomotive and the flatbed unit, a technical passport is kept containing technical and operational characteristics with the procedures to prevent overloading or shifting of the cargo. Rolling stock or locomotives with malfunctions that threaten traffic safety are not admitted. All machinery and units undergo mandatory inspections, maintenance and repairs apropos internal maintenance and repair programme.

Standard of Practice 1.5
Follow international standards for transportation of cyanide by sea.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Shipments of cyanide by railway are in compliance with Regulations concerning the International Carriage of Dangerous Good by Rail (RID).
Vavara only use road vehicles within the boundaries of the site.

Standard of Practice 1.6
Track cyanide shipments to prevent losses during transport.

	■	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.6
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Cyanide shipments are tracked using available tracking systems to prevent losses during transport with necessary procedures and systems in place. All communication equipment is tested periodically to ensure it functions properly. Consignment Notes, Certificates of Origin, Material Safety Data Sheets and other necessary chain of custody documentation is available, as required by the applicable national and international legislation.

Principle 2 – Interim Storage

Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

No interim storage facilities are used during the transportation of cyanide to Varvarinskoye cyanide compound.

Standard of Practice 2.1

Store cyanide in a manner that minimises the potential for accidental releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

No interim storage facilities are used during the transportation of cyanide to Varvarinskoye cyanide compound.

Principle 3 – Emergency Response
Protect communities and the environment through the development of emergency response strategies and capabilities.

Standard of Practice 3.1
Prepare detailed emergency response plans for potential cyanide releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

KTZ has an Emergency Response Plan and Dangerous Goods Emergency Card 619 to ensure compliance with the international and local rules pertaining to transportation of dangerous goods by rail. In accordance with RID, cyanide belongs to 6.1 hazard class "Poisonous (toxic substances), cyanides, with UN numbers specified in paragraph 2.2.45 and thus allowed for transportation only under convoy of consignors (consignees). The convoy is in possession of both the Emergency Response Plan and the Emergency Card 619.

Standard of Practice 3.2
Designate appropriate response personnel and commit necessary resources for emergency response.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.2
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Roles of KTZ personnel and the outside responders are identified in the Emergency Response Plan and Emergency Response Framework. All emergency response measures with dangerous goods are coordinated by a responsible supervisor in accordance with the Emergency Response Plan. In the event of an emergency, railway transport workers and Civil Defense are prepared to provide rapid response.

Standard of Practice 3.3
Develop procedures for internal and external emergency notification and reporting.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.3
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

KTZ maintains procedures and current contact information for notifying relevant parties of an emergency, these are kept current at all times.

Standard of Practice 3.4
Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment chemicals.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Neutralization measures are to be carried out in accordance with the emergency response procedures, including the Emergency Card, with the use of personal protective equipment and in a cordoned off area. Any restoration work is possible only after the threat to life and health of people in the emergency zone has been eliminated.

Standard of Practice 3.5
Periodically evaluate response procedures and capabilities and revise them as needed.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Provisions for periodically reviewing and evaluating Emergency Plan's adequacy are in place and are being implemented by KTZ during the Safety Day. The Emergency Response Plan's performance is revised by KTZ periodically in accordance with the internal procedures and ISO requirements.

It is therefore concluded that the transporter is in full compliance with Transport Practices 1-5.

CYANIDE TRANSPORTATION SUMMARY AUDIT REPORT
VARVARAINSKOYE RAIL, KAZAKHSTAN

JANUARY 2022

Prepared by Christine Blackmore (Lead Cyanide Auditor)

WARDELL ARMSTRONG INTERNATIONAL

Sir Henry Doulton House, Forge Lane, Etruria
Stoke on Trent, Staffordshire, United Kingdom

www.wardell-armstrong.com

CONTENTS

TRANSPORTATION SUMMARY AUDIT REPORT

The International Cyanide Management Code (hereinafter "the Code", "Code" or "the Cyanide Code"), this document, and other documents or information sources referenced at www.cyanidecode.org are believed to be reliable and were prepared in good faith from information reasonably available to the drafters. However, no guarantee is made as to the accuracy or completeness of any of these other documents or information sources. No guarantee is made in connection with the application of the Code, the additional documents available or the referenced materials to prevent hazards, accidents, incidents or injury to employees and/or members of the public at any specific site where gold or silver is extracted from ore by the cyanidation process. Compliance with this Code is not intended to and does not replace, contravene or otherwise alter the requirements of any specific national, state or local government statutes, laws, regulations, ordinances, or other requirements regarding the matters included herein. Compliance with this Code is entirely voluntary and is neither intended nor does it create, establish or recognise any legally enforceable obligations or rights on the part of its signatories, supporters or any other parties.

OPERATION GENERAL INFORMATION

Name of Transport Operation:	VARVARINSKOYE, KAZAKHSTAN
Name of Facility Owner:	POLYMETAL INTERNATIONAL PLC
Name of Facility Operator:	VAVARINSKOYE, KAZAKHSTAN
Name of Responsible Manager:	Daria Goncharova
Address:	Narodnogo Opolcheniya 2, St. Petersburg, 198216
State/Province:	
Country:	Russian Federation
Telephone:	Tel. +7.812.334.3666, +7.812.677.4325
Fax:	+7.812.753.6376
Email:	Daria Goncharova Goncharova@polymetal.ru

OPERATION LOCATION DETAIL AND DESCRIPTION

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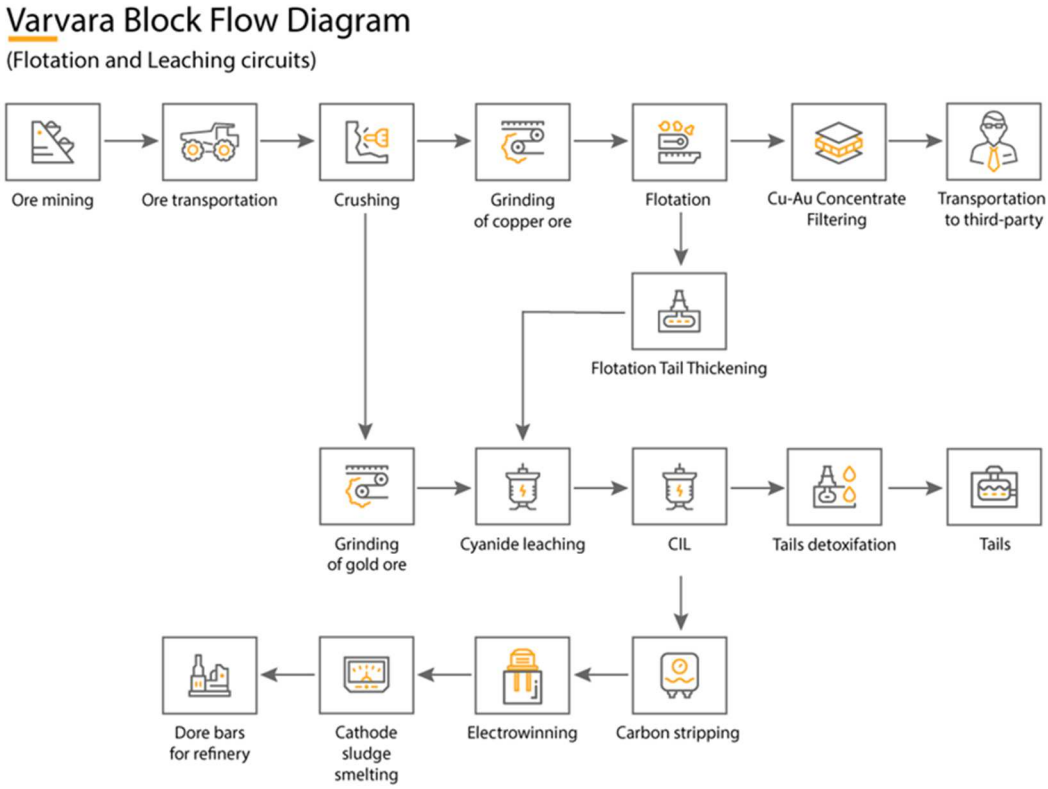

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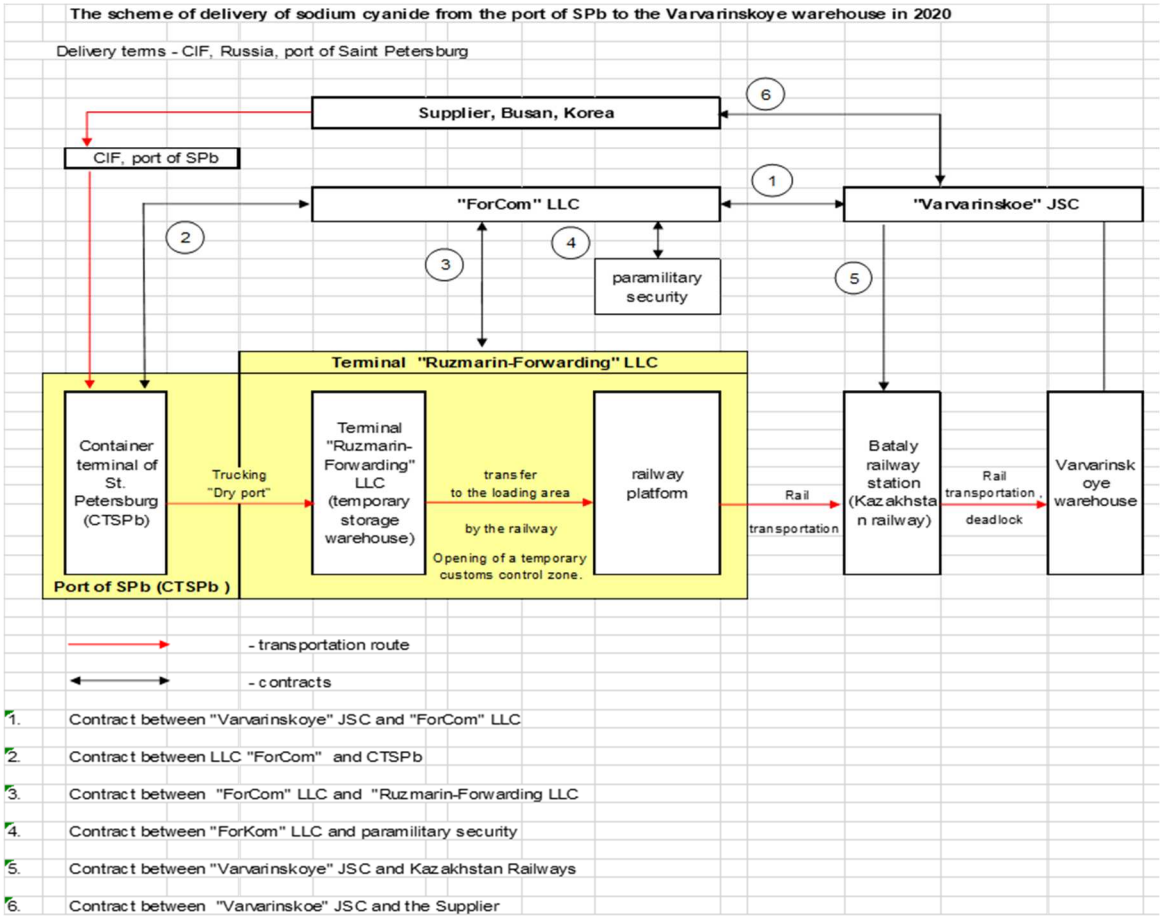

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Auditor's Finding

This operation is

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

with the International Cyanide Management Code.

Auditor Information

Audit Company: Wardell Armstrong International

Lead Auditor: Christine Blackmore

Lead Auditor email: cblackmore@wardell-armstrong.com

Dates of Audit: January 2022

Auditor Attestation

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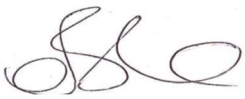

Name of Operation_____ Signature of Lead Auditor Date _____

Principles and Standards of Practice

Principle 1 – Transport
Transport cyanide in a manner that minimises the potential for accidents and releases.

Standard of Practice 1.1
Select transport routes to minimise the potential for accidents and releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC owns and efficiently operates a railway spur of its own and implements procedures that aim to minimize cyanide related risks. The route is a relatively short railroad appended to the national station "Bataly" and was designed and commissioned in accordance with the national regulations. On average, it takes 7-10 days for the cyanide containers to arrive from Saint Petersburg to Bataly station in Kazakhstan. "ForKom" LLC continually informs "Varvarinskoye" LLC of the cargo whereabouts and pending arrivals via designated acceptance-delivery agents. No problems with the shipping containers have occurred in the Varvarinskoye shipping history. No incidents or emergencies have occurred; the containers and seals have always arrived intact, as was reported to the Auditor during the site visit.
The railway spur design and construction as well as the goods permissible for transportation using it have been approved by the relevant governmental agencies following community consultations. The route is short, bypasses villages and watercourses thereby minimising risks of occurrence of possible emergences.

Standard of Practice 1.2
Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

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

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC employs only qualified personnel to operate its locomotive and any cyanide handling equipment. All staff receive regular training and refresher training,

emergency drills are also conducted. Locomotive operators and other railway personnel receive necessary regular inductions and training; refresher-training takes place biannually.

Standard of Practice 1.3
Ensure that transport equipment is suitable for cyanide shipment.

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

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC uses locomotive TEM2 which is designed and maintained to operate within the established loads. "Varvarinskoye" JSC implements procedures to prevent overloading of the flatbeds or the locomotive at the Bataly station and for the crane handling the cyanide containers at the Varvarninskoye station. No more than 25 railcars, weight not exceeding 2300 tonnes at a time is allowed while shunting from Bataly station to the Varvarinskoye access tracks. The cyanide cargo transit weight (1512t) is therefore within the allowable limit. Also, national law requires that cyanide containers are transported "on the straight line" which means that upon arrival at Bataly station the containers are handed over to "Varvarinskoye" JSC without touching the ground. No changes are made to the container load en-route. Chance of overloading of the railway flatbeds is therefore excluded.

Standard of Practice 1.4
Develop and implement a safety programme for transport of cyanide.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC has demonstrated that its practices and procedures ensure that its railway transport and facilities are suitable for the safe cyanide shipment. Both the locomotive and the railway tracks are well maintained, as is the crane used for handling the containers. Cyanide transportation is not allowed during inappropriate weather conditions. Procedures are in place to prevent overloading or shifting of the cargo.
"Varvarinskoye" JSC employees, including locomotive operators, crane operators and others involved into cyanide handling, undergo mandatory medical examination at the start of every shift as part of drug and alcohol prevention and control.
"Varvarinskoye JSC Standard Operating Procedures" stipulate for appropriate modifications such as severe weather conditions, heavy wind (>15m/s) or a force majeure circumstance.

Railway tracks cannot be used in case of heavy snow or presence of a thick snow cover, fallen trees, garbage or other obstacles. In case of heavy winter precipitation (snowstorm, blizzard, etc.), snow removal machinery is mobilized.

“Varvarinskoye” JSC implements safety procedures to ensure safe transport of cyanide from Bataly Station to its Varvarinskoye station. Safety procedures for the shunting operations at Bataly are also in place. Inspection and maintenance of the locomotive and the tracks is implemented with no incidents relating to the cyanide transport having been reported to date. Shipping records indicating the amount of cyanide are available. Material Safety Data Sheets are available in English and Russian. To prevent losses during transport cyanide shipments are tracked by “Varvarinskoye” JSC using electronic system with necessary procedures and systems in place. “Varvarinskoye” JSC uses the existing inventory control and the chain of custody documentation to monitor the amount of cyanide during transport. The list of documents includes: Consignment note, Transit Declaration, Cyanide Import License, Certificate of Origin, Certificate for the packaging and the containers. Cyanide quantity and shipping requirements are contained therein.

Standard of Practice 1.5

Follow international standards for transportation of cyanide by sea.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

Shipments of cyanide by railway are in compliance with Regulations concerning the International Carriage of Dangerous Good by Rail (RID).
Vavara only use road vehicles within the boundaries of the site.

Standard of Practice 1.6

Track cyanide shipments to prevent losses during transport.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 1.6
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The Locomotive operator is equipped with a portable radio in addition to a mobile phone. All communications equipment is tested and calibrated periodically to ensure it functions properly.

Reportedly, there are no blackout areas along the Bataly – Varvarinskoye route due the short distance and satisfactory mobile coverage.

Cyanide shipments are tracked using the an electronic system and also consignment documents are kept with the shipment at all times.

Principle 2 – Interim Storage

Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

No interim storage facilities are used during the transportation of cyanide to Varvarinskoye cyanide compound.

Standard of Practice 2.1

Store cyanide in a manner that minimises the potential for accidental releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

No interim storage facilities are used during the transportation of cyanide to Varvarinskoye cyanide compound.

Principle 3 – Emergency Response
Protect communities and the environment through the development of emergency response strategies and capabilities.

Standard of Practice 3.1
Prepare detailed emergency response plans for potential cyanide releases.

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

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC develops and implements emergency response procedures to maintain preparedness in case of accidental cyanide releases and exposures. Emergency Response Plan contains a set of response actions with roles and responsibilities clearly assigned to each party involved. The Plan is appropriate for the selected transportation route. Emergency Card for Cyanide No 619 is also used. In the event of an emergency involving cyanide, Varvarinskoye personnel are to communicate with the assigned parties, stop shunting operations or transport, take necessary measures to prevent threat to people, environment and the equipment, prevent access from unauthorized persons and conduct rescue operations. Roles of outside responders are clearly identified in the Emergency Response Plan. Emergency communication diagram with valid telephone numbers and assigned radiowaves is in place and updated regularly.

Standard of Practice 3.2
Designate appropriate response personnel and commit necessary resources for emergency response.

	■	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.2
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC has agreements in place with the licensed rescue services such as "Ort Sondirushi" JSC and "Magen" LLC who are present at the mine site and also ensure medical preparedness in case of an emergency. In case of a significant emergency, national civil defense would take over and manage the emergency appropriately.

"Varvarinskoye" JSC implements Health and Safety standards and emergency response procedures to minimise risks during transport of cyanide, commits necessary resources for the emergency response and designates trained responders, including specialised organisations.

Standard of Practice 3.3
Develop procedures for internal and external emergency notification and reporting.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.3
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC implements procedures and keeps current the contact information for notifying affected parties of an emergency. Mandatory revisions and updates of these procedures take place annually, revisions are also made as needed. Varvarinskoye JSC has procedures in place for notifying ICMI on any significant cyanide accidents that would occur during cyanide transport, evidence of which has been duly provided to the auditor.

Standard of Practice 3.4
Develop procedures for remediation of releases that recognise the additional hazards of cyanide treatment chemicals.

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.4
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC have procedures for remediation and neutralisation for soils and spills in place. Clean up procedures were demonstrated to the Auditor during the site visit. There is no water course in the immediate vicinity of the transport route for Vavarainskoye Rail.

Standard of Practice 3.5

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

	☒	in full compliance with	
The operation is	☐	in substantial compliance	Standard of Practice 3.5
	☐	not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

"Varvarinskoye" JSC has provided sufficient information and evidence to demonstrate that the existing response procedures and capabilities are periodically evaluated and revised.

It is therefore concluded that the transporter is in full compliance with Transport Practices 1-5.