

Our ref: CB/RU10169/005
Your ref:

Date: 20 July 2022

Mark Montoya
Director of Standards Assurance
International Cyanide Management Institute
1400 I Street, NW, Suite 550
Washington DC 20005 USA

Dear Mark

Polyus Verninskoye Operational Verification Audit – Corrective Action Report close out

Verninskoye underwent their initial International Cyanide Management Code (“Code”) certification audit in 2019/2020 including a site visit. The audit identified three (3) Standards of Practice as being “substantially compliant” with the Code, with regard to the implementation of a colorant dye into the cyanide process.

Polyus have now completed their investigations and provided the following documentation in support of their implementation of the colorant dye into the cyanide circuit:

- **DATA SHEET NO. 019:** Cyanide dye, E122 (carmoisine) - Determination and calculation of the basic consumption norm;
- **PROCESS INSTRUCTION No. 10:** Hydromet Circuit - Reagents Preparation Area – including instructions for the addition of carmoisine dye;
- **CERTIFICATE OF PILOT DYE TESTS FOR SODIUM CYANIDE SOLUTIONS PRODUCED BY ECO RESOURCE AT POLYUS VERNINSKOYE:** *“The test aimed to analyze whether it is possible to use a sodium cyanide solution dye in the Hydromet Section of Polyus Verninskoye mill in accordance with the International Cyanide Management Institute (ICMI) standards. The test determined the effect the sodium cyanide dye had on hydromet process parameters for enrichment products at Polyus Verninskoye mill, and on the related workflow. Dye intensity and stability during dissolution, and optimal dye consumption were measured”;* and
- **PROCESS FLOWCHART** No. TK-ZIF-039-2022 "Sodium cyanide unpacking
- **POLYUS KRASNOYARSK RESEARCH CENTER:** Testing cyanide dyes for sodium cyanide solutions – from 2 manufacturers.

According to the Russian law when technological processes change such as the addition of colourant dye a mandatory targeted briefing is undertaken in accordance with Russian Federation Decree of 13.01.2003. No. 1/29. A reference list operatives briefed has been provided to the Auditor. A photographic record of the dye addition has also been prepared by Verninskoye.



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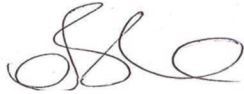
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Based on the information provided and in good faith: **in my opinion** the corrective actions have been completed within the 12 months specified. Therefore, Verninskoye is in **full compliance** of the cyanide Code.

Regards on behalf of Wardell Armstrong International

A handwritten signature in black ink, appearing to read 'C. Blackmore', with a stylized flourish at the end.

CHRISTINE A BLACKMORE
ICMI Lead Cyanide Auditor
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Standard of Practice	Summary of Requirement	Description of compliance and/or evidence supplied	Date of Compliance
2.1.1 c	<p>Is there a written agreement between the operation, the cyanide producer, distributor, and transporter(s) designating responsibility for the following, as applicable?</p> <p>c) Addition of colorant dye to high strength liquid cyanide prior to delivery at the mining operation, and addition of colorant dye to solid cyanide prior to or at the time of mixing (Note: This item will become auditable as of July 1, 2019. Companies are encouraged to include this requirement in agreements prior to that date, and for audits conducted prior to July 1, 2019, auditors are asked to note within the Detailed Audit Findings Report whether this requirement is already included in current agreements.)</p>	<p>The colorant dye is not provided by the cyanide producer, but is added as part of the cyanidation process on site in the process plant.</p>	14 July 2022
3.2.2 f	<p>Has the operation developed and implemented plans or procedures to prevent exposures and releases during cyanide unloading and mixing activities such as:</p> <p>f) Addition of colorant dye to solid cyanide prior to or at the point of mixing into solution? (Note: This item will become auditable as of July 1, 2019. Companies are encouraged to adopt this practice prior to that date, and for audits conducted prior to July 1, 2019, auditors are asked to note within the Detailed Audit Findings Report if the practice has already been adopted.)</p>	<p>Following investigations by Polyus in to the addition of a colorant dye into the cyanidation process the following documents have been supplied to confirm compliance with the cyanide Code requirements:</p> <ul style="list-style-type: none"> • DATA SHEET NO. 019: Cyanide dye, E122 (carmoisine) - Determination and calculation of the basic consumption norm • PROCESS INSTRUCTION No. 10: Hydromet Circuit - Reagents Preparation Area – including instructions for the addition of carmoisine dye. • CERTIFICATE OF PILOT DYE TESTS FOR SODIUM CYANIDE SOLUTIONS PRODUCED BY ECO RESOURCE AT POLYUS VERNINSKOYE: <i>The test aimed to analyze whether it is possible to use a sodium cyanide solution dye in the Hydromet Section of Polyus Verninskoye mill in accordance with the International Cyanide Management Institute (ICMI) standards. The test determined the effect the sodium cyanide dye had on hydromet</i> 	14 July 2022



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		<p><i>process parameters for enrichment products at Polyus Verninskoye mill, and on the related workflow. Dye intensity and stability during dissolution, and optimal dye consumption were measured.</i></p> <ul style="list-style-type: none"> • POLYUS KRASNOYARSK RESEARCH CENTER: Testing cyanide dyes for sodium cyanide solutions – from 2 manufacturers. 	
6.2.6	<p>Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.</p> <p>Is high strength cyanide solution dyed for clear identification? (Note: This item will become auditable as of July 1, 2019. Companies are encouraged to adopt this practice prior to that date, and for audits conducted prior to July 1, 2019, auditors are asked to note within the Detailed Audit Finding Report if the practice has already been adopted).</p>	<p>Following investigations by Polyus in to the addition of a colorant dye into the cyanidation process the following documents have been supplied to confirm compliance with the cyanide Code requirements:</p> <ul style="list-style-type: none"> • DATA SHEET NO. 019: Cyanide dye, E122 (carmoisine) - Determination and calculation of the basic consumption norm • PROCESS INSTRUCTION No. 10: Hydromet Circuit - Reagents Preparation Area – including instructions for the addition of carmoisine dye. • PROCESS FLOWCHART No. TK-ZIF-039-2022 "Sodium cyanide unpacking. • CERTIFICATE OF PILOT DYE TESTS FOR SODIUM CYANIDE SOLUTIONS PRODUCED BY ECO RESOURCE AT POLYUS VERNINSKOYE: The test aimed to analyze whether it is possible to use a sodium cyanide solution dye in the Hydromet Section of Polyus Verninskoye mill in accordance with the International Cyanide Management Institute (ICMI) standards. The test determined the effect the sodium cyanide dye had on hydromet process parameters for enrichment products at Polyus Verninskoye mill, and on the related workflow. Dye intensity and stability during dissolution, and optimal dye consumption were measured. • POLYUS KRASNOYARSK RESEARCH CENTER: Testing cyanide dyes for sodium cyanide solutions – from 2 manufacturers. 	14 July 2022



Standard of Practice	Summary of Requirement	Description of compliance and/or evidence supplied	Date of Compliance
		<ul style="list-style-type: none">Targeted briefings (training) have been undertaken. A record of operative has been supplied.	