Whatton Consulting Limited

REPORT

ICMC Cyanide Production Re-certification Audit - Summary Report Kittila Mine

Submitted to:

International Cyanide Management Institute (ICMI)
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United States of America

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ACRONYMS AND ABBREVIATIONS

ABB	Asea Brown Boveri
AEF	Agnico Eagle Finland
AEM	Agnico Eagle Mines
ARO	Asset Retirement Obligation
BGM	bituminous geomembrane
CAD	computer-aided design
CIL	carbon-in-leach
Code	International Cyanide Management Code
DAFR	Detailed Audit Findings Report
DPP	Discharge Pumping Plant
EHSQ	Environment, Health, Safety, and Quality
ELY	Lapland Centre for Economic Development, Transport and the Environment
EoR	Engineer of Record
ESG	Environmental, Social, and Governance
ERP	Emergency Response Plan
GHS	Global Harmonized Standard
GmbH	German company with limited liability
GPS	Global Positioning System
GRI	Global Reporting Initiative
HCN	hydrogen cyanide gas
HDPE	high-density polyethylene
ICMC	International Cyanide Management Code
ICMI	International Cyanide Management Institute
ISO	International Organization for Standardization
kg	kilogram
km	kilometre
m	metre
KPI	key performance indicator
mm	millimetre
m2	square metre
m3	cubic metre
KW	kilowatt
LAPHA	Lapin Hyvinvointialue Regional Authority
LOTO	Lock out tag out
MAC	Mining Association of Canada
OHSAS	Occupational Health and Safety Series
PMP	probable maximum precipitation
PPE	Personal protective equipment
mg/l	milligrams per litre
µg/l	microgram per litre
MOC	management of change
NaCN	sodium cyanide
NP	Neutralisation Plant
OMS	Operation, Maintenance, and Surveillance
PPE	personal protective equipment
SASB	Sustainability Accounting Standards Board
TARP	Trigger, Action, Response Plan
QA/QC	Quality Assurance/Quality Control
RCMP	Responsible Gold Mining Principles
RMMS	Risk Management and Monitoring System
RMMS(2)	Responsible Mine Management System
RPE	Respiratory Protective Equipment
SCBA	Self-contained breathing apparatus
SEVESO	Seveso Directive for major accident hazard sites
TMF	tailings management facility

TSM	Towards Sustainable Mining
UNEP	United Nations Environmental Program
UPS	Uninterrupted Power Supply
WAD	weak acid dissociable
WGC	World Gold Council

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1.0 INTRODUCTION

1.1 International Cyanide Code

The “International Cyanide Management Code for The Manufacture, Transport, and Use of Cyanide in The Production of Gold” (the Code) was developed by a multi-stakeholder Steering Committee under the guidance of the United Nations Environmental Program (UNEP) and the then, International Council on Metals and the Environment.

2.0 SUMMARY AUDIT REPORT FOR GOLD MINING OPERATIONS

Name of Cyanide User Facility:	Kittilä Gold Mine
Name of Cyanide User Facility Owner:	Agnico Eagle Mines Ltd, Canada
Name of Cyanide User Facility Operator:	Agnico Eagle Finland Oy
Name of Responsible Manager:	Johanna Mehtälä - EHSQ Superintendent
Address:	Kittilä Gold Mine Agnico Eagle Finland Oy Pokantie 541 99250 Kiistala Lapland
Country:	Finland
E-Mail:	johanna.mehtala@agnicoeagle.com

3.0 LOCATION DETAIL AND DESCRIPTION OF OPERATION

3.1 Mine Location

Agnico Eagle Finland's (AEF's) Kittilä mine is located in the municipality of Kittilä, a few kilometres (km) northeast of Kiistala village about 50 km northeast of the village of Kittilä in the Lapland region of northern Finland, approximately 1025 km north of Helsinki and 150 km north of the Arctic Circle.

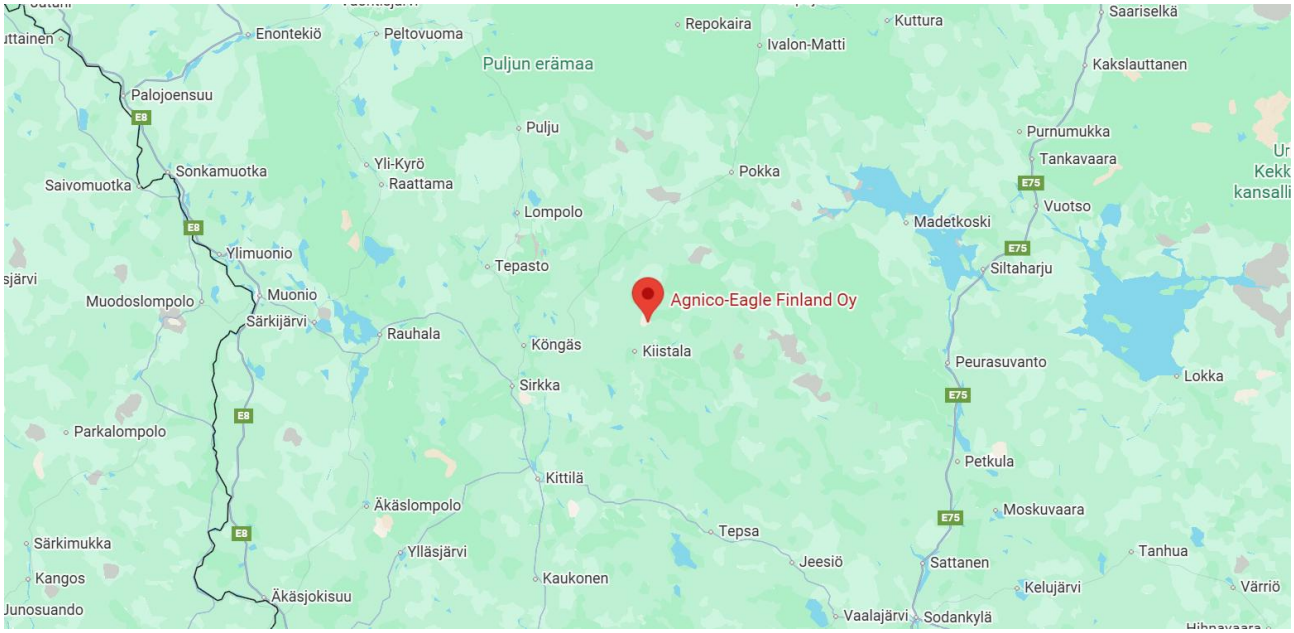

Figure 1: Regional Location Map (from Google Maps 2025)

3.2 Background

The AEF Kittilä ore bodies were initially mined from two open pits (Suuri and Roura) and underground operations were added in October 2010. Roura open pit was mined out in March 2011 and Suuri open pit in November 2012. Mining is now entirely underground in the Suuri and Roura deposits, since 2012.

The underground method is open stoping followed by delayed backfill. Approximately 16 km of tunnels are developed each year to ensure sufficient ore production is available to keep the mill supplied. After extraction, stopes are backfilled with cemented backfill or paste backfill with NP tailings to allow the safe mining of adjacent stopes. Ore is initially transported by hoist and then transported by truck. Initial crushing is underground.

Around 2 million tonnes of ore are extracted annually. The mine's annual gold production comes to roughly 7,000 kg. At current production volumes, the AEF Kittilä mine's known reserves are expected to produce gold until 2034.

The gold in the Suurikuusikko deposit is refractory; with most of the gold locked inside sulphide grains and only about four per cent existing as free gold. The mineral processing at AEF Kittilä comprises crushing, grinding, flotation, pressure oxidisation (autoclave), dissolution and electrowinning and smelting in a furnace before pouring into doré bars as detailed in the Process Flowsheet presented as Figure 3.

AEF receives solid cyanide as briquettes in containers by truck. These containers consist of plastic bags inside wooden boxes. The manufacturer, CyPlus, adds red dye packets to the boxes before shipping. The boxes are stored in two onsite warehouses before mixing in the mixing room of the plant.

Cyanide in the CIL tailings is destroyed using the INCO process before discharge to the CIL 2 Tailings Management Facility (TMF). AEF maintains WAD cyanide concentrations well below 50 milligrams per litre (mg/l) in the open waters at the TMF. There are no other open waters with cyanide solution.

The process produces two tailings flows. The first flow is a flow of flotation tailings, named NP tailings (Neutralisation Plant tailings), which represents about 85% of the production, and whose supernatant is partly discharged after sulphate and nitrogen removal to the Loukinen River and partly recirculated to the mill. The second flow is a flow of CIL tailings (after carbon in leach circuit and detox), which represents some 15% of the production and whose supernatant water is recirculated back to the mill. The total tailings area is approximately 110 hectares and all ponds are lined with impermeable bitumen liners.

There have been no significant changes to the mining or process activities since the last recertification audit.

4.0 SUMMARY AUDIT REPORT

Auditors Findings

Angico Eagle Kittilä Gold Plant is:	☒ in full compliance with ☐ in substantial compliance with ☐ not in compliance with	**The International Cyanide Management Code**

Audit Company:	Whatton Consulting Limited
Audit Team Leader:	Dale Haigh, Lead Auditor
Email:	dalehaigh@whattonconsulting.com

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

Name of Other Auditors

Kent Johnejack, ICMI (International Cyanide Management Institute) Pre-approved Mine Technical Auditor

Dates of Audit

The site visit element of the Re-certification Audit was undertaken between 5 to 8 May 2025.

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

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

Dale Haigh, Lead Auditor:

Kent Johnejack, Mine Technical Expert

November 2025

5.0 PRINCIPLE 1 – PRODUCTION

Encourage Responsible Cyanide Manufacturing by Purchasing from Manufacturers that Operate in a Safe and Environmentally Protective Manner

Standard of Practice 1.1: **Purchase cyanide from certified manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 1.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 1.1; to purchase cyanide from certified manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide, and to prevent releases of cyanide to the environment.

CyPlus GmbH (CyPlus), located in Wesseling in Germany, is the cyanide producer for the AEF Kittilä operation. The contract is between Agnico Eagle Mines (AEM) based in Finland and CyPlus. The current contract runs until the end of December 2027 and has been in place since 2017. Both parties have agreed to comply with the Principles and Standards of Practice of the ICMC.

CyPlus' production facility was re-certified as compliant with the code on 23 January 2025 and was originally certified in 2006. AEF Kittilä retains copies of the CyPlus Summary Audit Reports posted on the ICMI website, demonstrating compliance with the ICMI production protocol.

6.0 PRINCIPLE 2 – TRANSPORTATION

Protect Communities and the Environment during Cyanide Transport

Standard of Practice 2.1: **Require that cyanide is safely managed through the entire transportation and delivery process from the production facility to the mine by use of certified transport with clear lines of responsibility for safety, security, release prevention, training and emergency response.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 2.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 2.1; require that cyanide is safely managed through the entire transportation and delivery process from the production facility to the mine by use of certified transport with clear lines of responsibility for safety, security, release prevention, training, and emergency response.

All transporters are certified under the Code. CyPlus' Wesseling facility in Germany was re-certified compliant on January 23, 2025, originally certified in 2006. CyPlus is the consignor of cyanide to AEF Kittilä, with its Supply Chain #1 from Wesseling to International Ports certified since June 2, 2011, and last re-certified on August 6,

2024. Transport in Finland is under Supply Chain #6, certified on 16 September, 2025. In February 2024, CyPlus provided new cyanide information sheets and training for AEF Kittilä staff on safety and handling. AEF Kittilä hold copies of all chain of custody information including CyPlus GmbH Order Confirmation, Status Registration Documents and Sea Waybills for 2022 to 2025.

7.0 PRINCIPLE 3 – HANDLING AND STORAGE

Protect Workers and the Environment during Cyanide Handling and Storage

Standard of Practice 3.1: **Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 3.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 3.1; design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices, quality control/quality assurance procedures, spill prevention and spill containment measures.

AEF has designed and constructed its unloading, storage, and mixing facilities in accordance with industry standards and applicable jurisdictional rules. The unloading dock, two warehouses, and mixing area were unchanged this audit cycle and achieved compliance in the three previous audit cycles. There are no places where operators might congregate near these facilities. There are no nearby towns and the nearest residences are a kilometer away. The nearest perennial river (Seurujoki) is approximately 2 kilometers away.

AEF receives only solid cyanide briquettes and there is no unloading area for liquid cyanide.

AEF has installed level sensors on the mixing and storage tanks to prevent overfilling. The level sensors have set points that alarm in the control room. An interlock between the high-level set point on the storage tank will automatically shut down the transfer pump from the mixing tank. AEF has maintained and tested these level sensors during the annual shutdown period throughout the audit cycle, as documented in a spreadsheet.

AEF has installed the cyanide mixing and storage tanks on solid concrete bases in single concrete containment in the mixing room to prevent seepage or leakage to the subsurface. This containment has not changed this audit cycle. The volumes of the mixing and storage tanks are 10 and 19 m3, respectively. However, the containment volume of the floor of the mixing room is augmented by the volume available on the exterior concrete pad between the warehouses and the mixing room. The volume of the combined containment is approximately 156% of the storage tank. The use of the exterior concrete pad for additional containment may allow rainwater and/or snowmelt to enter the mixing room and commingle with spilled high-strength solution, which in certain proportions might generate HCN. AEF has installed signage to alert operators of this potential hazard. There is a sump with a level sensor to automatically return solutions to the CIL circuit. The auditors observed the concrete floor, tank bases, walls, and sump to be in good condition.

AEF stores solid cyanide in two enclosed side-by-side warehouses separated from the mixing room by an outside concrete pad. Each warehouse is fully enclosed with a concrete floor, concrete and metal walls, a metal roof, and a roll-up door to prevent contact with water. Each warehouse is equipped with a fan and a roll-up door for ventilation. The mixing room is equipped with forced air ventilation and a roll-up door. The mixing tank is

equipped with a blower fan and pipe vented to the outside. The offloading dock, warehouses, and mixing room are located within the fenced, gated, and patrolled mine site. The doors to the warehouses and mixing room are kept locked with access limited to certain operators. Solid cyanide and 13% high-strength cyanide solution are stored separately from acids, strong oxidizers, explosives foods, animal feeds, and tobacco products. There are no other materials or chemicals stored in the warehouses and mixing room.

Standard of Practice 3.2: Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 3.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 3.2; operate unloading, storage and mixing facilities using inspections, preventive maintenance, and contingency plans to prevent or contain releases and control and respond to worker exposures.

AEF manages empty cyanide boxes and bags to prevent their re-use according to a written procedure. AEF manages the boxes with a “first in first out” process and maintains a monthly inventory of full cyanide boxes to ensure all are accounted for. Empty wooden boxes and plastic bags are temporarily stored in a cargo container dedicated to hazardous waste before shipping for disposal by incineration. The auditor reviewed shipping manifests from throughout the audit cycle to verify continuous compliance.

AEF has developed an equivalent alternative to rinsing plastic bags three times. The written procedure specifies compressing the empty bags in an enclosed baler to remove air, then sealing them with duct tape in a separate plastic bag to prevent dust releases. The sealed bags are placed in an empty wooden container in the dedicated cargo container while awaiting shipment for disposal. The auditor judged this method to be equivalent to rinsing because of the dustproofing measures, the PPE worn, use of portable and fixed HCN monitors, and ventilation within the mixing room.

AEF does not return any empty containers to the vendor.

The mixing procedure describes the operation of valves, overhead crane, bag breaker, hopper, ventilation fan, and appurtenances for mixing solid cyanide. The procedure also describes the steps used by the control room to transfer solution from the mixing tank to the storage tank. Although the mixing procedure does not mention valve maintenance, a spreadsheet from the JD Edwards software showed that, in fact, the valves in the mixing area have been inspected and maintained.
The offloading procedure describes forklift operation to transfer cyanide boxes from the warehouses to the mixing room without ruptures or punctures. The mixing procedure describes the safe operation of the overhead crane and sling to lift the plastic bags to the hopper on the mixing tank. The auditor reviewed forklift operator certifications and forklift inspections from throughout the audit cycle to verify compliance.

The offloading procedure and the storage procedure state that wooden boxes are to be stacked no more than two high. The auditors observed two-box stacking in both warehouses.

The mixing procedure calls for cleanup of spilled briquettes and cyanide salts at the time of mixing. The auditors observed the mixing room to be in a tidy condition.

The mixing procedure specifies standard PPE; powered-air purifying full-face respirator; disposable Tyvek suit; chemical protective gloves and boots; portable HCN monitor; and radio. The procedure also requires two operators be involved in mixing plus the forklift operator outside the mixing room. In addition, the control room observes mixing via two closed circuit cameras. The auditors observed a mixing event to confirm conformance with these requirements.

CyPlus adds dye packets to the boxes of solid cyanide at the time of shipping. The auditor observed that the boxes in the warehouses had stickers stating “NaCN bricks plus dye”.

8.0 PRINCIPLE 4 – OPERATIONS

Manage Cyanide Process Solutions and Waste Streams to Protect Human Health and the Environment

Standard of Practice 4.1: **Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.1; to implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

AEF has implemented management systems for the mine, including the cyanide facilities. The limited number of cyanide facilities are operated as the closed CIL circuit with cyanide process water. The areas with cyanide facilities consist of the cyanide storage and mixing area; CIL circuit; stripping and elution circuit; carbon regeneration circuit; cyanide destruction circuit; the CIL 1 Reclaim Pond (on top of the inactive CIL 1 TMF); and the CIL 2 TMF (including the Reclaim Rockfill Dam). The NP circuits, NP TMFs, and the underground workings are excluded because no cyanide process water is present. The laboratory, refinery, development rock piles, and other ancillary facilities not associated with the CIL circuit are also excluded. Stormwater diversion is not needed for CIL 1 and 2 TMFs because of topography. This overall arrangement has not changed from previous audits.

The CIL 2 TMF is the only cyanide facility that has changed this audit cycle:

- CIL 2 TMF raise to 241 meters started in November 2022 and completed in February 2023
- Partial raise of the Reclaim Rockfill Dam within CIL 2 TMF in the winter of 2024-2025

The overarching management systems for Agnico Eagle globally and AEF locally are the Mining Association of Canada’s (MAC) Towards Sustainable Mining (TSM) program; the World Gold Council’s (WGC) Responsible Gold Mining Principles (RGMP); the Agnico Eagle Risk Management and Monitoring System (RMMS); and the Agnico Eagle Environmental, Social, and Governance (ESG) reporting under Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) protocols.

AEF has plans, procedures, permits, manuals, work instructions, and a control room operating system that define the assumptions, design criteria, regulatory requirements, and operating parameters for safe cyanide management. Key criteria and parameters include:

- Mixing high-strength cyanide solution = 13% at pH of 10.5
- CIL circuit
  - pH from 10.6 to 10.2 with minimum of 10.0
  - Cyanide addition between 400 and 500 mg/l
- Destruct = 10 mg/l WAD cyanide limit to open waters
- Stripping/elution pH = 1 for stripping and 12 for elution

- CIL 1 TMF Reclaim Pond (on inactive CIL 1 TMF)
    - Design storm = Probable maximum precipitation of 252 mm
    - Embankment factor of safety = 1.5
    - Freeboard = 0.5 m to spillway crest and 2 m to dam crest
- CIL 2 TMF
    - Design storm = Probable maximum precipitation of 252 mm
    - Construction method = downstream raises
    - Embankment factor of safety = 1.5
    - Target beach length = 100 to 150 m
    - Freeboard = 0.5 m to dam crest
- Outfall to Loukinen River
    - WAD cyanide limit = 0.4 mg/l

AEF has developed a set of work instructions that describe the practices for the safe and environmentally sound operation of the cyanide facilities. There are nine Work Instructions for CIL; four for cyanide destruction; four for stripping and elution. Carbon regeneration is covered in the procedure for stripping and elution.

AEF has developed plans for water and tailings management in the Operation, Maintenance, and Surveillance Manual. AEF also manages water and tailings with a probabilistic simulation model, a tailings depositional model, and an online real time monitoring platform.

AEF has implemented management of change (MOC) process. AEF provided an example of a change completed in 2025 to the location for measuring pH in the strip circuit from before the pumps to a safer location. AEF provided another example of a change in the autoclave, a non-cyanide facility, in 2025. Environmental staff were involved in the first change and safety staff were involved in both changes.

AEF has developed contingency procedures for non-standard operating situations that may present potential for cyanide exposures and releases. Contingency procedures for upsets in the operational water balance are contained in the Trigger Action Response Plan (TARP) for the TMFs and Water Reservoirs. The startup and shutdown procedures for CIL, cyanide destruction, and carbon stripping circuits are the equivalent of contingency procedures. AEF also has a contingency procedure for cleaning up frozen cyanide solution. A procedure for temporarily shutting down or stopping operations describes the contingency measures for a prolonged shutdown, which is defined as longer than six months. This procedure addresses remaining cyanide in the warehouses; residual cyanide in the mixing and storage tanks; process solutions in the CIL, stripping/elution, and destruct circuits; inspections and maintenance; water management; and environmental monitoring.

AEF has inspected the cyanide facilities at the plant. Tanks and columns have been visually inspected each shift. Annual non-destructive testing has been implemented to verify structural integrity. No corrective actions were needed this audit cycle. Secondary containments have been inspected each shift. An external company has completed annual structural inspections. Pipelines, pumps, and valves have been inspected each shift. Detailed maintenance inspections have also been carried out for pipelines, pumps, and valves on a weekly and monthly basis.

AEF has also inspected the CIL 1 and 2 TMFs. Pipes, pumps, spigots, and valves have been inspected daily. The tailings and reclaim pipelines have been inspected each shift. Seepage collection wells around the TMFs have been inspected daily. The CIL 1 and 2 TMFs dams have been inspected daily and piezometers, settlement plates, and water levels have been continuously monitored via instrumentation. The Engineer of Record for the TMFs has inspected them annually.

AEF has inspected the cyanide facilities on an established frequency sufficient to assure and document that they are functioning within design parameters. Inspections are completed by shift, day, week, month, and annual, depending on the facility and type of inspection. The auditor reviewed examples of these inspections from throughout the audit cycle to verify compliance.

AEF has documented inspections on forms, checklists, spreadsheets, and reports, including the date of inspection, the items inspected, the inspector's name, and the deficiencies observed. Deficiencies requiring corrective actions are entered into the maintenance software for tracking through completion.

AEF has implemented a mechanical and electrical maintenance program to ensure that equipment and devices function as necessary for safe cyanide management. AEF manages maintenance using commercial software with a defined workflow process for preventative and corrective maintenance. The workflow includes work requests, approval, planning, scheduling, obtaining materials/supplies, work orders, and closeout. The frequency for preventative maintenance is run-time duration and/or set time periods. The auditor reviewed maintenance histories for eight randomly selected pieces of equipment, as well as for level sensors, pH probes, and Cyanoprobes.

AEF has emergency power to prevent releases and exposures from the cyanide facilities in the event its primary power source is interrupted. AEF has three fixed generators and one portable backup generator with a total capacity of 5,280.25 kilowatts. AEF has maintained the four generators throughout the audit cycle with in-house monthly startup tests and annual maintenance by a contractor.

Standard of Practice 4.2: Introduce management and operating systems to minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.

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

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.2; To introduce management and operating systems to minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.

AEF has implemented a program to optimize cyanide addition in the CIL circuit, thereby reducing cyanide in tailings before destruction. AEF has optimized cyanide usage by periodic key performance indicator (KPI) programs. If chemical usage at the cyanide destruct circuit is high, then too much cyanide is being added. The metallurgist stated that the 2025 KPI program lowered the cyanide addition at CIL #1 by 100 ppm based on residual cyanide testing. KPI programs were previously conducted in 2023 and 2024, among others. AEF has implemented automatic (Cyanoprobe) and manual (titration) methods for real-time adjustments to cyanide addition rates. The auditor reviewed time series of cyanide addition flow rates from 2022 to 2025 that showed a slight decreasing trend in the latter half of this period.

Standard of Practice 4.3: Implement a comprehensive water management program to protect against unintentional releases.

	☒ **in full compliance with**	
The operation is	☐ in substantial compliance with	**Standard of Practice 4.3**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.3; To implement a comprehensive water management program to protect against unintentional releases.

AEF has developed a life-of-mine water balance for planning and an operational water balance platform. GoldSim, a probabilistic simulation model, is used for long-term planning. The GoldSim model is comprehensive in that it includes all tailings and water management facilities through the life-of-mine in 2036. FinMeas is an online platform showing real-time conditions for operational management. Any discussion of the site water balance must first consider that the cyanide facilities constitute a closed circuit using reclaim water from CIL 2 TMF and makeup water from the Seurujoki River. The cyanide process water is not discharged to the environment.

The GoldSim water balance model considers reasonable site-specific factors, such as measured tailings deposition rates; tailings physical parameters; PMP as the design storm; precipitation and evaporation data from a regional weather station; snow physical parameters; seepage and other losses; discharges to the Loukinen River; portable backup generator for reclaim water; and treatment plants and pumping stations. Because of topography, there is no run-on to the CIL 1 and 2 TMFs.

AEF has designed and operated the Reclaim Pond on the inactive CIL 1 TMF and the CIL 2 TMF with adequate freeboard. The design freeboard for the Reclaim Pond on CIL 1 TMF is 0.5 m from the allowed maximum operating level to the spillway crest. AEF provided a time series graph that showed measured water levels were below the allowed maximum operating level during the audit cycle. The design freeboard for CIL 2 TMF is 0.5 m. AEF provided a time series graph that showed measured water levels were below the freeboard level during the audit cycle.

AEF has inspected and monitored the CIL 1 TMF Reclaim Pond and the CIL 2 TMF to prevent overtopping or other unplanned discharges to the environment. AEF operators have inspected the TMFs daily with written inspections in journal and checklist format. AEF uses the FinMeas platform for real-time monitoring of piezometers, settlement plates, and water levels with alarms for exceeding specified limits. Other inspections include bathymetry twice per year; daily survey of the tailings edge; and drone photographs twice monthly. The EoR conducted annual inspections during the audit cycle and concluded in the 2024 report that “...the geotechnical performance of the dikes is as intended.”

AEF has measured precipitation at its onsite weather station for the last 8 years. The auditor reviewed a spreadsheet of daily data, as well as screenshots from the FinMeas system, to verify compliance. AEF provided a technical memorandum from 2025 that showed onsite precipitation data were systematically less than regional data. The auditor judges that use of the higher regional data is conservative with respect to overtopping.

Standard of Practice 4.4: Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.4**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.4; to implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

AEF has two cyanide facilities with open waters: the Reclaim Pond on top of the inactive CIL 1 TMF and the active CIL 2 TMF. The maximum WAD cyanide concentrations for the Reclaim Pond, CIL 2 decant, and CIL

tailings slurry were 1.0, 0.46, and 4.75 mg/l, respectively, during the audit cycle. Moreover, most of the daily results for the tailings slurry were <1.0 mg/l during the audit cycle.

AEF was compliant with its environmental permit limit of 10 mg/l throughout the audit cycle, as well as meeting the Code limit of less than 50 mg/l for protection of wildlife, livestock, and birds. Nonetheless, AEF has constructed a 2.1-m high fence around the mine property to restrict access by reindeer, which are considered domesticated livestock in Finland.

AEF has prevented wildlife, livestock, and bird mortalities by maintaining WAD cyanide concentrations in open waters and tailings that were essentially below 1.0 mg/l most of the audit cycle. AEF reports mortalities in the Intelex software by exception based on daily inspections, which the auditor judged compliant given the low concentrations of WAD cyanide. The Environmental Manager stated that only one mortality was recorded during the audit cycle, a reindeer that expired in the NP4 TMF (a non-cyanide facility) in the summer of 2024.

Overspray of leach solution and solution ponding are inapplicable because AEF does not have a heap leach facility.

Standard of Practice 4.5: Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.5**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.5; to implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.

AEF has a direct discharge to surface water, but it is from the non-cyanide facilities via the Discharge Water Pumping Plant (DPP) and 23-km long pipeline to the Loukinen River. AEF provided data from the DPP that represent the outfall to the river that showed a maximum concentration of WAD cyanide of 0.011 mg/l during the audit cycle, thus meeting the Code requirement for 0.5 mg/l WAD cyanide for direct discharges.

AEF has monitored for cyanide in surface water 5 km downstream of the outfall to the Loukinen River. The AEF environmental permit designates this reach as a mixing zone only for nickel, but this reach also functions as a non-permit mixing zone for cyanide. AEF provided data for WAD and total cyanide that showed both species were non-detect at <0.005 mg/l during the audit cycle. Given that free cyanide is a component of total cyanide, then the free cyanide concentration was also <0.005 mg/l during the audit cycle.

Although indirect discharges to the surface water nearest the cyanide facilities, the Seurujoki River, are unlikely given seepage controls and underground mine dewatering, AEF provided data that showed in-stream concentrations of free cyanide have not exceeded 0.022 mg/l. Concentrations of WAD and total cyanide at three stations on the Seurujoki River were non-detect at <0.005 mg/l for both species during the audit cycle. Given that free cyanide is a component of total cyanide, then the free cyanide concentration was also <0.005 mg/l during the audit cycle, indicating a lack of indirect discharges from the mine to the Seurujoki River.

AEF is not engaged in surface water remediation because cyanide concentrations in surface water did not rise above levels protective of aquatic life.

Standard of Practice 4.6: Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.6**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.6; to implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of groundwater.

AEF has implemented measures to manage seepage to protect groundwater. Foremost among these measures is cyanide destruction in CIL tailings. Other measures, as listed in the audit reports for previous audit cycles, include:

- Double lining with a moraine core and a bituminous geomembrane (BGM) liner on the sidewalls and the base of the CIL 1 and 2 TMFs
- BGM on the base and sidewalls of the Reclaim Pond on top of the inactive CIL 1 TMF
- Seepage collection wells around the CIL 1 and CIL 2 TMFs
- Concrete secondary containment for the cyanide facilities at the plant

AEF has monitored groundwater for cyanide downgradient of the cyanide facilities. There is no designated beneficial use for groundwater, but the actual use of groundwater at and around the mine is industrial (i.e., mining) and potable water for the mine and nearby residences. The regulatory limit is 0.05 mg/l total cyanide for potable water. According to the Environmental Manager there is no cyanide limit for industrial use, but Finnish regulators would consider any detection of cyanide to be an issue.

AEF has installed eight groundwater monitoring wells around the CIL 1 and CIL 2 TMFs. Based on groundwater samples every two months, the concentrations of WAD and total cyanide at these monitoring wells was non-detect at <0.005 mg/l for both species from 2022 to 2025. There are nine potable wells upgradient of the mine. Total cyanide is analysed every five years in accordance with regulations. In the most recent data from 2023 all concentrations were non-detect at <0.005 mg/l.

AEF does not use CIL tailings as backfill in the underground mine. Rather, AEF uses NP tailings (non-cyanide) as underground backfill.

AEF is not engaged in groundwater remediation given that cyanide concentrations in groundwater have not risen above levels protective of beneficial use.

Standard of Practice 4.7: Provide spill prevention or containment measures for process tanks and pipelines.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.7**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.7; to provide spill prevention or containment measures for process tanks and pipelines.

AEF has provided properly sized secondary containments for all cyanide mixing, storage, and process tanks and columns. There are three containment areas for the cyanide facilities:

- Mixing and storage tank containment with a volume of 156% of the largest tank
- CIL and cyanide destruction containment with a volume of 224% of the largest column
- Elution and stripping containment with a volume of 120% of the largest tank

The auditor observed these containments to be constructed with concrete walls and floors that were visually in good condition at the time of the site visit.

AEF has provided the secondary containments for the cyanide mixing, storage, and process tanks and columns with sumps with level sensors and automatic switches to return spilled solutions to the CIL circuit. Accordingly, no procedures are needed to prevent discharge of cyanide solution or cyanide-contaminated water from secondary containments to the environment.

There are no cyanide-related tanks or columns without secondary containment.

AEF has provided containment measures for cyanide pipelines to collect leaks and prevent releases to the environment. The high-strength and cyanide process solution pipes are located within the plant over concrete secondary containment. The tailings pipelines and return water pipelines are installed within a geomembrane-lined ditch between the plant and the tailings impoundments. These pipeline containments have not changed since the previous audit cycle. The auditor observed them to be in good condition at the time of the site visit.

There are no cyanide pipelines that present a risk to surface water.

AEF has constructed cyanide tanks and pipelines with carbon steel, stainless steel, or HDPE, all of which are compatible with cyanide and high pH. The auditor did not observe other materials during the site visit.

Standard of Practice 4.8: Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 4.8**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.8; to implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

AEF has implemented quality assurance and quality control (QA/QC) programs during modification of the cyanide facilities this audit cycle. No new cyanide facilities were constructed this audit cycle. Compliance was achieved for the other cyanide facilities in previous audit cycles, as indicated in the audit reports for 2015, 2018, and 2022.

The CIL 2 TMF raise to 241.0 m started in November 2022 and completed in February 2023. The CIL 2 TMF raise was constructed by a contractor, AJH Infra Oy. The Lapland Centre for Economic Development, Transport and the Environment (ELY Centre) approved the construction and QA/QC measures. The QA/QC program was implemented by an independent contractor, Sitowise, whose staff were approved by the ELY Centre. AEF

provided the Sitowise Final Report for the project with three appendices as evidence that a QA/QC program was implemented.

AEF's QA/QC program for the raise of CIL 2 TMF addressed the suitability of materials, adequacy of soil compaction, and installation of filter materials. Durable, inert rock for the raise was obtained from the underground mine development rock with a maximum size specification determined by visual observation. A method specification for compaction per layer placed. Coarse and fine filter aggregate was specified by particle size distribution and verified by laboratory testing. Filter fabric was obtained and placed according to specifications. Concrete manhole rings were specified along with aggregate fill for seepage collection and monitoring. Geomembrane was not part of the approved design.

AEF provided evidence that appropriately qualified persons reviewed the modification to the CIL 2 TMF to confirm it was built as proposed and approved. The Final Report by the independent oversight company, Sitowise, contains a signed conformance statement. The 2023 approval letter from the ELY Centre was signed by qualified representatives from the ELY Centre, AEF, Sitowise, and the Kittilä Municipality Environmental Protection Authority.

AEF has retained QA/QC records in hard copy and digital format. The auditor observed hard copies for the mill and TMF construction in an archive room on the second floor of the administration building. The auditor also observed TMF construction records in digital form on the company server.

Standard of Practice 4.9: **Implement monitoring programs to evaluate the effects of cyanide use on wildlife, and surface and groundwater quality.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 4.9**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 4.9; to implement monitoring programs to evaluate the effects of cyanide use on wildlife, and surface and groundwater quality.

- AEF has developed a written monitoring program and a procedure for environmental sampling. The monitoring program was prepared in accordance with AEF's environmental permit and addresses monitoring of surface water, groundwater, potable well water, among other media. The procedure for surface water and groundwater sampling addresses preparations for sampling, safety, activities in the field, and activities after sampling. The biodiversity management plan states that all wildlife observations should be reported. The environmental sampling guidance includes instructions that a sampler should observe the environment and report any dead animals. The EHSQ Superintendent stated via email that the general induction materials include instructions for wildlife encounters. If wildlife were observed in CIL 2 or the pond on the inactive CIL 1, inspectors would note this in the comments section in the daily inspection form. Investigation and follow-up, if needed, would be tracked with the Intelex software. Given that WAD cyanide concentrations are very low in the open waters, generally less than 1 mg/l, the auditor judged this approach to wildlife monitoring to be compliant.
- AEF has used appropriately qualified personnel to develop sampling and analytical protocols for both in-house and contracted staff. The written monitoring program and procedure for environmental sampling were prepared and/or reviewed by AEF staff with environmental science and engineering degrees and 15 to 20 years of experience. The ELY Centre approved the monitoring program in June 2023. Eurofins, the contracted laboratory and samplers, was most recently certified by the Finnish Accreditation Service (FINAS) in 2025. Eurofins has also certified three AEF environmental staff to conduct sampling:

- The written monitoring program includes tables specifying where surface water, groundwater, and potable well water samples should be collected. The written monitoring program also includes tables listing the analytes, including cyanide species, and analytical methods. The procedure for environmental sampling of surface and groundwater addresses how samples should be collected, containerized, filtered, preserved, and shipped, including chain-of-custody documentation.
- Eurofins and AEF have documented sampling conditions. Eurofins uses digital field forms that included weather conditions, field parameters, collection parameters, and comments for any notable influences. AEF provided spreadsheets summarizing the samples collected with notes on weather and sampling conditions. The auditor reviewed examples of these documents from throughout the audit cycle to verify compliance.
- AEF has conducted monitoring at frequencies adequate to characterise the medium being monitored and to identify changes in a timely manner. Surface water is sampled weekly, monthly, or quarterly depending on the monitoring station. Groundwater and potable well water are sampled quarterly.

9.0 PRINCIPLE 5 – DECOMMISSIONING

Protect Communities and the Environment from Cyanide Through Development and Implementation of Decommissioning Plans for Cyanide Facilities

Standard of Practice 5.1: **Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife, livestock, and the environment.**

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Emergency Response Practice 5.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 5.1; to plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife, livestock, and the environment.

AEF has developed written procedures to decommission cyanide facilities at the cessation of operation. The 2022 Mine Closure Plan represents a pre-feasibility level of design and is accompanied by a 2025 Technical Memorandum. These documents address management of unused cyanide, disposal of residual cyanide and sludges as hazardous wastes, decontamination, and water management. The endpoint for decontamination is 0.5 mg/l WAD cyanide. Recoverable water on the TMFs will be collected and treated, and tailings infrastructure will be decontaminated using the same procedures as for the cyanide circuits in the plant. Seepage collection systems will remain intact into the long-term post-closure period as a contingency.

AEF has developed a schedule for mine closure that includes decommissioning. The closure timeline shows that decommissioning of the cyanide facilities and water management for the TMFs is scheduled for the Execution Period from 2035 to 2055.

AEF has reviewed its decommissioning procedures for cyanide facilities during the life of the operation. As referenced in the 2022 DAFR, the Mine Closure Plan was dated 2017 at the time of that previous audit. Therefore, AEF has updated the Mine Closure Plan within five years of the previous version.

Standard of Practice 5.2: **Establish a financial assurance mechanism capable of fully funding cyanide-related decommissioning activities.**

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 5.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 5.2; to establish a financial assurance mechanism capable of fully funding cyanide-related decommissioning activities.

AEF has developed a cost estimate to fully fund third-party implementation of the cyanide-related decommissioning measures. The most recent update to the quarterly Asset Retirement Obligation (ARO) spreadsheet is dated the second quarter of 2025. The estimate included a line item for decommissioning the cyanide circuits, as well as line items for overall closure of the CIL 1 and 2 TMFs, water treatment, and long-term seepage monitoring. AEF confirmed with an external consultant and contractor that the unit costs represented third-party unit costs for labor and equipment.

AEF has reviewed and updated the ARO cost estimate quarterly during the audit cycle. The ARO spreadsheet contains tabs for quarterly updates from the first quarter of 2023 to the second quarter of 2025.

AEF has established a financial guarantee from an external entity that was accepted by the applicable regulator in Finland. The amount of the 2025 guarantee was approximately 2.5 times the estimated amount for cyanide decommissioning.

10.0 PRINCIPLE 6 – WORKER SAFETY

Protect Workers' Health and Safety from Exposure to Cyanide

Standard of Practice 6.1: Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 6.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 6.1; identify potential cyanide exposure scenarios and take measure as necessary to eliminate, reduce and control them.

AEF Kittilä has implemented detailed procedures to manage cyanide-related tasks to minimise worker exposure. Activities such as unloading, mixing, plant operations, confined space entry, and equipment decontamination follow clearly defined protocols. Example procedures reviewed on site included the Cyanide Leaching Procedure, Lock Out Tag Out (LOTO) procedures, and Confined Space Training materials. Procedures provided instructions for activities that minimise worker exposure. Workers use work cards during each shift to record task-specific safety checks and PPE requirements.

Confined space entry is strictly controlled via permits and includes cyanide level checks. Equipment decontamination prior to maintenance is standard practice, using LOTO protocols. Training is comprehensive and role-specific, managed through the Intelex system, which tracks assignments and refresher requirements.

The procedures detail the PPE required for each task. Personal Protective Equipment (PPE) is task-specific and includes HCN monitors, powered-air purifying full-face respirator, and Tyvek suits. Pre-shift inspections are required and documented through tailored work cards. Additionally, specific checklists are used in cyanide-

intensive areas like the CIL, ensuring proactive identification of hazards. During the mill walk around it was noted that workers wore the PPE required by the location, and activity.

AEF Kittilä encourages worker involvement in health and safety improvements through Work Cards, a Continuous Improvement Process, and feedback on procedure reviews. Pre-work inspections are used at the beginning of every shift. These are documented by means of a 'Work Card'. Incident investigations involve workers and are recorded within the Intelex system, with examples reviewed during site visits.

Standard of Practice 6.2: Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

	☒ **in full compliance with**	
The operation is	☐ in substantial compliance with	**Standard of Practice 6.2**
	☐ not in compliance with	

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 6.2; to operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

AEF Kittilä has established pH control as a primary measure to prevent the release of HCN gas during cyanide-related activities. Operational parameters require pH levels above 10 in the CIL tanks, verified both manually and through automatic sensors. Historical data confirms minimal fluctuations, demonstrating effective control.

AEF has identified areas and activities where workers may be exposed to hydrogen cyanide gas or cyanide dust. The site has identified that potential cyanide (dust and gas) could be present in the Mill Building and that all employees entering this area have to work appropriate PPE including RPE and in the mixing and CIL areas (within the mill) workers also have to have a personal HCN monitor (as well as other standard PPE). Hydrogen cyanide monitoring equipment is maintained, tested and calibrated annually as directed by the manufacturer. Records of maintenance, testing and calibration are retained for a period of at least three years. Example records covering this period were inspected on site.

During the site visit, signs indicating cyanide and hazardous substances presence (Global Harmonized Standard (GHS) signs and a Cyanide Warning and Emergency Procedures sign) were observed at the entrance to buildings using cyanide.

Exposure risks are primarily identified in the Mill Building, especially the mixing and CIL areas. Fixed HCN monitors (21 in total) and 86 portable devices ensure comprehensive monitoring. Alarms are triggered at 5 ppm (visual alert) and 10 ppm (audible alert and evacuation). Monitors undergo calibration by the manufacturer each year and these calibrations were inspected for the calibration period.

PPE use, including HCN monitors and masks, is mandatory for all staff entering the mill. Dyed cyanide solutions help visually detect leaks. Additional protective measures include regular equipment calibration, clearly posted safety signage, and structured training.

Emergency infrastructure like safety showers, eyewash stations, and dry powder fire extinguishers, is strategically placed and regularly maintained and inspected. Pipelines and tanks are clearly labelled to prevent accidental exposure. A structured incident investigation process is in place involving root cause analysis, though no incidents have been recorded over the past three years.

Safety data sheets, first aid procedures and other materials on cyanide safety are available in the Mill control room and on a shared drive on the computer network. The safety data sheet for cyanide is in Finnish which is the language of the workforce. This information is also available in areas where cyanide is managed.

Information regarding cyanide poisoning symptoms, cyanide first aid and general emergency response procedures are detailed on a number of signs entitled ‘Cyanide Warning’, which is yellow and placed outside the cyanide warehouse, cyanide mixing area, CIL area and control room. These were observed during the site inspection and are also in Finnish.

Whilst no cyanide related incidents have occurred during the past three years, a number of non-cyanide related incidents have occurred and have been reported and investigated in accordance with the site's investigation and reporting procedures. Examples of incident reporting and investigation were reviewed on-line.

Standard of Practice 6.3: Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

☒ **in full compliance with**

The operation is

☐ in substantial compliance with **Standard of Practice 6.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 6.3; develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

The site is well-equipped for cyanide-related emergencies with emergency water, oxygen, resuscitators, antidote kits, and robust communication systems available throughout high-risk areas. Emergency equipment is stored at strategic locations such as the Mill Control Room, Laboratory, and emergency vehicles.

Cyanide antidotes (Cyanokits) are stored in accordance with manufacturers requirements and inspected regularly. Safety equipment like showers and eyewashes is linked to control room alarms and checked monthly. Medical providers and external emergency services carry compatible antidotes. A number of first aid kits were also inspected during the site tour and ample materials were stored and all of the relevant contents were within expiry deadlines. Safety showers, eye washes and oxygen kits are also inspected monthly by the Mill Safety Expert. Inspection records were observed on site for 2022 to 2025.

Under Finnish law, only qualified medical staff are allowed to administer cyanide antidotes. Antidotes and instruction for use are available on site and were reviewed. The Local Healthcare Provider at Kittila can provide the required antidote/treatment and carry Cyanokits in their Emergency vehicles. Local hospitals are aware that cyanide is in use at the site and that the use of a cyanide antidotes may be required according to site representatives.

Emergency Response Plans (ERPs) are well-developed and accessible in Finnish. All staff receive first aid and emergency response training, with designated emergency response teams undergoing advanced training. A procedure exists for preparing exposed individuals for transport to the AEF Kittilä regional hospital, which is familiar with the mine's cyanide risks. The operation has developed written emergency response plan and procedures for action to be taken should a cyanide exposure incident occur. Basic emergency response is provided in induction training which everyone has. Mill workers then have to go through the key points of emergency response at the mill. Everyone working with cyanide also undergoes the cyanide training. The operation has informed the regional hospital in Rovaniemi and local health centre in Kittilä about the potential need to treat patients for cyanide exposure.

The Emergency Response Plans detail a range of specific reactions to deal with cyanide exposure including moving the person to a safe area to prevent inhalation and ingestion, administering oxygen, removal of any contaminated clothes, rinsing with plenty of water to remove from eyes and skin. Responding to these cyanide exposures is also included within the emergency response plan training provided by CyPlus.

11.0 PRINCIPLE 7 – EMERGENCY RESPONSE

Protect Communities and the Environment through the Development of Emergency Response Strategies and Capabilities

Standard of Practice 7.1: Prepare detailed emergency response plans for potential cyanide releases.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.1; to prepare detailed emergency response plans for potential cyanide releases.

AEF Kittilä has ERPs that address cyanide-related emergencies across the mill and tailings areas. Plans are tailored to site-specific risks, including dam failures, pipeline ruptures, and chemical leaks. Scenarios include operational disruptions, transport accidents, and cyanide leaks. There is also an external emergency plan written by the local authority.

Internal and external ERPs detail roles, equipment, evacuation protocols, and response actions. Critical systems are supported by battery backups and diesel generators. Procedures ensure community protection, first aid provision, spill containment, and environmental restoration.

The emergency plans include: Clearance of site personnel and potentially affected communities from the area of exposure and this is detailed in both the External Management Plan (section entitled Warning the Population) and the Crisis Management Plan. The mine has developed emergency response training that details instructions for an accident involving cyanide (following the requirements of the Mill ERP). In the event of a fire or cyanide leak, the area must be closed off.

The Site also has a safety permit due to large scale chemical storage and handling and the site has to send chemical management details to the authorities as part of the permit reporting duties anually. During the permit application process the site also identified the main emergency scenarios which included cyanide leakage or fire.

Mock drills are conducted regularly and inform revisions to the ERPs. These include regional collaborations and emergency scenarios such as fires and chemical leaks. Evaluations from drills feed into system improvements, and emergency training is refreshed annually.

Standard of Practice 7.2: Involve site personnel and stakeholders in the planning process.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.2; to involve site personnel and stakeholders in the planning process.

AEF Kittilä actively involves its workforce and local stakeholders in emergency planning. Safety meetings communicate changes, while Work Cards and mock drill evaluations offer feedback mechanisms. Example work cards have been observed as noted in responses to Principle 6 (Worker Safety). Community engagement

includes public hearing meetings on the External ERP, which is update in collaboration with the Municipality who also attend mock drills.

Local residents receive safety bulletins, and the company maintains a community liaison committee representing a broad range of stakeholders. Meetings and site tours are performed and increase public awareness of cyanide risks. Potentially affected communities are made aware of the nature of the risks associated with accidental cyanide releases via the External Emergency Plan public hearing meetings and the document sent to them called Safety Bulletin which is sent to all local communities

Emergency plans and roles are communicated to response agencies, including hospitals, fire services, and environmental authorities.

The fire brigade visits AEF every few months and can comment on the internal ERP during their visits. In addition, a mock drill has to be performed every three years as part of legal (SEVESO) requirements as well as the annual drill required for the cyanide code. The external emergency plan is written by the Local Authority and is based on the Internal Emergency Plan. However, they also contact a large number of local stakeholders when the develop the External Emergency Plan.

Standard of Practice 7.3: Designate appropriate personnel and commit necessary equipment and resources for emergency response.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.3; to designate appropriate personnel and commit necessary equipment and resources for emergency response.

Emergency response coordination is formalised in detailed emergency plans. Designated coordinators and teams are identified per shift, and legal training requirements (up to 100 hours) are met. Emergency equipment is listed, inspected, and maintained via a digital system (JD Edwards).

Roles and responsibilities, equipment inventories, and inspection schedules are clearly documented. External entities are engaged through mock drills and formal cooperation, ensuring readiness in real-life emergencies.

Drills conducted since 2022 have included multiple external agencies and covered various realistic scenarios including the following:

An External Emergency Response Mock Drill was completed for the tailing areas on 17 November 2022. This was a regional mock drill and 76 people attended including regional emergency services and from other mines in the area.

A Mock Drill performed in September 2024 involved wider external parties (LAPHA Regional Authority – Lapin Hyvinvointialue – Wellbeing Services of County of Lapland) and AEF Kittilä crisis management team, Emergency Party, AEF Kittilä Ambulance Team and AEF Kittilä Police.

A Mock Drill was performed on 14 April 2025 involving the Cyanide Mixing Room which was contaminated with cyanide. A person who was unconscious had to be rescued by the site emergency response team and AEF Kittilä Emergency Responders and the AEF Kittilä Local Municipality Rescue Manager (Lappish Rescue Department) was in attendance.

Standard of Practice 7.4: Develop procedures for internal and external emergency notification and reporting.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.4**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.4; to develop procedures for internal and external emergency notification and reporting.

Contact procedures are detailed in all ERPs which contain the emergency contact number for AEF's Emergency Control Centre. AEF Kittilä's Emergency Control Centre manages initial responses, notifying regulatory bodies and coordinating with media as necessary. The Emergency Control Centre would then dial 112 for the emergency services (including medical facilities, police and fire) to alert them to the incident. Contact information for these response providers is also detailed in the External ERP. Contact information for management is detailed in both the AEF Crisis Management Plan and Appendix 8 of the Mill ERP. The external emergency number (112) can also be contacted directly and this is also noted in the ERPs.

In addition to the emergency fire, police and medical services that the site would contact in the event of an emergency, the site would also contact the following regulatory agencies (depending on the nature and scale of the incident):

- Lapland Regional Environment Centre;
- State Administrative Authority, the Department for Rescue Services; and
- Emergency Response Centre of Oulu.

The site maintains communication protocols with stakeholders, ensuring the public and authorities are informed about emergencies.

AEM's Crisis Management Plan has a specific section on cyanide related incidents and a series of questions that lead the crisis team to contact the Cyanide Management Institute should any of the questions be answer yes, in the event of a serious incident involving cyanide. No significant cyanide incidents have occurred during this recertification period.

Standard of Practice 7.5: Incorporate remediation measures and monitoring elements into response plans and account for the additional hazards of using cyanide treatment chemicals.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.5**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.5; to incorporate remediation measures and monitoring elements into response plans and account for the additional hazards of using cyanide treatment chemicals.

The Mill Emergency Plan describes specific remediation measures as appropriate for the likely cyanide release scenarios of:

a) Recovery or neutralisation of solutions and solids
b) Decontamination of soils or other contaminated media.

c) Management and disposal of spill clean-up debris
d) Provision of an alternate drinking water supply

The Mill Emergency Response Plan and supporting documents address the potential need for environmental monitoring to identify the extent and effects of a cyanide release, and includes sampling methodologies, parameters and where practical, possible sampling locations.

A Work Instruction (Treatment of Cyanide Soils as seen on line on 7 May 2025) spells out some treatment details.

Remediation measures would be undertaken by specialist contractors as described below. Procedures explicitly prohibit the use of harmful neutralising chemicals in surface water releases.

The Emergency Response Plan describes specific remediation measures as appropriate for the likely cyanide release scenarios.

The procedures (Treatment of Cyanide Soils) state that any excavation of cyanide contaminated material carried out would continue until the soil is tested as cleaner than the government's decree threshold for contaminated soils (1 mg/kg for cyanide). A sampling and testing method is defined in the procedure. Site confirmed that they would hire a specialist consultant/contractor to design an investigation and removal plan if necessary in significant spill cases. Alternate drinking water supplies are guaranteed through on-site boreholes and bottled water.

Standard of Practice 7.6: Periodically evaluate response procedures and capabilities and revise them as needed.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 7.6**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 7.6; to periodically evaluate response procedures and capabilities and revise them as needed.

Emergency Response Plans are reviewed every three years or sooner if significant changes occur. Cyanide-related elements are tested through drills that are evaluated for effectiveness. Training and drills from 2022 to 2025 involved both internal and external stakeholders. The Emergency Plans include procedures and contact information for notifying management, regulatory agencies, outside response providers and medical facilities of the cyanide emergency.

Section 1 of the Mill ERP states that the plan will be evaluated and revised every three years, or when operations change significantly or after any cyanide-related emergency requiring its implementation. No actual significant cyanide related incidents have occurred in the past three years and so no updates related to such incidents have taken place.

All ERPs contain the emergency contact number for AEF's Emergency Control Centre. The Emergency Control Centre would then dial 112 for the emergency services (including medical facilities, police and fire) to alert them to the incident. The external emergency number (112) can also be contacted directly and this is also noted in the ERPs.

The External Emergency Plan is written by the Local Authority.

A number of mock drills or exercises have been completed in the past three years and a number of external parties were involved in some of these exercises including Regional Rescue. Mock drills included complex scenarios such as dam failures and cyanide exposures. Evaluation reports led to improvements in communication strategies and tailings management. Annual planning ensures continued preparedness.

12.0 PRINCIPLE 8 – TRAINING

Train Workers and Emergency Response Personnel to Manage Cyanide in a Safe and Environmentally Protective Manner

Standard of Practice 8.1: Train workers to understand the hazards associated with cyanide use.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 8.1**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 8.1; to train workers to understand the hazards associated with cyanide use.

All personnel undergo cyanide hazard recognition training as part of induction, cyanide refresher training, work card training, mill orientation, and emergency plan training.

The operation trains all personnel who may encounter cyanide in cyanide recognition. The cyanide awareness training presentation includes the following topics: General Cyanide Information including types of cyanide possible at the site, Toxicity, Exposure routes, Symptoms of poisoning, Monitoring, Protection against exposure including use of PPE/RPE and Cyanide first aid.

Records of training are kept on the Intelex system, with testing used to confirm understanding. Cyanide training records are retained for at least three years and example records were observed online from past three years.

Standard of Practice 8.2: Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 8.2**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 8.2; to train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community, and the environment. The operation trains workers to perform their normal production tasks, including unloading, mixing, production and maintenance, with minimum risk to worker health and safety in a manner that prevents unplanned cyanide releases.

Refresher training on cyanide management is provided to ensure that employees continue to perform their jobs in a safe and environmentally protective manner

Additional training for staff working in the mill includes induction training which is refreshed annually and includes general safety and operational measures at the facility. Cyanide awareness refresher training is provided annually to everyone who works with or may come into contact with cyanide.

All operators also refresh their knowledge of work instructions each time they are updated and they relate to specific operations/tasks performed at the cyanide facilities. These work instructions are updated at least every three years. Examples observed included updated procedures for carbon transfer lines, CIL work instructions and the nitrogen removal plant.

The emergency response team are also provided with refresher training, comprising emergency team training conducted monthly, 11 times per year (no training during the holiday season). Each session lasts around 3 hours. In addition, the emergency response team attend joint exercises and theme days.

Refresher training is provided annually, and performance is monitored through observation and software (Moodle) review. Records for each individual are kept on file for this training as seen during the site visit for 2022-5. Training materials are provided for training events and examples were reviewed during the site inspection.

Records of training received are retained throughout an individual's employment. The records are placed on the company's Intelex system and include: The name of the employee; the name of the trainer; the topics covered; the date the training took place; and if the employee demonstrated an understanding of the training materials. The Intelex system was reviewed and training records reviewed for cyanide related activities.

Standard of Practice 8.3: Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

☒ **in full compliance with**

The operation is ☐ in substantial compliance with **Standard of Practice 8.3**

☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 8.3; to train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

All cyanide unloading, mixing, production and maintenance personnel are trained in the procedure to be followed if cyanide is released. This is detailed in Induction training and Mill induction training. There is also annual evacuation training and monthly alarm tests.

Cyanide hazard recognition refresher training is provided annually to everyone who encounters cyanide. Site staff confirmed that the training includes response procedures for cyanide releases and cyanide exposures and this was also supported by a review of the training presentation.

Induction training does provide details of procedures to follow if cyanide is released, In addition, training is provided to all staff in cyanide procedures which include the emergency response procedures.
Emergency Response Coordinators and members of the Emergency Response Team are trained in the procedures included in the Emergency Response Plan and receive extensive training on PPE use, decontamination, and first aid. Mock drills are used to evaluate preparedness. Site cyanide response personnel (coordinators and emergency response team members), are trained in use of relevant equipment (PPE and HCN monitors), decontamination and first aid procedures. They also take part in drills to test and improve their response skills. This training is detailed in the following training sessions: Induction training, Mill induction training, Cyanide awareness training, Cyanide Refresher training, and Emergency Response training.

Records are retained documenting cyanide training on the company's Intelex system and include: The name of the employee, the name of the trainer, the topics covered, the date the training took place and how the employee demonstrated an understanding of the training materials. This is completed through tests at the end of the training session and example test results were observed during the site inspection.

The Intelex system was reviewed and training records reviewed for cyanide related activities.

External responders and the public are familiarised with relevant emergency plans through public meetings and joint drills. Refresher training is conducted annually and well-documented.

13.0 PRINCIPLE 9 – DIALOGUE

Engage in Public Consultation and Disclosure

Standard of Practice 9.1: Promote dialogue with stakeholders regarding cyanide management and responsibly address identified concerns.

☒ **in full compliance with**

The operation is
☐ in substantial compliance with **Standard of Practice 9.1**
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 9.1; to promote dialogue with stakeholders regarding cyanide management and responsibly address identified concerns.

AEF Kittilä provides multiple channels for stakeholders to raise concerns, including open house events, email, phone, and in-person visits. The community liaison committee and regular meetings ensure two-way communication. Sustainability reports and safety bulletins provide additional transparency.

Open house events occurred in 2022 and 2024 (with 700 attendees) with a further event planned for 2025.

Contact is also available via the AEF Kittila website where environmental information. AEF Kittila also has feedback channels, social media channels (LinkedIn, Instagram, Facebook, and X).

Standard of Practice 9.2: Make appropriate operational and environmental information regarding cyanide available to stakeholders.

☒ **in full compliance with**

The operation is
☐ in substantial compliance with **Standard of Practice 9.2**
☐ not in compliance with

Summarise the basis for this Finding/Deficiencies Identified:

The operation is in FULL COMPLIANCE with Standard of Practice 9.2; to make appropriate operational and environmental information regarding cyanide available to stakeholders.

AEF Kittilä shares information about cyanide management through safety bulletins, website information, sustainability reports, community meetings and the External ERP process. The site uses its website and social media to reach stakeholders.

No cyanide incidents have occurred to date, but non-cyanide incidents were communicated transparently during the recertification period, demonstrating readiness to disclose future events.

The AEF Sustainability report would show information on cyanide releases or exposure incidents (if they occurred) and it would be publicly disclosed. Information would also be provided immediately through the web site. One example of an incident that occurred at the site was a fire (not cyanide related) at the end of December 2023 and notification of this incident was seen on AEF Kittila's web site. AEF Kittilä also sends out information to all the liaison committee and through local newspapers.

No cyanide related incidents have occurred at the Site to date. The site has a number of systems in place and has developed communication channels through social media, through media connections (site holds a database of media connections for local, national and international press). An example was provided of a non-cyanide incident (as no cyanide incidents have taken place) whereby the community liaison group were provided with information regarding an accident on the road to the mine that limited access to the mine and surrounding area.

Signature Page

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