



INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

AUDITOR CREDENTIALS FORM

Facility Audited AEM - Meadowbank Mines

Date of Audit August 30 - September 3, 2021

Auditor and Technical Specialist Credentials

Lead Auditor	Michelle Gillen
Auditor Certification	EP(CEA), Number 3855
Certifying Organization	CECAB, www.cecab.org
Address	2010-120 Adelaide Street West Toronto, ON, Canada
Telephone Number	416-646-3608
Email Address	michelle.gillen@erm.com

Audit Experience (Minimum experience: 3 Audits in past 7 years as Lead Auditor)

Year	Type of Audit	Type of Facility	Location
2020	CN Code Certification	Gold Mining Operation	Canada, Ontario
2020	CN Code Pre-Audit	Gold Mining Operation	Canada, Quebec
2019	CN Code Gap Assessment	Gold Mining Operation	USA, South Carolina
2016	CN Code Certification	Gold Mining Operation	USA, Nevada
2016	CN Code Certification	Gold Mining Operation	Canada, Ontario
2020	HSE Audit	Various Mining Operations	Across Canada

Cyanide Related Operations Experience

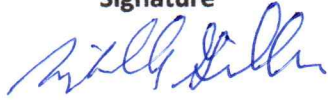
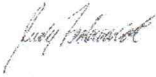
(Each Auditor must have at least 3 years; at least one auditor must have at least 7 years experience)

Auditor	Years Experience	Relevant Position Titles	Types of Operations
Michelle Gillen	20	HSE Consultant	EHS Consulting to Mining HSE Audits at Mines
Judy Fedorowick	20+	Partner and HSE Consultant	EHS Consulting to Mining and other industries

Statement of No Conflict

I certify that I have not audited any component of this facility for which I was responsible for design or development; nor have I within the past year been an employee of the facility, its parent company, or associated affiliates. Excluding audits, I have not derived more than 30% of my income within the past 5 years from the facility its parent, or associated affiliates. I have not participated in more than three consecutive Cyanide Code audits of this facility. I have participated in at least three health, safety and/or environmental audits in the past 7 years and am familiar with standard audit procedures as well with the protocols developed by the International Cyanide Management Institute for implementation of the Code.

International Cyanide Management Institute for implementation of the Code.

Signed	Name	Signature	Date
Lead Auditor*	Michelle Gillen		30-Jun-22
Mining Technical Specialist	Judy Fedorowick		30-Jun-22

* The lead auditor's signature must be certified by notarization or equivalent.

Notarization


Country Canada.
Province / State Ontario
County Wellington.

Subscribed and sworn (or affirmed) before me this 30th day, June, of 2022
(day) (month) (year)

By CHEN CHEN TAN
(name of signer)



(Notary signature)


CHEN CHEN TAN
Licensed Paralegal & Notary Public
in and for the Province of Ontario.
My commission is of unlimited duration.
No legal advice given.



Michelle Gillen, BSc, EP(CEA)

Principal Consultant

Michelle Gillen is an environmental scientist and Certified Environmental Auditor (CEA) with over 18 years' experience. She currently concentrates on environmental, health & safety compliance, and management systems auditing as well as EHS culture assessments and utilizing enhanced auditing techniques.

Ms. Gillen has completed numerous audits across Canada at a variety of industrial facilities including mining, aerospace, automotive, chemical, food processing and pharmaceutical facilities and is a verification service provider under the Mining Association of Canada's Towards Sustainable Mining and a Cyanide Code Auditor



Experience: 18 + years' experience in the mining, oil and gas, chemical, manufacturing, and pharmaceutical sectors.

Email: Michelle.Gillen@erm.com

LinkedIn: <https://www.linkedin.com/in/michelle-gillen-a4912832>

Education

- Environmental Engineering Applications, Conestoga College, Kitchener, Ontario, 2000
- B.Sc. (Honours), Environmental Science, University of Waterloo, Waterloo, Ontario, 1999

Professional Affiliations and Registrations

- Environmental Professional, Certified Environmental Auditor (Auditing Association of Canada) since 2005
- Verification Service Provider (VSP), Towards Sustainable Mining
- Certified Lead Auditor – International ICMI Cyanide Management Institute

Languages

- English, native speaker

Fields of Competence

- EHS Compliance Audits
- ICMI Cyanide Code Certification Audits
- Management System Audits (ISO 14001, OHSAS 18001, Health, Safety, Environment, and Community)
- Due Diligence Assessments, (including Phase I and IIs)
- Regulatory Reviews
- Towards Sustainable Mining Verification Service Provider
- Site Investigations

Key Industry Sectors

- Mining and metals
- Petrochemical
- Oil & gas
- Chemical
- Pulp & paper

Key Projects

Mining and Metals

Gold Mine, Quebec

Recently completed a readiness assessment of a gold mine in Quebec to confirm their level of preparedness to undergo their initial Cyanide Code Certification.

Gold Mine, Nevada

Lead auditor of cyanide code verification audit at a gold mine in Nevada. Topics assessed included health and safety, storage and handling, training and emergency response.

Gold Mine, South Carolina

Completed a gap assessment audit of a gold mine in South Carolina. The gap assessment was the first formal assessment of the operations performance with respect to the ICMI code requirements. Follow up activities included providing assistance to the operation to address gaps.

Gold Mine, Ontario

Completed a gap assessment audit of a gold mine in Ontario. The operation was considering becoming a signatory to the code and wanted to understand the existing gaps and actions needed to become compliant. The gap assessment was the first formal assessment of the operations performance with respect to the ICMI code requirements.

Gold Mine, Ontario

Lead auditor of cyanide code verification audit at a gold mine in Nevada. Topics assessed included health and safety, storage and handling, training and emergency response.

Tailings Dam Management, British Columbia

Lead auditor verifying the implementation of the Towards Sustainable Mining framework for Tailings Management of a mine in British Columbia. The TSM framework follows closely to the ISO14001 management system framework.

Rare Minerals Mine, Manitoba

Member of an EHS audit team for an audit of a tantalum mine in Manitoba. Topics included waste and transport of dangerous goods. Project included developing a protocol detailing EHS regulatory requirements for the site.

Lead Smelter, British Columbia

Environmental auditor on an EHS compliance audit at a Lead Smelter. Topic areas covered included hazardous and non-hazardous waste management including import and export, and the transport of dangerous goods. Other waste topics included landfill management and environmental emergencies.

Nickel Mines, Ontario

Auditor for a corporate management system of nickel mines and the associated smelter in Ontario. Evaluated the Health, Safety, Environmental and Community management systems for legal compliance, environmental management, and product stewardship.

Zinc Refinery, Quebec

Conducted a Post Due Diligence Assessment HSEC audit of a zinc refinery in Quebec as part of a global post due diligence assessment. Evaluated soil and groundwater conditions, closure plans, and operational compliance to identify liabilities.

Copper Refinery, Ontario

Prepared a legal registry of a copper refinery located in northern Ontario. The registry identified key environmental, health, safety and community requirements.

Potash Mine, Saskatchewan

Lead EH&S auditor on a risk assessment for environmental insurance policy. Identified key risks affecting policy.

Gold Mines, Ontario, US

Conducted a series of safety culture assessments at gold mine operations in Ontario and portions of the US. The process involved working with leaders in the organization to identify safety performance breakdowns in the field. Follow up coaching activities occurred with leaders in the organization to help them improve on their safety interventions and interactions with front line workers.

Oil and Gas

Oil Sands Operation, Alberta

Conducted a series of safety culture assessments at an oil sands operation. The process involved working with leaders in the organization to identify safety performance breakdowns in the field. Follow up coaching activities occurred with leaders in the organization to help them improve on their safety interventions and interactions with front line workers.

Pipeline Terminal, Alberta

Team member on an EHS audit of a crude oil and condensate storage terminal and pumping station in Alberta. Topics include safe work permitting, risk assessment, truck and tanker operations, emergency response, and pipeline integrity.

Oil Sands Operation, Alberta

Conducted a series of environmental audits at an oil sands operation in Alberta. The audit went beyond basic compliance and looked to assess risks of future non-compliance based on the level of programs and processes implemented, including operating procedures, assignment of roles and responsibilities as well as the effectiveness of training programs.

Chemical Manufacturing

Chemical Manufacturer, Alberta and Ontario

Compliance and Responsible Care auditor of two chemical manufacturing operations (plastics) in Alberta and Ontario. Each audit was focused on

risks associated with air emissions and consisted of a team of 2 auditors for 8 days.

Chemical Manufacturer, Ontario

EHS auditor of a chemical manufacturer in Ontario for an audit which included providing assistance and coaching to internal auditors new to Canadian regulatory requirements and new auditors.

Coatings Manufacturer, Manitoba

Conducted an environmental audit for regulatory compliance and company standards with an international audit team.

Carbon Black Facilities, Ontario

Conducted environmental and health and safety audits at several carbon black facilities in Ontario.

Power

Coal Fired Power Plant, Ontario

Auditor on an ISO 14001 and 18001 management systems verification audit at a coal fired power plant. Specific focus area included waste management and air emissions.

Power Generation Facilities, Ontario

Lead Systems auditor as well as auditor of several power generating facilities across Ontario, for ISO 14001 management systems audits. One of the audits performed was an integrated environmental and health and safety compliance audit, which used a sampling approach to assess multiple locations and objectives in a weeks' time.

Hydroelectric Dam, Suriname

Lead assessing the environmental liabilities and risk associated with a transaction for a jointly government and privately owned hydroelectric dam. The transaction was part of a larger assessment, which included port activities, mines, and refineries in contemplation of a change in ownership of these assets.

Judy Fedorowick, MSc, CEA, EMSLA

Partner

Ms. Fedorowick, a Partner in the Toronto, Canada office has 25 years' experience assisting companies improve their operational performance through the development and assurance of environmental, risk and health and safety programs and systems. Throughout her consulting career, Ms. Fedorowick has designed, participated in, delivered and promoted various techniques to assess and change the environmental, health and safety (EHS) performance of companies. She has developed deep technical knowledge of these industries through boots on the ground engagements, and understands the challenges of achieving business performance while meeting EHS objectives. She has gained success in her career through a wide variety of engagements ranging from diagnostic assessments, verifications, focused risk reviews, training, coaching and facilitation.



Experience: 25 years' experience in the mining, oil and gas, chemical, manufacturing, and pharmaceutical sectors.

Email: Judy.Fedorowick@erm.com

Education

- MSc. Environmental Studies, University of Toronto, Canada, 1996
- Bachelor in Environmental Studies, University of Waterloo, Canada, 1990

Professional Affiliations and Registrations

- Environmental Professional, Certified Environmental Auditor (Auditing Association of Canada) since 1996
- Certified Environmental Management Systems Lead Auditor (EP, EMSLA) since 1998
- Verification Service Provider (VSP), Towards Sustainable Mining (Mining Association of Canada)
- Certified Lead and Mine Specialist Auditor – International Cyanide Management (ICMI) Institute

Languages

- English, native speaker

Fields of Competence

- Corporate assurance program development
- Innovative auditing techniques
- Focused risk reviews of high hazard activities and critical life safety processes
- Change management facilitation
- Mine safety
- Sustainability and risk leadership workshops
- Auditor training
- EHS management systems – development and assurance
- Compliance permitting

Key Industry Sectors

- Mining and metals
- Petrochemical
- Oil & gas
- Chemical
- Pulp & paper

Select Projects

Global EHS Assurance Program

Program Manager and Lead Auditor for environment, health safety and community (EHSC) assurance audits conducted at coal mines, base metal mines (underground and open pit), integrated smelters, exploration and closed sites over a 10 year period for an integrated mining company. Audits have been conducted in Canada, the US, Chile, Mexico and Australia. The assurance program has assisted the client develop a risk profile across all assets and identify company-wide improvement programs.

Risk Review Assurance Program

Integrated a Green BowTie methodology into a corporate assurance program to assist a mining company focus on critical controls and improvement plans. The program allowed the client to select critical risks, performance criteria and critical tasks for those activities with the highest unwanted consequence. Through onsite workshop sessions, critical control management plans were developed and then used to assess performance. Scenarios are variable and have included tailings dam performance issues, water quality events from underground mining, dusting events, community unrest, acid rock mine drainage etc.

Tailings Management Assurance

Assisted a multi-commodity based mining company establish an internal tailings and major water impoundment management and assurance program. protocol for assessing tailing management robustness was developed and then tested at several mines in North America.

Cyanide Code Audits

Lead auditor for cyanide code audits completed at signatory gold mines according to ICMI requirements. As a certified ICMI auditor, responsible for planning, onsite auditing of all protocols including environmental, transportation, risk

and health and safety components, and reporting according to ICMI requirements.

ICMM Assurance Framework Development

Technical lead for the development of a revised assurance procedure for the International Council on Mining and Metals (ICMM) 2018 performance expectations. Work involved extracting best practices from global sustainability frameworks as input to the assurance framework and accompanying guidance documents. Various stakeholders' views including the ICMM member representatives and the ICMM representatives were consolidated to inform the content of the framework and its adoption mechanisms. Collaboration was key to the successful completion of this new assurance framework for the mining industry.

Development of Risk Control Standards

Following 6 years as the Program Manager and Lead Auditor for an Americas based mining company, facilitated the development of their high potential risk control requirements. Using data from the audits, the top six safety risks were identified, and using technical experts, minimum standards to control the risks were developed. Six global safety standards for these risks were rolled out to operations, and are used to assess how sites manage their highest risks.

ICMM Application Assurance

Provided the third party assurance of a Client's application to become an ICMM member to demonstrate that the applicant could meet ICMM's 10 Principles and 5 Position Statements for sustainable development. Led the assurance process to assess the application content in terms of completeness, accuracy and credibility. Following membership approval, continued to work with the Client to develop an assurance framework to address the full range of its CR responsibilities, with a specific focus on the requirements the ICMM sustainability framework.

Towards Sustainable Mining (TSM)

As the third party verifier, assessed various mines and smelters for conformance to the TSM requirements for greenhouse gases, tailings management, crisis management, community outreach, biodiversity and health and safety were included in scope.

Risk Review, Underground Mines, Emergency Planning

Lead a risk review and control verification assessment of the emergency response planning requirements for underground mines for a global mining company. Work included validation of the risk assessment process, the robustness of the control identification, and the adequacy and field implementation of controls. Work was conducted in alignment with good practices such as the ICMM critical control framework and ISO31000. After completion of initial assignment provided the senior oversight for the remaining portfolio of sites.

Compliance Audits and Support, Exploration

Assisted two separate companies with assessment of their global mineral exploration sites in terms of safety and environmental risks. This included selection of relevant criteria and identification of gaps so that performance improvement plans could be developed.

EHS Compliance Audit, Diamond Mine

Conducted a focused EHS compliance audit of above and below ground high risk activities to support implementation of a certified integrated EHS management system. This allowed the site improve internal processes prior to verification.

Operational Integrity Review

Conducted an operational risk review of the brine management system for a potash company focusing on process integrity programs such as inspection, maintenance and process logic control (PLC) systems of brine pipelines. The assessment was

conducted through the lens of spill and release potential. Preventative controls were then developed based on the review.

Environmental Audit, Potash

Co-developed a corporate environmental audit manual and related system such as legal registries, audit protocols and auditor training programs. Implemented the program through completion of the audits at underground potash mines in Canada.

Safety Transformation Gold Mining

Developed a safety diagnostic and performance improvement program for a global gold mining company. Program included assessment of on the ground at risk conditions at open pit and underground mines throughout the Americas, followed by leadership training and hazard recognition coaching. Worked with the Senior Vice Presidents to determine key safety culture successes to incorporate into training and coaching sessions aimed at stimulating actions at the operational level. To sustain improvements, analysis of a wide set of data was conducted, including root cause analysis of potential fatal occurrences, leading to the development of enhanced Golden Rules and a field level Golden Guide to challenge Supervisors and Workers to work safely. New coaching program developed and delivered targeting senior leaders (General Foreman and above) to engage more effectively and coach other Leaders to improve safety. Involvement has included strategic program development, diagnostic reviews, training and coaching in both above and underground environments.

Corporate Assurance Program Analysis, Global oil and gas Company.

Conducted an initial review of a confidential company's global HSSE assurance framework to identify areas of improvement in relation to audit process and audit implementation for managing risk. Acted as an observer during an upstream and downstream internal HSSE framework audit to

provide insight into audit processes, including identification of Audit Team, audit criteria selection, auditor capabilities, evidence collection, data evaluation, causal analysis and development of audit findings. Accompanied auditors during interviews, in-field engagements and document review sessions to determine if evidence gathering was truly reflecting the risk and nature of the operations. Confidential management report provided an evaluation of the overall assurance process and recommendations for improvement.

Performance Based Auditing, Chemical Industry

Initial traditional compliance audit at a manufacturing facility was followed by a performance based risk assessment of the site's health and safety aspects. As lead assessor, was responsible for identifying at-risk conditions and behaviors, and discovering root cause of deviations, presented in a high impact closing meeting. Follow on coaching of Supervisors was conducted to improve competency of health and safety field based interactions.

TSM Implementation

To assess the impact of TSM on its operations, conducted a gap analysis of six TSM Indicators to four open pit mining operations in Eastern Canada. Results of the gap analysis were used to determine the level of effort and required resources to effectively implement TSM. Individual advancement plans for each of the Protocols and each Site were developed.

Health and Safety Compliance Audits

Lead auditor for the regulatory compliance audit of a zinc copper open pit mine in northern Alaska over two audit cycles. Responsible for the development of Mine Health Safety Administration protocols, onsite lead auditor activities, and follow up report for the audit team. Audit also included a high level evaluation of the culture of the operations, based on management level conversations.

Uranium Mining

Provided senior oversight on a gap analysis review of a uranium miner's Safety, Health, Environment, Quality and Radiation management system to enable the organization to move from site-specific to a single corporate level ISO 14001/OHSAS 18001 certification. Work included onsite assessments of the performance of four of their operations to their internal Environmental Leadership Program and the TSM.

EHS Compliance Audits

Conducted EHS compliance audits at several quarries and lime processing facilities across Canada. Required knowledge of regulatory requirements in three provincial jurisdictions.

Closure Plan Assessment

Assisted a mining company develop criteria to assess closure planning within its portfolio based on industry best practice, internal management standards, and available guidance from mining jurisdictions. A tool was developed and then applied to a mine 6-months prior to beginning closure activities to assess readiness in terms of environmental and safety performance. The tool included short term, long term and post closure monitoring aspects.

EMS Development

Strategic support to a lime producers' senior management team to assist with the initial development of their environmental strategy. Benchmarking of world class practices, review of risk factors, and facilitation of two workshops with the senior management team to visualize and document strategic objectives. Subsequently co-developed environmental standards based on the priorities, including technical tools to assist with implementation.

Gold Mine EHS Risk Review

Risk review and management system audit of an open pit gold mine in Ontario. System and culture

maturity was evaluated as a means to identify root causes of compliance and risk management gaps. Suggestions for improvement were aimed at both front line workers and senior management leadership.

TSM Gap Analysis

Assessed the degree of alignment between a global multi-commodity mining company's sustainability and management system internal standards, guidelines, and expectations to the requirements of Towards Sustainable Mining. The resulting gap analysis identified the commonalities between the requirements to ease the effort for each site to implement any additional requirements outlined in TSM. Coaching on implementing TSM was also provided to select sites in Quebec.

Audit Program Development, Mining

Evaluated a multi-faceted corporate governance and compliance global audit program for an integrated mining company for efficiency and effectiveness. Consolidated a review of findings into a series of coaching exercises aimed at truly understanding the risk of hazards identification and their consequences.

Safety Transformation Program, Oil Sands

Technical Advisor to ERM's program of work to support the achievement of a step-change in safety performance at an oil sands operation in Fort McMurray, Alberta. Work included diagnostic assessment, training and field coaching to enhance the quality of safety leadership with a particular emphasis on leader's hazard recognition and field engagement skills. Responsible for the development and management of over 30 ERM safety specialists from across North America that were providing front line diagnostic and coaching within the operations, maintenance, projects and upgrader operations.

Hazard Recognition and Effective Intervention Coaching

Health and safety training program developed for internal HS resources of a coal mining business unit

with five operations in the Americas. Training included in-class regulatory awareness training, followed by the basics of how to develop acute hazard recognition skills. The training sessions were conducted at a host mine site to allow attendees to practice their hazard recognition skills and identify issues for corrective actions.

Performance based audits, Health and Safety

Member of an Audit team conducting safety intervention audits of refineries in Texas and Louisiana. Work included identification of at-risk behaviours and physical risk situations at the refinery, drill down on causes of situations, and overall assessment of the management framework which lead to the at-risk situations. Presentation of findings included identification of aspects within the organization which led to the safety deviation.

Coaching and Training, Mining, Ontario

Using data and learnings from a safety diagnostic review that involved interventions with senior leaders and focused worker groups developed a leadership training and hazard recognition coaching program. Engagements include both high impact classroom training followed by onsite coaching for over 90 employees.

Publications

- Managing Environmental Risk for Sustainable Operational Excellence Ontario Mining Association September 2014
- Sustaining EHS Performance Improvements – Initiating Actions - presented at the 2013 Annual Auditing Association of Canada Conference
- Mining Business Risks Summit, Toronto, Ontario 2012. Invited facilitator on Risks in Emerging Countries
- Using Health and Safety Intervention to Transform Behaviours & Improve Performance, presented at the 2011 Annual Auditing Association of Canada Conference and the 2012 Safety and Reliability in Mining Resources, Canadian Institute of Mining and Metals Conference