

Auditor Credentials Form

Facility Audited: Barrick Hemlo Date: Dec 22, 2016

Lead Auditor Credentials

Lead Auditor: Michelle Gillen Auditor Certification Number: 3855
 Certifying Organization: Name: CECAB Telephone Number: 416 646 3608
 Address: 200-308 - 11th Ave SE, Calgary Web Site Address: www.cecab.org
 Minimum experience: 3 audits in past 7 years as Lead Auditor

Year	Type of Facility, Type of Audit Led	Country & State/Province
2016	Gold Mine, Cyanide Code Gap Assessment	Canada, Ontario
2015	Copper Mine, Towards Sustainable Mining	Canada, British Columbia
2014	Uranium Mine, Environmental Compliance	Canada, Saskatchewan
2014	Diamond Mine, EHS Compliance	Canada, Northwest Territories

Cyanide-related Operations Experience

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

Auditor	Yrs.	Relevant Position Titles	Types of Operations
Michelle Gillen	15	Consultant: Lead Auditor, Auditor, Safety coach, Project Manager	Various mining operations, including gold mines in Ontario, South Dakota, Nevada & Nunavut
Judy Fedorowick	15+	Partner, Lead Auditor, consultant	Mining operations throughout the Americas, including gold mines in Canada & the USA including reviewing high risk programs such as cyanide & tailings.
		See CVs for additional details	

Statement of No Conflict

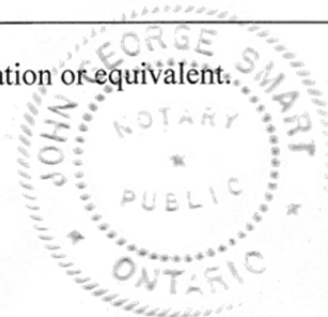
I certify that I have not audited any component of this facility for which I was responsible for design or development; nor have I within the past year been an employee of the facility, its parent company, or associated affiliates. Excluding audits, I have not derived more than 30% of my income within the past 5 years from the facility, its parent, or associated affiliates. I have not participated in more than two consecutive Cyanide Code audits of this facility. I have participated in at least 3 health, safety, and/or environmental audits in the past 7 years and am familiar with standard audit procedures as well as with the protocols developed by the International Cyanide Management Institute for implementation of the Code.

Signed,	Name	Signature	Date
Lead Auditor*	<u>Michelle Gillen</u>	<u>[Signature]</u>	<u>Dec 22, 2016</u>
Auditor 1	<u>Judy Fedorowick</u>	<u>[Signature]</u>	<u>Dec 20, 2016</u>
Auditor 2			
Auditor 3			
Auditor 4			

Use additional pages if necessary

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

[Signature]



Michelle Gillen, BSc., CEA, VSP



Michelle Gillen is an environmental scientist, Verification Service Provider under TSM and Certified Environmental Auditor (CEA) with over 15 years' experience as an EHS consultant.

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

In addition to auditing, Ms. Gillen has also assisted clients as a safety coach helping supervisors and leaders in hazard assessment and effective intervention, preparing audit protocols and compliance tools, and developing corporate H&S standards for an international mining company on blasting, working at heights, PPE and permit to work.

Ms. Gillen recently completed a project assessing the crisis management planning at an organization in Canada, including assesses the level of crisis preparedness and integration of the various crisis and emergency management plans.

Fields of Competence

- EHS Compliance Audits
- Management System Audits (OHSAS 18001, ISO 14001, Sustainable Development)
- Safety Coaching
- Environmental Site Assessments (Phase I and II)
- Regulatory Reviews and Compliance Assistance and developing Compliance Tools
- Towards Sustainable Mining Verification Service Provider

Professional Affiliations & Registrations

- Certified Environmental Auditor (CEA)
- Canadian Environmental Auditing Association (CEAA)
- Verification Service Provider (VSP), Mining Association of Canada

Education and Training

- B.Sc. (Honours), Environmental Science, University of Waterloo, Waterloo, Ontario (1999)
- Environmental Engineering Applications Certificate Conestoga College, Kitchener, Ontario (2000)
- Workplace Hazardous Materials Information System Training (2001)
- OSHA 40-Hour Training (2000)
- Confined Space Training (2002)
- Environmental Sampling Course (2002)
- Mergers & Acquisition Auditor Training (2005)
- Canadian Environmental Law and Regulation Training (2007)
- ERM CVS – Lead Auditor Course (2008)
- Towards Sustainable Mining Verification Workshop (2008)
- Pre-Start Health & Safety Reviews/ Machine Guarding (2009)
- Sustainability and Climate Change (2010)
- Life Cycle Assessment (2010)
- Transaction Services Lead Asser (2012)
- Alberta Construction Safety Association – Construction Safety Training System (2013)
- Mining Safety and Health Association (MSHA) training (2014)
- Globally Harmonized System (GHS) (2015)

Key Projects

Gold Mine, Nunavut

Conducted an environmental, health and safety compliance audit of a gold mine in Nunavut. In addition to reviewing environmental topics was also the local regulatory expert for a team of internal company auditors covering various EHS topics. The following year Ms. Gillen conducted a follow up audit as lead auditor to determine the status of the finding closure.

Gold Mine, Ontario

Conducted a confidential gap assessment of a gold mine in Ontario to determine their readiness to become certified under the Cyanide Code.

Towards Sustainable Mining (TSM), Xstrata Nickel; Xstrata Zinc, Vale, Teck Resources, Taseko

As the third party verifier, assessed various mines and smelters for conformance to the TSM requirements for greenhouse gases, tailings management, crisis management, aboriginal and community outreach, biodiversity and health and safety. In 2011, Michelle Gillen conducted the TSM verification of the Vale site's which was completed on time despite labour and weather issues.

Gold Mine, Ontario

Participated in several culture diagnostics at Gold mines in Ontario in order to identify breakdowns in the safety culture. Follow up engagement included coaching leaders within the organization to identify hazards, intervene with employees in a constructive manner and enhance their leadership skills at the sites.

Gold Mine, South Dakota

Coaching leaders of a gold mine to act as coach the coach. Coaching was around engaging employees in pre-shift meetings, intervening on hazardous acts, coaching to identify hazards, and have more effective field engagements.

Gold Mine, Nevada

Participated in a culture diagnostics at an open pit gold mine in Nevada in order to identify breakdowns in the safety culture. The process involved identifying safety hazards in the mining and processing operations and using audit techniques to understand the root cause of the breakdown.

TSM Gap Analysis, Rio Tinto

Assessed the degree of alignment between Rio Tinto's sustainability and management system internal standards, guidelines, and expectations and 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. The format was also used as a baseline by those Rio Tinto entities just entering TSM as a format for the initial self-reporting year.

Consumer Products Manufacturer, Various Canada, US

Michelle performed a gap assessment management of a consumer products manufacturer in Canada. The project involved establishing crisis management criteria based on recognized standards, assess the level of crisis planning preparedness and including the integration of the various crisis and emergency management plans within the organization and developing suggestions for improvement going forward.

Uranium Mine, Saskatchewan

Michelle led an environmental compliance audit of a uranium mine in Saskatchewan. The scope of work included preparing a protocol of regulatory requirements, and was the lead auditor for a team which included two internal auditors.

Diamond Mine, Northwest Territories

Michelle was the health and safety auditor of an EHS compliance audit of a Diamond mine in the NWT. Scope included assessing ground stability, emergency response, confined space, lockout tagout etc.

Oil Sands Operations, Alberta

Worked with major oil and gas client to assist during a turnaround project, leasing with contractors, identifying and correcting safety hazards, and coaching other leaders during the event.

Oil Sands Extractive and Process Operations, Alberta

Participated in several culture diagnostics at oil and gas facilities in Alberta and BC in order to identify breakdowns in the safety culture. Follow up engagement included coaching leaders within the organization to identify hazards, intervene with employees in a constructive manner and enhance their leadership skills at the sites.

Coal Mine, British Columbia

Conducted detailed environmental compliance audits at several open pit coal mines in British Columbia. The audit included reviewing permitting and maintenance issues related to tailings dams, air quality control, drinking water and wastewater.

Coal Mine, Alberta

Conducted a detailed environmental compliance audit at an open pit coal mine in Alberta. In addition to reviewing permitting and maintenance issues related to tailings dams, air quality control, drinking water and wastewater.

Phosphate Manufacturer, Ontario

Was the lead auditor of an environmental compliance audit for a producer of specialty grade phosphate products for the food, pharmaceutical and industrial market segments.

Potash Mine, Saskatchewan

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

Lead Smelter, Canada

Conducted a detailed environmental compliance audit at a lead smelter in Canada. The review included assessing importing and exporting hazardous waste requirements, and environmental emergencies regulations.

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.

Fertilizer Manufacturer, Ontario

Acted as the lead assessor on an environmental health and safety due diligence assessment of several fertilizer operations in Ontario and Quebec. Operations included the mixing and packaging of fertilizer and soil products.

Nickel Smelter, Ontario

Auditor for a corporate management system of a nickel smelter in Ontario. Evaluated the health, safety, environment and community management systems for legal compliance, environmental management, and product stewardship.

Nickel Smelter, Ontario

Conducted an assessment of the safety culture and performance of the safety systems of a nickel smelter in Ontario. The program included interviewing front line workers to determine the cause of unsafe behaviours in the workplace and assisting in facilitating employee sensing sessions.

Zinc, Coal, Copper and Nickel Mines, BC, ON, NFLD, MB

Conducted verification of a variety of coal, copper, zinc and nickel mines and smelters reporting under the Mining Association of Canada's Towards Sustainable Mining (TSM) Program. TSM indicators verified at facilities across Canada including: Tailings Management, Energy and GHG Management, Crisis Management and External Outreach.

Limestone Quarry, Alberta

Audit team member during an EHS compliance audit of limestone quarry and processing facility. Responsible for the environmental topics during the audit.

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.

Iron Ore Mine, Newfoundland and Labrador

Participated in a safety acceleration program which included interviewing front line workers on unsafe behaviours and providing instruction to site safety leads in completing safety interventions.

Furniture Manufacturer, Manitoba

Lead auditor at a furniture manufacturing plant as part of an EH&S compliance audit. Topics covered included corporate standards, and environmental topics.

Paint Manufacturer, Ontario

Lead E auditor at a paint manufacturing plant as part of an EH&S compliance audit.

Chemical Manufacturer, Alberta

Lead EH&S auditor on a risk assessment for environmental insurance policy.

Coal Fired Power Plant, Ontario

Auditor on a management systems verification audit at a coal fired power plant.

Oil Refinery, New Brunswick

Auditor on a management systems verification audit at an oil refinery in New Brunswick. Identified gaps in the environmental management system.

Chemical Manufacturer, Ontario

Lead H&S auditor on an EHS compliance audit team at a plastics colour blender in Stratford, Ontario.

Judy Fedorowick, M.Sc., CEA



Ms. Fedorowick is a Partner and the Performance Assurance Practice Lead for Canada based in Toronto, Ontario. She has 20 years experience in environmental, risk and health & safety consulting with a focus on high hazard industries such as mining and metals, forestry, petro-chemical and oil and gas. Throughout her consulting career, Ms. Fedorowick has designed, participated in, delivered and promoted various techniques to assess and change the 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. As a trusted advisor, she leads senior leadership training and coaching sessions both in a group setting and during one-on-one engagements. 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. She has worked extensively throughout both North and South America.

Recent Presentations

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

Mining Business Risks Summit, Toronto, Ontario 2012.
Invited facilitator on Risks in Emerging Countries

Sustaining EHS Performance Improvements - Initiating Actions - presented at the 2013 Annual Auditing Association of Canada Conference

Managing Environmental Risk for Sustainable Operational Excellence OMA September 2014

Professional Affiliations & Registrations

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

Fields of Competence

- Focused Risk Reviews of High Hazard Activities and Critical Life Safety processes
- Change Management Facilitation
- Mine Safety
- Sustainability and Risk Leadership Workshops for Corporate Offices
- Corporate Assurance program development
- Auditor Training
- EHS Management Systems - Development and Audits

Education

- M.Sc., Environmental Studies, 1996, University of Toronto
- B.E.S., Environmental Studies, 1990, University of Waterloo

Key Industry Sectors

- Mining and Metals
- Petrochemical
- Oil & Gas
- Chemical
- Pulp & Paper

Cyanide Code Audits, Americas

Lead auditor for cyanide audits code completed at signatory gold mines according to the International Cyanide Management Institute (ICMI) requirements. This included Cortez Hills in Nevada, and the Hemlo Gold Mine in Canada. As a certified auditor with the ICMI, responsible for planning, onsite auditing of all protocols including environmental, transportation, risk and health and safety components, and reporting according to ICMI requirements.

Towards Sustainable Mining (TSM), Xstrata Nickel; Xstrata Zinc, Vale Inco, Teck Resources, Diavik, Taseko

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. Since 2009 have conducted or managed over 15 verification engagements. Participation with a client at a community of interest panel during the Mining Association of Canada annual meeting. All work included delivery of a confidential management report to Client outlining performance gaps and recommendations for system improvements.

Detour Gold Mine, Ontario Canada

Risk review and management system audit of an open pit gold mine. 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.

EHS Focused Risk Assessment, Pend Oreille Mine Washington

Lead Auditor of a three person team completing a risk based compliance audit of an underground base metal mine. The audit focused on those risks associated with a recent change from care and maintenance to full operations. Closed and operating assets on the site were reviewed.

EHS Compliance Audit, Diavik Diamond Mines,

Conducted a focused EHS compliance audit of above and below ground high risk activities to support Diavik's implementation of their certified integrated EHS management system. Pre-audit planning included review of internal documentation to identify potential high risk activities to ensure completion of a focused audit with select content.

Tailings Management Assurance, Americas

Following the Mount Polley tailings incident in BC, assisted a multi-commodity based mining company

establish an internal tailings and major water impoundment management and assurance program. A protocol for assessing tailing management robustness was developed and then tested at several mines in North America.

Goldcorp, Safety Transformation 2011-present

Developed a safety diagnostic and performance improvement program for a global gold mining company. Program included assessment of on the ground at risk conditions, followed by leadership training and hazard recognition coaching. Worked with the SVPs of the company, to determine key safety culture successes to incorporate into training and coaching sessions aimed at stimulating actions at the Operational level. Pilot program delivered to sites within Canada and Central America and then expanded to include 10 Americas based operational facilities and project sites. To sustain improvements, analysis of a wide set of data was then conducted, including root cause review of potential fatal occurrences, leading to the development of enhanced Golden Rules and a field level Golden Guide that challenges 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.

Barrick Gold, GRI and ICMM Assurance Review

Provided the third party assurance review of Barrick Gold's Sustainability report and internal HSEC systems. Scope of work included corporate interviews and document review of processes and management systems at the site, regional business unit and corporate level in terms of alignment with ICMM and GRI (mining and metals supplement) elements were assessed to provide assurance for the 2008 CSR Report.

TSM Implementation, Uranium Mining, Saskatchewan

To assess the impact of TSM on its operations, conducted a gap analysis of six TSM Indicators to four mining operations. Alignment between TSM and existing processes were identified. 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.

Teck Resources, Global EHS Assurance Program

Lead Auditor for EHS assurance audits conducted at open pit coal mines, integrated smelters and copper mines throughout north and South America over a five

year period. Operations reviewed included all open pit activities, screening and crushing, wash plant, load-out and tailings impoundments for the Coal, Copper and Zinc business units. Assisted the client develop audit tools including formats for Audit Plans, closing/opening meeting formats, reporting processes and auditing protocols. Audit summary report of overall program findings from 12 distinct assets was evaluated to provide a risk profile to corporate management.

Inmet, ICMM Application Assurance

Provided the third party assurance of Inmet's application to become an International Council on Mining and Metals (ICMM) member. Specifically a new approach sanctioned by the ICMM required an assurance process of the application to demonstrate that an applicant could meet ICMM's 10 Principles and 5 Position Statements for sustainable development. Led the assurance process for Inmet to assess the application content in terms of completeness, accuracy and credibility. As the third party assurer was required to present to the ICMM Council review Board to verify the assurance process. Following ICMM membership approval, (Inmet was the first mining company approved through ICMM's new application process) continued to work with Inmet 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, and to adequately prepare Inmet for external ICMM verification.

Xstrata PLC, Corporate Assurance Audits

Corporate assurance audits conducted at six copper and nickel mines, processing facilities and projects. Scope included evaluating facility's implementation and performance in terms of a corporate health, safety, environmental and community framework to support the Company's sustainable development framework. Aspects reviewed have included risk management, operational integrity, catastrophic hazard management, legal compliance, environmental management and SD business planning.

Health and Safety Compliance Audits, Alaska

Lead auditor for the regulatory compliance audit of a zinc copper mine in northern Alaska. Responsible for the development of Mine Health Safety Administration (MSHA) protocols, onsite lead auditor activities, development of closing presentation, and follow up report for the audit team. The scope of the audit included both the open pit mine and processing facilities, as well as associated Port facilities. Audit also included a high level evaluation of the culture of the operations, based on management level conversations.

Hazard Recognition and Effective Intervention Coaching, Teck Coal 2012-2013

Health and safety training program developed for internal HS resources of a coal mining business unit with five operations in the Americas. The scope of 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. Included in-field root cause analysis determinations of hazards as they area identified.

Kennecott Exploration Company, (Rio Tinto), Diamond Service, Compliance Audits and Support

Conducted EHS compliance audits of a dense media separation processing facility and a caustic fusion laboratory to initially develop baseline conditions (2007) and to further evaluate (2010) on a scheduled basis. In 2010, both operating and remediated exploration sites were evaluated in the program. Ongoing regulatory support has included Tailings sampling program conducted to build a risk profile in order to develop a management program. Obtained air and waste management registrations. Ongoing development of EHS legal registries for the facilities since 2009.

Sustainability Management Framework Development, Global Multi-Commodity Producer

Provided the external context to the development of an internal sustainability framework, by providing clarity in terms of ICMM, UN Global Compact, IFC and other external commitments. Participated in the internal workshops used to determine subject matter specificity in the SD standards and advice on the overall structure of the framework to ensure usability and assurance to external requirements.

Taseko Gibraltar Mine, B.C.

Lead auditor of an EHS and management system integrated audit at an open pit copper-molybdenum mine. All aspects of the mine, from extraction, processing to final transportation were audited by a four person team. Both a compliance based and separate management system based audit report produced.

Teck Resources, Chile

Lead auditor of a 5- person team assessing regulatory compliance of two open pit copper mines. Project role included quality control over both pre-planning and onsite audit processes, assistance to the audit team onsite to identify real issues in the field, challenging auditors to ensure comprehensiveness in their review, and communicating between audit team and Client.