

**The Independent
Environmental Monitoring
Agency: A Canadian Case
Study**

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Independent Environmental Monitoring Agency

- **Ekati mine project description**
- **EIA process for Ekati mine project**
- **Monitoring requirements for Ekati mine**
- **Independent Environmental Monitoring Agency - www.monitoringagency.net**

Ekati Mine

- **Diamond mine (Canada's first)**
- **Gem quality diamonds**
- **Northwest Territories**
 - **Arctic barrens, 300 km NE of Yellowknife**
- **Construction from 1996**
- **Operation from October, 1998**
- **Surface mining of kimberlite pipes (usually under lakes)**
- **Processing plant on site**

Ekati Mine Project Description

- **Dewatering lakes for access to kimberlite pipes**
- **Explosives use (introduces nitrogen (ammonia) into waste rock)**
- **Waste rock sent to waste rock piles**
- **Kimberlite is processed on site to extract the diamonds and then the residue (tailings) is disposed of into Long Lake tailings pond**
- **Work camp for several hundred staff (“hotel” accommodates 825 persons)**

EIA Review for Ekati Mine

- **Full panel review 1994-1996**
- **1996 project approval**
- **Major affected people, aboriginal groups**
 - **Kitikmeot Inuit Association (Kugluktuk)**
 - **Dogrib Treaty 11 Council (Fort Rae)**
 - **Akaiicho Treaty 8 (Lutselke and Yellowknife)**
 - **North Slave Metis Alliance (Yellowknife)**
- **Approval subject to Environmental Agreement**
 - **BHP (proponent), GNWT, Canada**

Monitoring Requirements for Ekati Mine

- **Water Board - water quality monitoring**
- **Fisheries authorisation - fish studies**
- **Renewable Resources - wildlife monitoring**
- **Operating Environmental Management Plan - monitoring programs (spills, safety, etc.)**
- **Impact Benefit Agreements with aboriginal groups (bilateral) - socioeconomic aspects - independent of Environmental Agreement**

Environmental Agreement for the Ekati Mine

- **Establishes the Independent Environmental Monitoring Agency**
- **Obligates BHP to report annually on environmental programs and every three years to prepare an environmental impact report**
- **Requires BHP to give full consideration to traditional knowledge in developing and revising environmental programs**
- **Text available on Monitoring Agency web site**

Environmental Issues for the Ekati Mine

- **Wildlife impacts**
 - especially caribou
 - also bears, wolves, wolverines, birds, loons and raptors
- **Aquatic impacts**
 - lake drainage (compensation for fish habitat)
 - diversion channel (compensation for fish habitat)
 - Kodiak Lake sewage effects (nutrient addition)
- **Mine waste**
 - waste rock (acid rock drainage?, metal leaching?)
 - tailings (settling of fine clays?)
 - kimberlite toxicity (effects on fish downstream?)

Environmental Issues for the Ekati Mine

- **Cumulative effects**
 - **mining exploration, construction and operation (new Diavik mine) - diamond plus other mines**
 - **highways**
 - **especially for caribou and aquatic effects**

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- **Public watchdog for environmental management at the Ekati mine**
- **Seven members: BHP, GNWT, Canada, and four aboriginal groups**
- **Seven board members appointed by seven members**
- **No “representation” - all board members have the same common mandate**
- **Budget about Can\$500 000/a provided by Mine operator - initially some funds came from governments**

Independent Environmental Monitoring Agency

- **The tasks required of the Monitoring Agency include:**
 - **1.Reviewing and commenting on monitoring and management plans and the results of these activities;**
 - **2.Monitoring and encouraging the integration of traditional knowledge of the nearby aboriginal peoples into the mine's environmental plans;**
 - **3.Participating in regulatory processes directly related to environmental matters involving the Ekati mine and its cumulative effects;**

Independent Environmental Monitoring Agency

- **The tasks of the Monitoring Agency include:**
 - **4. Bringing concerns of the aboriginal peoples and the general public to the Ekati diamond mine and government;**
 - **5. Keeping aboriginal peoples and the public informed about Agency activities and findings; and,**
 - **6. Writing annual report with recommendations that require the response of BHP and governments.**
 - **www.monitoringagency.net**

Independent Environmental Monitoring Agency

- **In order to meet its mandate the Agency:**
 - **monitors and reviews environmental management plans and reports by BHP and government agencies**
 - **analyses issues to promote the identification, evaluation and management of environmental impacts**
 - **reviews the activities of regulatory agencies and their interactions with BHP**
 - **monitors the progress of traditional knowledge studies funded by BHP and conducted by aboriginal organisations**
 - **facilitates interaction between BHP and aboriginal organisations to integrate traditional knowledge into BHP's management plan**

Independent Environmental Monitoring Agency

- **In order to meet its mandate the Agency:**
 - **participates in technical workshops involving environmental management at the Ekati mine**
 - **meets and corresponds regularly with with BHP and regulators about environmental issues at Ekati**
 - **reviews and comments on regulatory approvals sought by BHP that relate to environmental matters**
 - **reports to aboriginal organisations and the public at large**
 - **maintains a publicly accessible library of all materials regarding environmental management of the Ekati mine**

Independent Environmental Monitoring Agency

- **In order to meet its mandate the Agency:**
 - publishes newsletters, a web site, a brochure and annual reports
 - holds an annual general meeting for members of the Monitoring Agency

Independent Environmental Monitoring Agency

- **Successes (Bill Ross Views)**
 - improvements to monitoring programs - poor to OK to good
 - annual monitoring workshops
 - aboriginal liaison to promote traditional knowledge work
 - identification and management of impacts
 - reporting to aboriginal members
- **Failures (Bill Ross Views)**
 - inadequate reporting to aboriginal members
 - poor working relationships with BHP and government agencies
 - internal difficulties in reaching decisions we agree on

Independent Environmental Monitoring Agency

- **Successes (Macleod Institute Views)**
 - well accepted technical contributions
 - ensuring BHP's licence conditions are being met
 - identifying issues and improving environmental management
 - environmental effects monitoring workshops
 - traditional knowledge workshops
 - establishing library, newsletters and a website
- **Failures (Macleod Institute Views)**
 - inadequate reporting to aboriginal members
 - poor working relationships with BHP and government agencies
 - internal difficulties in reaching decisions we agree on

Independent Environmental Monitoring Agency

- **Failures (Macleod Institute Views)**
 - **poor conduit of information to and from the public and aboriginal communities**
 - **works too much in isolation from the stakeholders**
 - **need better relationship with the communities**

Independent Environmental Monitoring Agency

- **Recommendations of Macleod Institute**
 - 1. initiate dialogue with Society members regarding Agency's future role
 - 2. meet public and aboriginal information needs realistically
 - 3. improve process for establishing Agency's core budget

Independent Environmental Monitoring Agency

- **Recommendations of Macleod Institute**
 - 4. more constructive (solution oriented) in monitoring and advising
 - 5. broad view of environmental management to address cumulative effects
 - 6. help integrate traditional knowledge into environmental management

Independent Environmental Monitoring Agency

- **Recommendations of Macleod Institute**
 - 7. develop a strategic planning process concerning its mandate
 - 8. more effective delegation, and increased outreach and communications.
 - 9. implement appropriate internal management performance indicators.