

From Minimal Damage to Net Contribution: Mining's Seven Questions to Sustainability

Presentation to the 26th Annual Meeting of the
International Association of Impact Assessment
Wednesday Afternoon, 28 April 2004
Vancouver, British Columbia CANADA

R. Anthony Hodge, Ph.D. P. Eng.
Anthony Hodge Consultants Inc.
231 Terrasse Barret
L'Assomption Quebec
CANADA J5W 1M4
450 589-6944
thodge@anthonyhodge.ca

Ian Thomson, Ph.D., P. Geol
On COMMON GROUND Inc.
906 – 1112 Pender Street
Vancouver, British Columbia
CANADA V6E 2S1
604 681-8600
rockdoc@direct.ca

Overview

- Origins of the 7QS Approach
- Key Conceptual Underpinnings
- The 7QS Approach
- Persistent Contentious Issues
- The Evolution from “Impact” Analysis and the Mitigation of Damage to “Contribution” Analysis and Ensuring Net Benefits
- Practical Examples

Origins of the 7QS Approach

- Multidisciplinary roots: economics, social indicators, quality of life, natural resources, state-of-environment, health and healthy community reporting, sustainable development, corporate reporting, social responsibility
- Mining, Minerals and Sustainable Development – North America: 35 person multi-interest Work Group from across North America
- 10 pieces of work as a starting point: international investment, industry, indigenous people's commissioned work, ENGO commissioned work, sustainability and environmental assessment, government; authors of 8 of these at the table
- Eight month process including three face-to-face workshops
- Result: an unprecedented opportunity to collaboratively build an assessment template that was not re-inventing the wheel but rather building on a vast existing base of knowledge from a broad range of disciplines and interests.

Key Conceptual Underpinnings

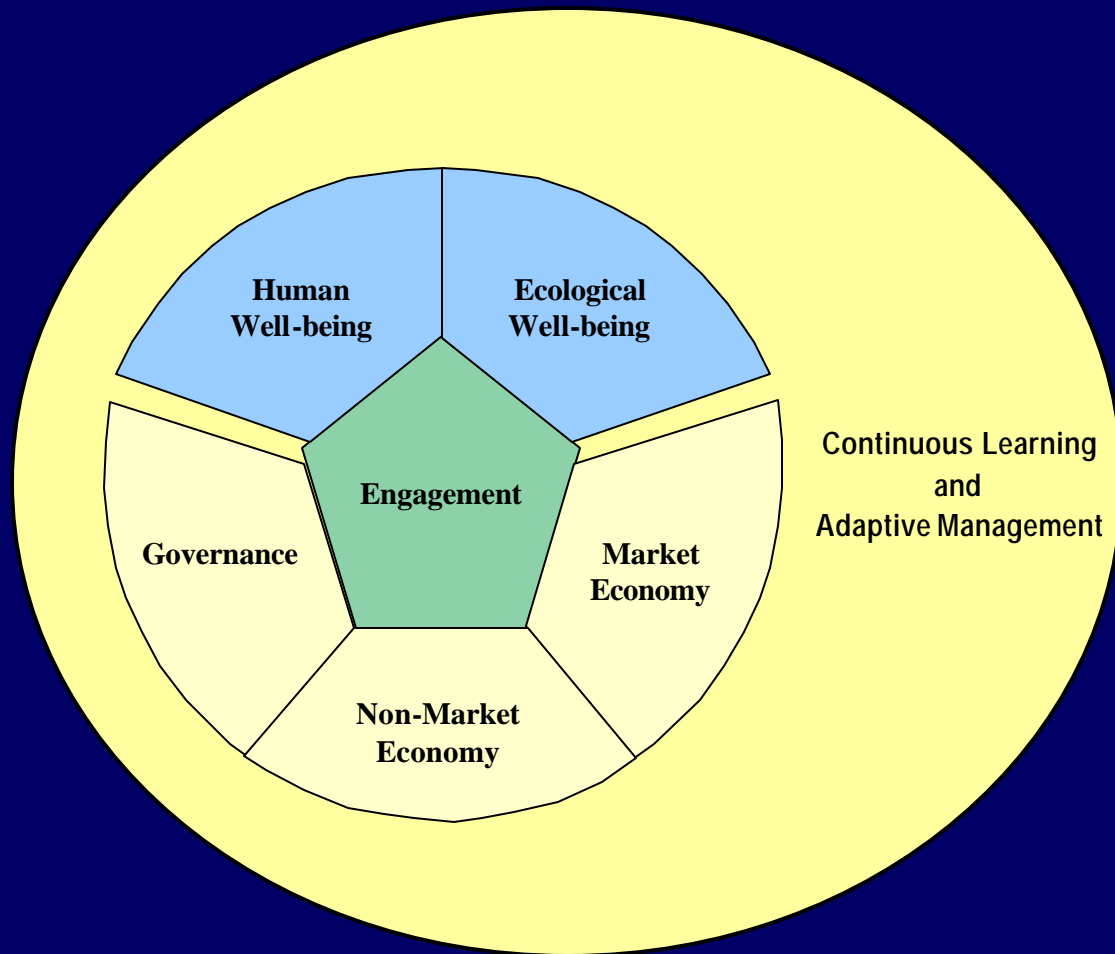
- Value based: parallel care and respect for the ecosystem and people within
- Goal of sustainability: to achieve human and ecosystem wellbeing together therefore the “result” against which success should be judged is the achievement of, or the contribution to human and ecosystem wellbeing together
- Achieving a Positive Contribution: if human activities are to be seen as contributing to sustainability, they must demonstrate the achievement of a net benefit for people and ecosystems over the long term (harder to achieve but fairer treatment of +ves and –ves)
- Shift away from environment vs. people
- Respecting developing – developed world differences
- Dealing with process integrity as well as substance
- Achieving Security: people and ecosystems

The 7QS Template

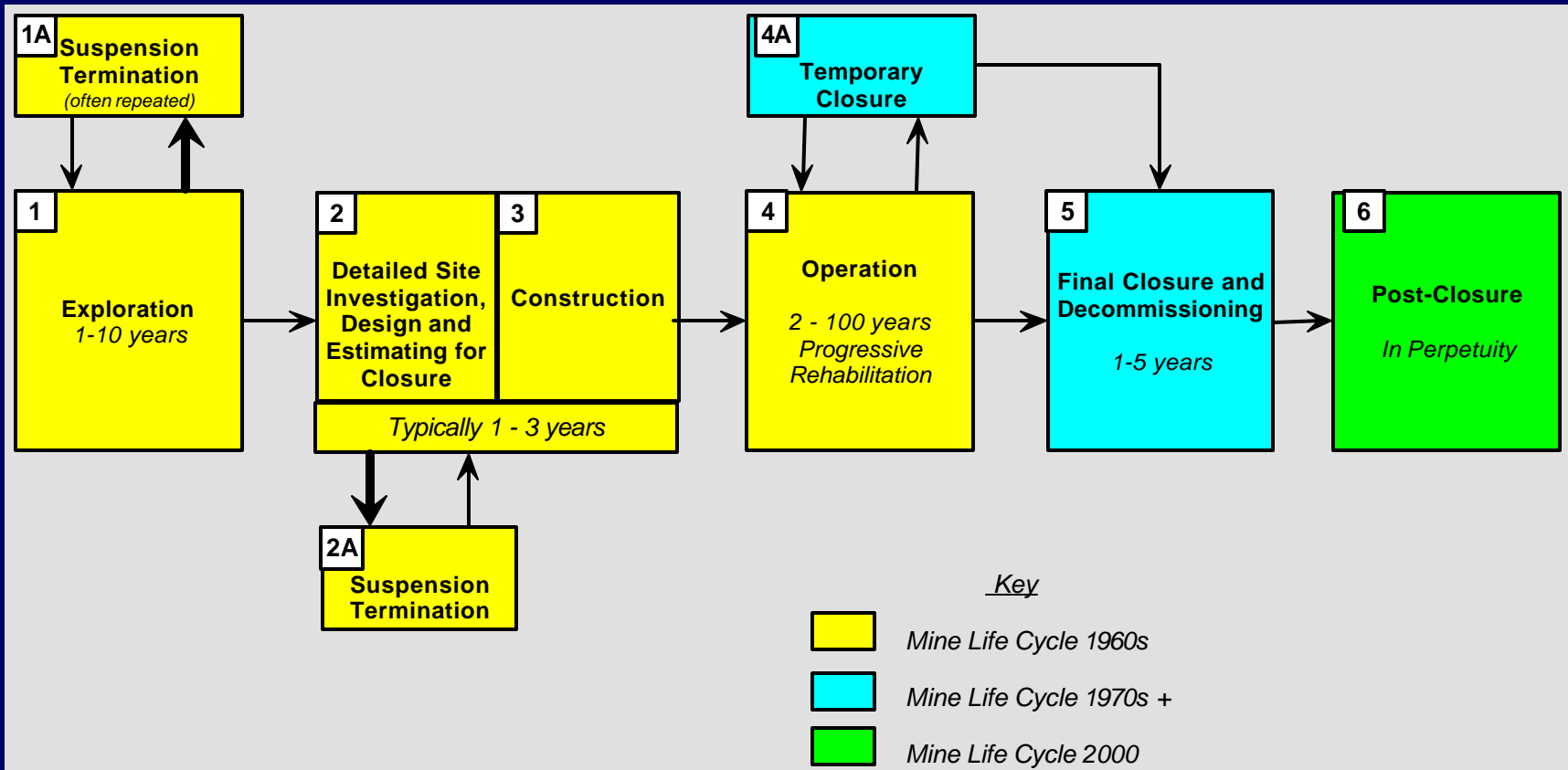
The Seven Questions at a Glance



The 7QS Template



The Full Mine-Project Life Cycle



Applications

Project Level Applications

- Early project appraisal related to assessment for acquisition or pre-feasibility
- Overall project planning and identification of who should be involved, when
- Identification of risks, use in financing and insuring
- Licensing and approvals processes
- Internal corporate reviews of performance during operation
- Guide to corporate reporting, external communications
- Guide to external review by other interests

Broader Applications

- Community-driven regional assessments in which the implications of a range of projects and conditions must be assessed
- National assessments and beyond

Persistent Contentious Issues

- The equity issue
- Addressing trade-offs
- Assessing need and alternatives
- Achieving a whole system perspective
- Dealing with uncertainty, using an appropriate level of pre-caution and facilitating adaptive management
- Addressing the attribution problem and dealing with cumulative impacts

From “Impact” to Contribution Analysis – From Mitigation of Damage to Ensuring Net Benefits

- An inevitable evolution
- No matter how “impacts” are described, they bring a negative sense (hitting your head on the wind shield)
- The sustainability test is whether or not a positive contribution to people and ecosystems is achieved over the long term; If either one fails, life is undermined.
- Amounts to a two-dimensional design-criteria to be applied against all human activities
- Is tougher to achieve but fairer than considering only “impacts.”

The Seven Questions in practice

- Mining
 - To date individual mine studies are confidential
 - The Tahltan and mining, a published example
- Non-mining
 - Community based forest management (Arizona, USA)
 - Economic development in a protected area (Huascarán, Peru)
 - Economic development for an island community (BC, Canada)
- Review, Consolidation and Improvement
 - Practitioners meeting in Spring 2005

Key References

MMSD – North America, 2002. ***The Seven Questions to Sustainability – How to Assess the Contribution of Mining and Mineral Activities.*** Winnipeg: International Institute for Sustainable Development. (available in English and Spanish)

The Tahltan Nation and the International Institute for Sustainable Development. ***Out of Respect – The Tahltan, Mining and the Seven Questions to Sustainability.*** Winnipeg: International Institute for Sustainable Development.

Both available on-line at <http://www.iisd.org/natres/mining>