Pacific Symposium on Managing Extractive Industries in Pacific Island States to Improve Human Development

Session 7 Ensuring Sustainable Environments at Resource Extraction Sites - " The Current Commitments of the Private Sector in Rehabilitating the Environment"

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Overview

1. Extractive industries can and do contribute to sustainable human development
2. Working with business - Policy outcomes need to understand the industry they are aiming to regulate
3. Environmental management integrated into all stages of the project life cycle
4. Working together for sustainable policy outcomes
5. Concluding comments

Introduction

- Sustainable mining practices can contribute significantly to growth

(Donna Petrachenko - Head of the Australian Government Rio+20 taskforce)

- Mining is critical to a green economy because of the benefits it brings to local communities particularly in developing countries (MCA)

- A growing private sector – the engine of economic growth – is fundamental to moving people out of poverty. Ultimately, people exit poverty when they find work. (AusAID 2012)

- "With responsible public and private management, the mining and metals industry can contribute to poverty alleviation across the world while maintaining ecosystem integrity"

(ICMM 2012)

Working with Business

- Understanding the business needs (project lifecycle)
- Certainty of inputs and outcomes
- The decision timeframe - major projects 20+ years
- Business is not a substitute for Government, particularly at local levels
- Governance
- Transparency
- Partnerships
- Not all businesses are the same
- Industry is responsive to changing expectations

Project Lifecycle

Rehabilitating the Environment

Approach - Principles

1. Science based approach
2. Extensive baseline studies
3. Community and Government consultation - agreed and transparent outcomes
4. Application of International Standards (e.g. IFC)
5. Environmental Management Plans
6. Progressive rehabilitation over the life cycle of a project
7. Ongoing monitoring
8. Research to deliver improved outcomes
9. Final closure and signoff

Rehabilitating the Environment

Exploration

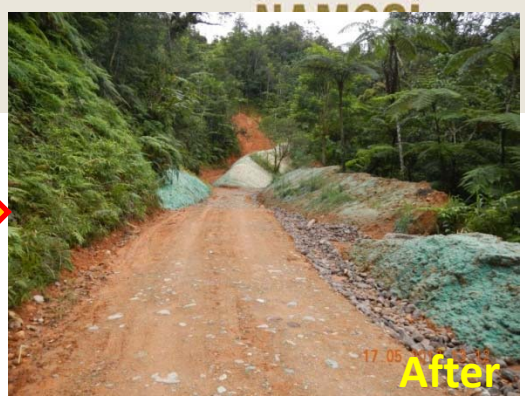
1. Any significant environmental aspects identified
2. Minimise footprint
3. Progressive rehabilitation
4. Work with local communities

Rehabilitating the Environment

Exploration

REHABILITATING THE ENVIRONMENT

Namosi Site 24



Site 38

WP14A

Rehabilitating the Environment

Pre - construction

1. Environmental Impact Assessment
2. Environmental risks associated with the project clearly understood and management plans in place prior to commencement
3. Closure plan presented as part of project approval documentation
4. Thorough understanding of materials characterisation prior to commencement
5. Environmental, social and cultural factors integrated into project design

Rehabilitating the Environment

Construction

1. Minimise areas of disturbance
2. Progressive clearing of operational /construction areas sequenced with environmental management measures (e.g. sediment control structures)
3. Construction Environmental Management Plan in place

Rehabilitating the Environment

Operations

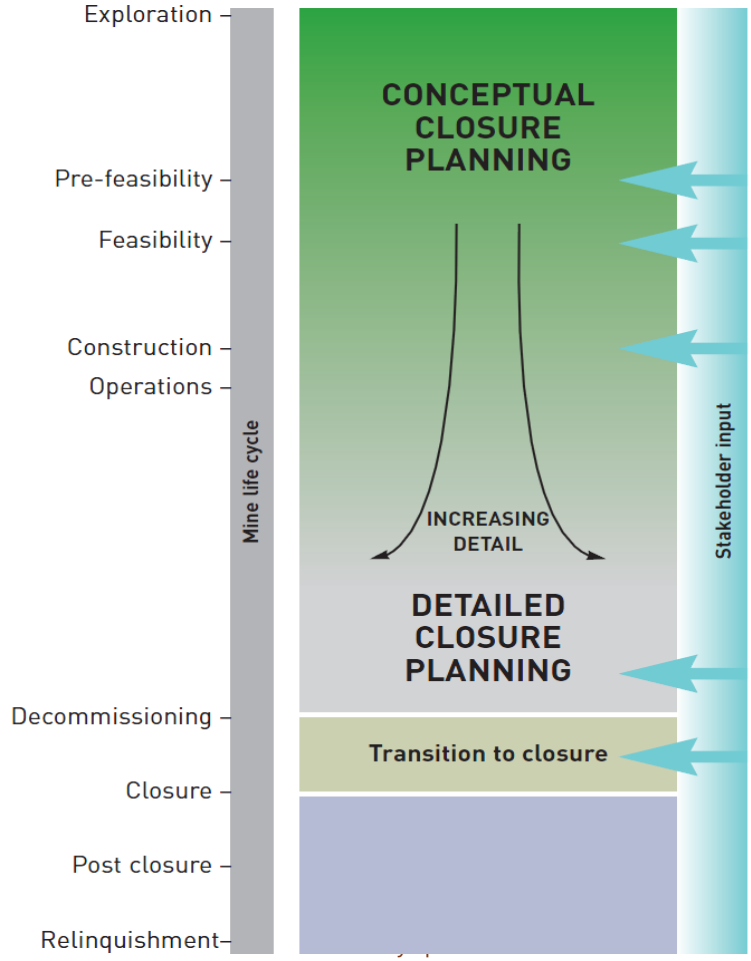
1. Built on the concept of progressive rehabilitation
2. Targeted research programs to address uncertainty and/or improve rehabilitation outcomes
3. Extensive monitoring of aspects environmental to validate EIA assumptions and early indication of trends in environmental aspects
4. Public reporting (e.g. through Sustainability Reports, websites)

Rehabilitating the Environment

Progressive Rehabilitation

Rehabilitating the Environment

Closure and Post Closure



1. Determining a long-term vision that describes the site and its surrounds after the operations have finished
2. Setting closure objectives for the natural and social environment consistent with the closure vision
3. Identifying alternative closure options, evaluating options
4. Gaining stakeholder input and endorsement of the option
5. Agreed final outcomes
6. Implementing the plan
7. Closure monitoring program in place – monitoring performance against agreed objectives and success criteria

Cyanide Code

Aims to improve management of cyanide used in gold mining to help protect human health and reduce environmental impacts.

The Code was developed by a multi-stakeholder steering committee under the guidance of the United Nations Environmental Program and the International Council on Metals and the Environment. It is managed by the International Cyanide Management Institute (ICMI).

The Code covers nine main principles:

- manufacture of cyanide (who we buy cyanide from)
- transportation
- handling and storage
- operations (including the standard of the plant)
- decommissioning
- safety for employees (including signage and training)
- emergency response (including planning and drills)
- training
- communication (including employee and community dialogue).

NAMOSI JOINT VENTURE

Business for Biodiversity Offset Programme - BBOP

The BBOP Advisory Group members who support the Standard as of 28 March 2012 are: Ambatovy Project Arup Biodiversity Works Biotope BirdLife International CDC Biodiversité Centre for Research-Information-Action for Development in Africa Citi Conservation International Daemeter Consulting Department for Environment and Rural Affairs – Defra (UK) Department of Conservation, New Zealand Earthwatch Institute Ecoagriculture Parners EcoDecisión Environ Corporation Environmental Banc & Exchange Environmental Resources Management ERAMET - PT WEDABAY Nickel Project European Bank for Reconstruction and Development Fauna & Flora International Forest Trends Forestry Commission, Government of Ghana Global Environment Fund Golder Associates Grupo Ecológico Sierra Gorda, I.A.P., México Hardner & Gullison Associates Inmet Mining Inter-American Development Bank International Conservation Services CC International Institute for Environment and Development International Union for Conservation of Nature (IUCN) KfW Bankengruppe Leibniz Institute of Ecological and Regional Development (IOER) Markit Environmental Registry Ministry of Ecology, Energy,

Sustainable Development, and Spatial Planning, France Ministry of Infrastructure and the Environment, The Netherlands Ministry of Mines and Energy, Namibia Ministry of Nature, Environment and Tourism, Mongolia Mizuho Corporate Bank National Environment Management Authority, Uganda National Institute of Ecology, Mexico Nature Conservation Resource Center, Ghana New Britain Palm Oil Ltd. New Forests Newcrest Mining Limited Nollen Group Proforest Rainforest Alliance Redd Forests Response Ability, Inc. Royal Botanic Gardens, Kew Scientific Certification Systems SLR Consulting Solid Energy Coals of New Zealand South African National Biodiversity Institute Sveaskog Tahi Estate The Biodiversity Consultancy The Brazilian Biodiversity Fund (Funbio) The Environment Bank The Nature Conservancy Tonkin and Taylor Treweek Environmental Consultants Tulalip Tribes, US United Nations Development Programme (Environment and Energy Group) United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC) Wildlands Inc. Wildlife Conservation Society Winstone Aggregates Zoological Society of London; and the following individuals: Steve Botts Susie Brownlie Marc Christensen Michael Crowe Toby Gardner Martin Hollands Daniela Lerda Paul Mitchell Dave Richards Shelagh Rosenthal
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During Phase 2 of BBOP, the BBOP Secretariat was provided by Forest Trends and the Wildlife Conservation Society.

Concluding comments

1. Extractive industries are a part of providing opportunities for growth
2. Understanding the extractive industry business model is critical in achieving effective policy outcomes
3. Environmental factors are integrated into all stages of the mineral development cycle
4. Importance of working together to deliver sustainable outcomes
5. Significant resources out there already to inform policy discussions

Further Reading

1. Australian Government DRET Leading Practice Booklets - http://www.ret.gov.au/resources/resources_programs/lpsdpmining/handbooks/Pages/default.aspx
2. Newcrest Sustainability Report – http://www.newcrest.com.au/sustainability/current-sustainability-report
3. Namosi Joint Venture Website - http://www.njv.com.fj/
4. ICMM Publications - http://www.icmm.com/
5. BBOP - http://bbop.forest-trends.org/
6. Cyanide Code - http://www.cyanidecode.org/
7. IFC Standards - http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework/Sustainability+Framework+-+2006/Environmental%2C+Health%2C+and+Safety+Guidelines/
8. AusAid Sustainable Economic Development Program – Mining for Development

The Balance