

Workshop at MOECAAF

Matthew Baird, Environmental Counsel
Adam Moser, US-Asia Partnerships for Environmental
Law, Vermont Law School
Nay Pyi Taw, Myanmar
29-30, September 2014

Session Overview

- Key Principles and Mechanisms on EIA
- Standards and Guidelines
- EIA Review Process
- Responding to Project Proponent and EIA consultants
- Public Participation Processes

Key aim of Environmental Impact Assessment (EIA)

- The key aim of EIA is to achieve **sustainable development and create sustainable societies.**

Environmental and social impact assessment is a process of estimating and assessing impacts on the environment by development projects and activities. It also identifies the methods and standards for preventing, mitigating and reducing such potential impacts on the environment.

Key Principles of EIA

- Effective environmental assessment is achieved through the adoption and application of key principles. These include:
 - Proponent bears the cost of the application and assessment process;
 - Public participation at all stage of the process;
 - Access to information by civil society and the government;
 - Transparent process;
 - Best available scientific information;
 - Clear decision-making;
 - Effective compliance and enforcement

Primary Mechanisms for EIA

- Reliance on participatory approaches (Principle 10);
- Application of the precautionary principle (Principle 15);
- Application of the principle of intergenerational equity (Principle 3);
- Conservation of biological diversity and ecological integrity is a primary consideration (Principle 4);
- Improved valuation, pricing and incentives (Principles 8, 12, 13, and 16).

Standard and Guidelines

- Interim Standards
- Guidelines
- What should be used?
 - IFC guidelines
 - World Bank, ADB Safeguards Policies
 - ASEAN guidelines e.g Marine Water Quality
 - Other sectoral guidelines

1994 National Environmental Policy

The wealth of the nation is its people, its cultural heritage, its environment and its natural resources. The objective of Myanmar's environmental policy is aimed at achieving **harmony and balance** between these through the integration of environmental considerations into the development process to **enhance the quality of the life of all its citizens**. Every nation has the sovereign right to utilise its natural resources in accordance with its environmental policies; but great care must be taken not to exceed its jurisdiction or infringe upon the interests of other nations. It is the responsibility of the State and every citizen to preserve its natural resources in the interests of present and future generations. **Environmental protection should always be the primary objective in seeking development.**

Standards and Guidelines

- In the U.S. a pre-construction permit based on the best performing technology that is feasible for the intended purpose of the plant is known as a **BACT (Best Available Control Technology)** permit, in the EU it is known as a **BAT (Best Available Technique)** permit.
- Doesn't prescribe the technology but sets the standard that must be met or bettered.

- **(c) Best Available Techniques or BAT** means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle avoidance, prevention, reduction, mitigation and compensation as the basis for Emission Limit Values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole, where:

'Best' shall mean most effective in achieving a high general level of protection of the environment as a whole;

'Available' techniques shall mean those developed on a scale which allow implementation in the relevant industrial sector, under economically and technically viable conditions taking into consideration the cost and advantages, as long as they are reasonably accessible to the operator; and

'Techniques' shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned

http://firstforsustainability.org

Go to IFC Environmental and Social Performance Requirements. **ST for Sustainability**
Financial Institutions: Resources, Solutions and Tools

Language: English

Environmental Business Opportunities E&S Risk Management Sustainability In Action Browse by...

YOU ARE IN: Home > Environmental and Social Risk Management > Implementing IFC Environmental and Social Requirements > Establish and Maintain an ESMS > IFC Environmental and Social Performance Requirements > IFC Performance Standards

IFC Performance Standards

When the potential environmental and social impacts associated with a financial institution's client/investees are significant, the financial institution should apply the IFC's Performance Standards as a benchmark for identifying and managing these risks.

ENVIRONMENTAL BUSINESS OPPORTUNITIES

E&S RISK MANAGEMENT

- UNDERSTANDING E&S RISK
- MANAGING E&S RISK
- IMPLEMENTING IFC E&S REQUIREMENTS
- IFC ENVIRONMENTAL AND SOCIAL REQUIREMENTS FOR FI CLIENTS

The IFC Performance Standards are an international benchmark for identifying and managing environmental and social risk and has been adopted by many organizations as a key component of their environmental and social risk management. IFC's Environmental, Health, and Safety (EHS) Guidelines provide technical guidelines with general and industry-specific examples of good international industry practice to meet IFC's Performance Standards.

In many countries, the scope and intent of the IFC Performance Standards is addressed or partially addressed in the country's environmental and social regulatory framework. The IFC Performance Standards encompass eight topics:

- Environmental and Social Assessment and Management System:** Commercial clients/investees are required to manage the environmental and social performance of their business activity,

AN INNOVATION OF **IFC** International Finance Corporation
World Bank Group

In Partnership With

MINISTRY FOR FOREIGN AFFAIRS OF FINLAND Sida

Search

SUSTAINABLE BANKING NETWORK

CONTACT US

ABOUT THE PORTAL

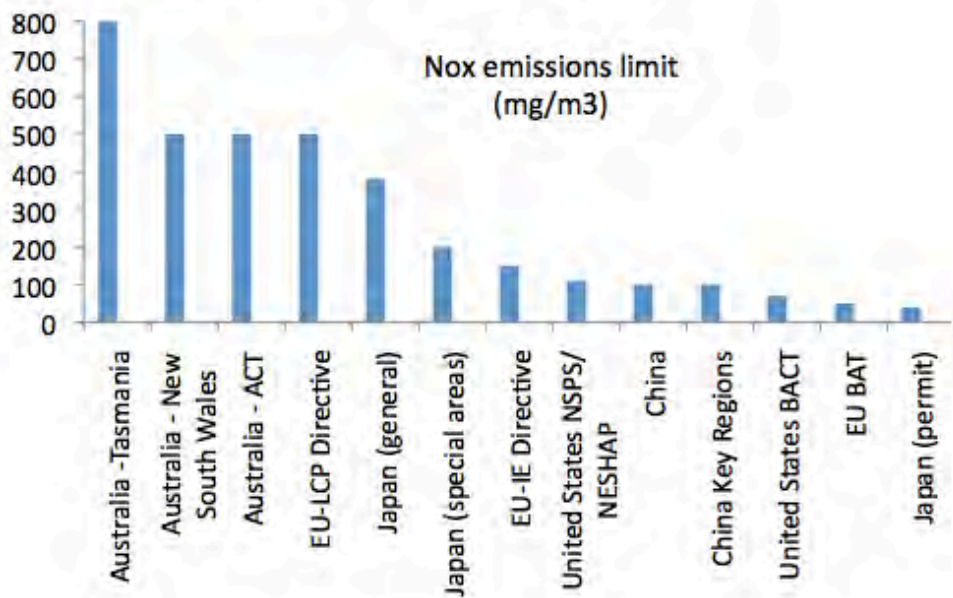
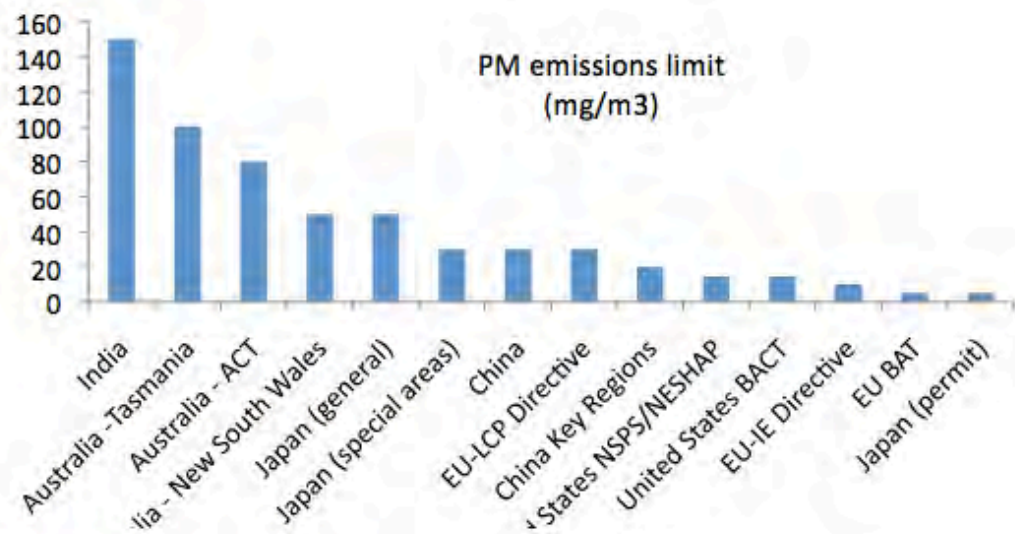
RESOURCES

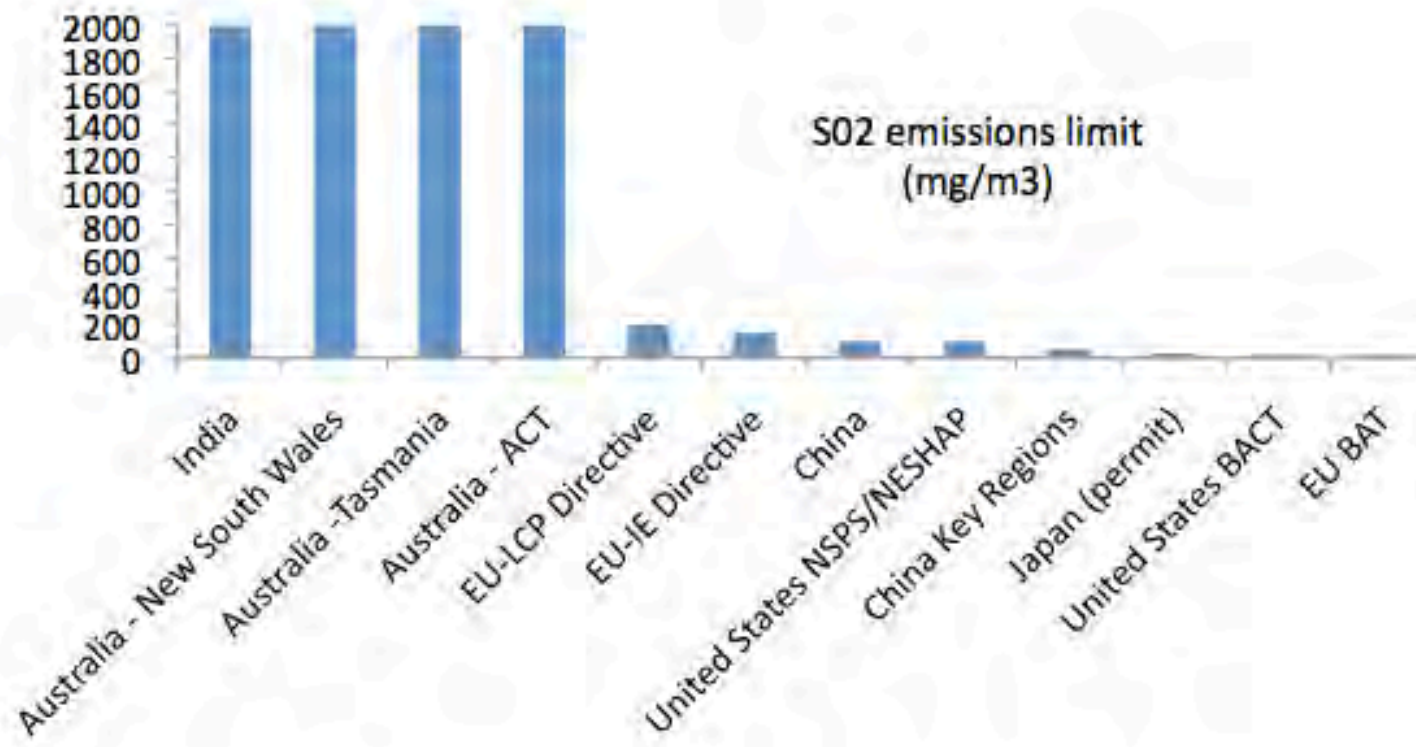
RELATED DOCUMENTS

IFC's Performance Standards on Social & Environmental

Emission Limits – Thermal Power Plants

Country/State	PM (mg/m³)	SO₂ (mg/m³)	NO_x (mg/m³)
India ¹	150	none	None
EU-LCP Directive ²	30	200	500
EU – IE Directive ³	10	150	150
EU-BAT ⁴	5	20	50
United States – NSPS/NESHAP ⁵	14.5	100	110
United States (BACT) ⁶	14.5	22	70
Japan (general) ⁷	50	permit	380
Japan (special area)	30	permit	200
Japan (permit) ⁸	5	27	40
China ⁹	30	100	100
China (key regions) ¹⁰	20	50	100
Australia – New South Wales ¹¹	50	none	500
Australia – Tasmania	100	none	800
Australia - ACT	80	none	500
Natural gas ¹²	5	35	50
Wind/Solar	0	0	0





New rule for mercury in PRC and USA

Table 1: Mercury Emission Standards for Coal and Oil-fired Power Plants in the United States				
		Subcategory	Mercury Emission Limit (lb/GWh)	Expected Technology
Coal- and oil-fired Units	Existing	Regular coal	0.013	Fabric Filters, Activated Carbon Injection (ACI), and Upgrades to Existing Controls
		Designed for low-rank coal ^a	0.12 or 0.040	
		IGCC (gasified coal)	0.030	
		Solid-oil derived & Continental liquid oil	0.0020	
		Non-continental liquid oil	0.0040	
	New	Regular coal	0.00020	
		Designed for low-rank coal	0.040	
		IGCC (gasified coal)	0.0030	
		Solid-oil derived	0.0020	
		Continental liquid oil	0.00010	
		Non-continental liquid oil	0.00040	

lb/GWh = pounds pollutant per gigawatt-electric output

^a Most of these units burn lignite coal.

Source: EPA MATS Final rule, pages 347-351, <http://www.epa.gov/mats/pdfs/20111216MATSfinal.pdf>. Accessed March 20, 2012.

Compliance costs of \$40 billion in PRC

- A recent report (2012) by the China Council for International Cooperation on Environment and Development (CCICED) recommended that China tighten its mercury standard to 0.005 mg/m³ by 2015, and 0.003 mg/m³ by 2020.
- **Chinese standard (0.03 mg/m³):**
 - 1) U.S. standard, as it applies to a Bituminous coal plant: 0.0017 mg/m³ (0.013 lb/GWh)
 - 2) U.S. standard, as it applies to a Lignite coal plant: 0.0153 mg/m³ (up to 0.12 lb/GWh)

Environmental, Health, and Safety Guidelines for Thermal Power Plants

Introduction

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP)¹. When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. These industry sector EHS guidelines are designed to be used together with the **General EHS Guidelines** document, which provides guidance to users on

of specific technical recommendations should be based on the professional opinion of qualified and experienced persons. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate

- Emission discharge standards v ambient environmental standards
- Specific facilities or industries v general standards for local areas, regions or cities and towns.

MARINE WATER QUALITY CRITERIA FOR THE ASEAN REGION

For Aquatic Life Protection

Parameter	Criteria Values	Note
Ammonia (NH ₃ -N)	70 µg/L	
Cadmium	10 µg/L	
Chromium (VI)	50 µg/L	Criteria value proposed by CPMS-II is 48 µg /L. The Meeting recommended to adopt 50 µg /L, following the existing national standards of member countries
Copper	8 µg/L	As the proposed value 2.9 µg /L is too stringent, the Meeting agreed to use round-up value of 7.7 µg /L, the product of the lowest LOEC from a chronic study 77 µg /L for reproduction for <i>Mysidopsis bahia</i> and a safety factor of 0.1
Temperature	Increase not more than 2° C above the maximum ambient temperature	
Cyanide	7 µg/L	
Dissolved oxygen	4 mg/L	
Lead	8.5 µg/L	
Mercury	0.16 µg/L	

Parameter	Criteria Values	Note
Nitrate (NO ₃ -N)	60 µg/L	A single criteria value should be derived for nitrate and nitrite combined in future.
Nitrite (NO ₂ -N)	55 µg/L	
Oil and grease	0.14 mg/L	Other related parameter, e.g. PAH, should be proposed in the future.
Total phenol	0.12 mg/L	
Phosphate (PO ₄ ³⁻ -P)	15 µg/L (Coastal P) 45 µg/L (Estuarine)	
Tributyltin	10 mg/L	
Total suspended solids	Permissible 10% maximum increase over seasonal average concentration	

For Human Health Protection

Parameter	Criteria Values	Note
Bacteria	100 faecal coliform/100 mL 35 enterococci/100 mL	Coastal water quality for recreational activities

ASEAN MARINE WATER QUALITY Management Guidelines and Monitoring Manual

- [ASEAN-
MarineWaterQualityManagementGuidelinesand
MonitoringManual.pdf](#)

- Workers' accommodation: processes and standards A guidance note by IFC and the EBRD
- [International EIA Info and Guidelines/IFC workers accomodation.pdf](#)

Corporate Social Responsibility (CSR)

- Non-binding principles
- OECD Guidelines for Multinational Enterprises
– 2011 Edition
- Equator Principles
- Guidelines for Environmental Protection in Foreign Investment and Cooperation, Ministry of Commerce and Ministry of Environmental Protection, PRC.

OECD Guidelines for Multinational Enterprises

1. The *Guidelines* are recommendations jointly addressed by governments to multinational enterprises. They provide principles and standards of good practice consistent with applicable laws and internationally recognised standards. Observance of the *Guidelines* by enterprises is voluntary and not legally enforceable. Nevertheless, some matters covered by the *Guidelines* may also be regulated by national law or international commitments.
2. Obeying domestic laws is the first obligation of enterprises.

OECD Guidelines for Multinational Enterprises

A. Enterprises should:

1. Contribute to economic, environmental and social progress with a view to achieving sustainable development.

VI. Environment

Adopt Environmental Management Systems

Precautionary Approach

EIA – can be voluntary, including contractors

Equator Principles June 2006

- Guiding principles for the financial industry. A benchmark for determining, assessing and managing social and environmental risk in project financing. \$US10million of more.

Principle 2: Social and Environmental Assessment

- For each project assessed as being either Category A or Category B, the borrower has conducted a Social and Environmental Assessment process to address, as appropriate and to the EPFI's satisfaction, the relevant social and environmental impacts and risks of the proposed project (which may include, if relevant, the illustrative list of issues as found in Exhibit II). The Assessment should also propose mitigation and management measures relevant and appropriate to the nature and scale of the proposed project

Equator Principles

- Category A – Projects with potential significant adverse social or environmental impacts that are diverse, irreversible or unprecedented;
- Category B – Projects with potential limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures
- Also have specific project guidelines.
- 2008 PRC SEPA agreed to promote Equator Principles

Notification of the Ministry of Commerce and the Ministry of Environmental Protection on Issuing the Guidelines for Environmental Protection in Foreign Investment and Cooperation

March 1, 2013 - 15:28 BJT (08:58 GMT) MOFCOM english version

Issued by: Ministry of Commerce of the People's Republic of China and Ministry of Environmental Protection of the People's Republic of China Shang He Han [2013] No. 74

Date of Issuance: February 18, 2013

To competent commerce department and department of environmental protection of all provinces, autonomous regions, municipalities directly under the central government, municipalities separately listed on the state plan and the Xinjiang Production and Construction Corps, and all central enterprises,

In order to direct enterprises in China to further regularize their environmental protection behaviors in foreign investment and cooperation, guide them to actively perform their social responsibilities of environmental protection, and promote the sustainable development of foreign investment and cooperation, we have formulated the *Guidelines for Environmental Protection in Foreign Investment and Cooperation* (hereinafter referred to as these *Guidelines*) which is hereby issued.

Competent commerce departments and departments of environmental protection of all regions shall step up publicity of these *Guidelines*, and guide enterprises in China to raise their environmental protection awareness, and to understand and observe environmental protection policies and regulations of the host country in foreign investment and cooperation, so as to realize mutual benefits.

Ministry of Commerce of the People's Republic of China Ministry of Environmental

Article 1 These *Guidelines are hereby formulated in order to direct enterprises in China* to further regularize their environmental protection behaviors in foreign investment and cooperation activities, timely identify and prevent environmental risks, guide enterprises to actively perform their social responsibilities of environmental protection, set up good international images for Chinese enterprises, and support the sustainable development of the host country.

Article 2 These *Guidelines are applicable to the environmental protection of Chinese* enterprises in foreign investment and cooperation activities, which shall be abided by enterprises consciously.

Article 3 It is advocated that in the course of active performance of their **responsibilities** of environmental protection, enterprises should respect the religious belief, cultural traditions and national customs of community residents of the host country, safeguard legitimate rights and interests of labors, offer training, employment and re--employment opportunities to residents in the surrounding areas, promote harmonious development of local economy, environment and community, and carry out cooperation on the basis of mutual benefits.

- **Article 4**

Enterprises shall, adhering to the concept of environmental friendly and resource conservation, develop low-carbon and green economy, and implement sustainable development strategies, so as to realize a “win-win” situation of corporate self-interests and environmental protection.

- **Article 8**

Enterprises shall, in accordance with requirements of laws and regulations of the host country, conduct environmental impact assessment on their development and construction as well as production and operation activities, and take reasonable measures to reduce possible adverse impacts based on the findings of such environmental impact assessment.

- **Article 9 Enterprises are encouraged to take full into account of the impacts of their** development and construction as well as production and operation activities on the social environment such as historical and cultural heritages, scenic spots and folk customs, and to take reasonable measures to reduce possible adverse impacts.
- **Article 11 Enterprises are encouraged to, prior to construction of the project, conduct** environmental monitoring and evaluation for the proposed construction site, obtain understanding of the environmental background situation of the place where the project is located and its surrounding areas, and put the environmental monitoring and evaluation results on record.
Enterprises are inspired to conduct monitoring on main pollutants discharged, be aware of the pollution situation of enterprises at all times, and put the monitoring results on record

- **Article 12 Enterprises are advocated to carry out environmental due diligence on the** target enterprise before acquiring overseas enterprises, focusing the evaluation on the hazardous wastes formed in its historical operation activities and the soil and underground water pollution, as well as environmental debts of the target enterprise related thereto. Encourage enterprises to take favorable environmental practices for the purpose of reduction of potential risks of environmental liabilities.
- **Article 13 Enterprises shall make management plans for hazardous wastes that may be** generated during production, the contents of which shall include measures to reduce the amount and hazard of hazardous wastes, as well as measures to store, transport, utilize and dispose these hazardous wastes.

- **Article 15 Enterprises shall carefully consider the ecological function orientation of the** area where the project is located, and they may, with the coordination of the government of the host country and the community, have priority to take such measures as in--place and nearby conservation of animal and plant resources that worth conservation and may be affected, to reduce adverse impacts on local biodiversity.

For ecological impacts caused by investment activities, enterprises are encouraged to carry out ecological restoration in accordance with requirements of laws

- **Article 18 Encourage enterprises to post their environmental information on a regular** basis, and publish their plans on implementation of laws and regulations on environmental protection, measures taken, and environmental performance achieved,etc..

- **Article 21** Enterprises are encouraged to actively participate in and support local public benefit activities for environmental protection, publicize the concept of environmental protection, and build a good enterprise image in respect of environmental protection.
- **Article 22** Encourage enterprises to research and learn from the principles, standards and practices with respect to environmental protection that are adopted by international organizations and multilateral financial institutions.

EIA Report and Review

- After the EIA Report is lodged with the Ministry what happens next.
- There is usually an initial review of the EIA.
- This is based on the Procedures (when approved).
- A checklist is one way of reviewing the EIA to ensure that all the information is provided.

EIA Report and Review

- The EIA Report Review Body shall have the following responsibilities:
 - When requested by the Ministry, to review the EIA of any Project.
 - Within the timeframe prescribed by the Ministry, to prepare an EIA Review Report in regard to an EIA Report.
 - The Ministry may, in each case, prescribe the scope and content of the EIA Review Report.
 - The EIA Review Report shall identify any defects in the EIA investigations or the EIA Report and give recommendations as to which further studies, investigations, consultations or assessment that the Project Proponent must undertake and report.
 - The EIA Report Review Body shall provide such other feedback and recommendations on any EIA Report as the Ministry may explicitly request.
 - The EIA Review Report shall, where relevant, give recommendations on conditions of the ECC.

– The Ministry may, in each case, prescribe the scope and content of the EIA Review Report. Such scope and content may include assessments of the following questions:

- Does the EIA Report comply with the Procedure (EIA Report structure, content, study methodology, public participation process, etc.)?
- Does the EIA Report comply with the Scoping Report and TOR for the EIA?
- Does the EIA Report comply with explicit guidelines, standards, timing or criteria for review?
- Does the EIA Report recognize and consider the views of stakeholders?
- Is the EIA Report complete and does it contain sufficient, suitable and reliable information?
- Have all applicable environmental requirements been adequately identified, addressed, referred to and fully complied with in the preparation and content of the EIA Report?
- Have all foreseeable Adverse Impacts been identified and addressed in the preparation and content of the EIA Report?
- Is it likely that the measures to prevent, mitigate or minimize Adverse Impacts of the Project specified in the EIA Report will ensure that the environmental requirements will be fully complied with?
- Are the measures to prevent or minimize pollution from the Project effective and based on BAT and Good Practice?
- Are there any measures or procedures which are non-compliant or risk leading to non-compliance with environmental requirements?
- Can the Project as described and presented in the EIA Report be constructed and operated without causing unacceptable Adverse Impacts?

Types of Mitigation form a hierarchy

- **Avoid** the impact by not taking action or parts of the action
- **Minimize** impacts by limiting the degree or magnitude of the action
- **Rectify** the impact by repairing, restoring, or rehabilitating the affected environment
- **Reduce or eliminate** the impact over time by preservation and maintenance operations.
- **Compensate** for the impacts by replacing or providing substitute resources or environments

EIA review hd.pdf

Handout 9-1

Topic 9: Review of EIA quality

Procedures for Reviewing EIA Reports

Procedures for Reviewing EIA Reports

Principle 10, Rio Declaration

- Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.