

APPENDIX A

ISO 14001:2015 Environmental Management

System. Guidance:

The ISO system of Standards have long provided the model for ensuring industry carries out activities and provide products and services that conform to international standards. Quality, the Environment and Safety are widely adopted on a Global Scale. While on the surface the standards may seem complex, the fundamental structure is based on common sense management practices which companies voluntarily adopt to ensure transparency, communication and compliance. The origin of the standards and the basic framework is outlined in Part II: Groundwater Management-*Continuous Improvement* found in the body of this report.

Companies both global and local in scale adopt these standards voluntarily or as mandated by their customers. Primarily, they are used as tools to communicate to stakeholders that their management practices are in conformance with their expectations. Organizations go to great effort and expense to enact appropriate procedures to ensure conformance. At the highest levels a "third party" will audit the organizations management system regularly to check that internal controls and processes are established, implemented and maintained. For organizations with limited resources, partial implementation of the model, incremental adoption of key elements or "self-certification" is practical. As long as the principal of Plan-Do-Check-Action is implemented to promote continuous improvement, in the long-run, the objective of better environmental protection, production of a quality product, or the provision of a healthy and safe workplace will be achieved.

To further promote these concepts this researcher has reviewed the ISO 14001:2015 based Environmental Management Systems (EMS) Manual MA-ED-001 issued July 14, 2015 by the DENR Central Office. It provides the model for the proposed EMS Manual of the fictional "Calamansi Mining Company" that follows. It appears that the intent of the manual is to provide a model for mining operations in the Philippines to promote best practices and environmental stewardship. Indeed, it provides comprehensive processes and details to inform "Calamansi" operations. Calamansi's EMS could be adapted by any organization that operates environmentally sensitive operations. Using Word processing tools an organization could easily adopt the standard by replacing

"Calamansi Mining Company" with the name of the organization and replace the "Mining Company" Reference with the "Organization" or other proper noun.

ISO 14001
Environmental Management
Systems (EMS) Manual

Calamansi Mining
Company
(CMC)

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Environmental management systems — Requirements with guidance for use

1 Introduction

The Department of Environment and Natural Resources-Central Office ("Department") Management Systems Manual") is the highest-level documented information to provide overall direction of environmental management of the department.

The Department has established the EMS Manual based on ISO 14001:2015 Environmental management systems-requirements with guidance for use- as a structured and systematic tool to deliver its mandate to protect the environment and natural resources of the Philippines.

This EMS Manual describes the principles, practices and procedures, which shall be developed and maintained by the Department to demonstrate its moral ascendancy to the departments' interested parties. This EMS Manual shall become the guiding principle to establish, implement, maintain and continually improve its performance in managing its opportunities and satisfying the needs and expectations of interested parties.

This EMS Manual shall be subject to review, evaluation and improvement by the Department's EXECOM to reflect changes in policies, management and procedures. This EMS manual shall be the basis of the Department's effort for the continual improvement of the EMS and its related processes.

This EMS Manual is defined as part of EMS used to develop its environmental policy, and improve performance of its processes and manage its environmental aspects and control its risks.

For clarity, the terms and definitions in this EMS Manual encompass the ISO 14001:2015 requirements and the planned arrangements of the Department that shall have relevance to the environment. This may include but not limited to integrating the environmental management system to quality, occupational Health and safety management and other management systems.

About DENR.

Mandate pursuant to Executive Order 192, June 10, 1987

The Department of Environment and Natural Resources is the primary government agency responsible for the conservation, management, development, and proper use of the country's environment and natural resources, specifically forest and grazing lands, mineral resources, including those in reservation and watershed areas, and lands of the public domain, as well as licensing and regulation of all natural resources may be provided by law in order to ensure equitable sharing of the benefits derived there from for the welfare of the present and future generations of Filipinos.

To accomplish its mandate, the Department shall be guided by the following objectives that will serve as the basis for policy formulation.

Assure the availability and sustainability of the country's natural resources through judicious use and systematic restoration or replacement, whenever possible;

Increase the productivity of natural resources in order to meet the demands for forest mineral, and land resources of a growing population;

Enhance the contribution of natural resources by the different sectors of the population and;

Conserve specific terrestrial and marine areas representative of the Philippine natural and cultural heritage for present and future generations.

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Secretary of Environment and Natural Resources

The Secretary of the Department holds office at the DENR Central Office. The Secretary has been appointed by the President of the Philippines and has been vested with the authority and responsibility for the exercise of the mandate of the Department, the accomplishment of its objectives and the discharge of its powers and functions.

This International Standard specifies the requirements for an environmental management system that an Mining Company can use to enhance its environmental performance. This International Standard is intended for use by a Mining Company seeking to manage its environmental responsibilities in a systematic manner that contributes to the environmental pillar of sustainability.

This International Standard helps a Mining Company achieve the intended outcomes of its environmental management system, which provide value for the environment, the Mining Company itself and interested parties. Consistent with the Mining Company's environmental policy, the intended outcomes of an environmental management system include:

- enhancement of environmental performance;
- fulfillment of compliance obligations;
- achievement of environmental objectives.

This International Standard is applicable to any Mining Company, regardless of size, type and nature, and applies to the environmental aspects of its activities, products and services that the Mining Company determines it can either control or influence considering a life cycle perspective. This International Standard does not state specific environmental performance criteria.

This International Standard can be used in whole or in part to systematically improve environmental management. Claims of conformity to this International Standard, however, are not acceptable unless all its requirements are incorporated into an Mining Company's environmental management system and fulfilled without exclusion.

1.0 Scope

1.1 Interested Parties Identification with their needs and expectations

MAJOR CLASSIFICATIONS OF INTERESTED PARTIES	NEEDS AND EXPECTATIONS
DENR Officials	Policies, plans, programs, guidelines, regulations, decisions. Opinions and technical advise Good working condition and eployee welfare and benefits
DENR Employees	Use of resources (human, physical, financial and information). Salaries, wages and other remuneration, career development
Contractual	Contracts, Payments

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Service Provider	Contracts, Payments
Janitorial	Salaries, wages and other remuneration
Security Personnel	Salaries, wages and other remuneration
External Parties	
National Government Agencies (NGAs)	Policies, plans, programs, guidelines, regulations, decisions.
Government Owned and Controlled Corporations (GOCCs)	Opinions and technical advise
State Universities and Colleges (SUCs)	MOU, MOA, contracts, decisions
Local Government Units (LGUs)	Permits, licenses, agreements and clearances
Government Funding Institutions (GFIs)	Reports, work and financial plan and other reportorial requirements
International Financial Institutions (IFIs)	International commitments
Basic Sectors	Policies, plans, programs, guidelines, regulations, decisions.
Church and other charitable institutions	Policies, plans, programs, guidelines, regulations, decisions.
Media	Policies, plans, programs, guidelines, regulations, decisions.
Business and Industries	Policies, plans, programs, guidelines, regulations, decisions.
International Bilateral Partners	Policies, plans, programs, guidelines, regulations, decisions.
Non-Government Organizations (NGOs) Civil Society Organizations (CSOs) People's Organizations (POs)	Policies, plans, programs, guidelines, regulations, decisions.
Other branches of Government	Policies, plans, programs, guidelines, regulations, decisions.
Constitutional Bodies	Policies, plans, programs, guidelines, regulations, decisions.
Office of the President	Policies, plans, programs, guidelines, regulations, decisions.
Suppliers/Dealers/Contractors	Policies, plans, programs, guidelines, regulations, decisions.

1.2 Boundary of EMS Implementation.

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2.0 References

References of this manual, which leads to other related documentation, is the ISO 14001:2015 clauses:

- Clause 1 - Scope
- Clause 2 - Normative References
- Clause 3 - New Terms and Definitions
- Clause 4 - Context of the Organization
- Clause 5 - Leadership
- Clause 6 - Planning
- Clause 7 - Support (Resources; Competence; Awareness; Communication; Documented Information)
- Clause 8 - Operation (Operational Planning and Control; Emergency Preparedness and Response e.g. Environmental Emergencies)
- Clause 9 - Performance Evaluation
- Clause 10- Continual Improvement

3 Terms and definitions

EMS Environmental Management System

EMSCT EMS Core Team

EXECOM Executive Committee

4 Context of the Mining Company

4.1 Understanding the Mining Company and its context

The Mining Company shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomes of its environmental management system. Such issues shall include environmental conditions being affected by or capable of affecting the Mining Company.

4.2 Understanding the needs and expectations of interested parties

The Mining Company shall determine:

- the interested parties that are relevant to the environmental management system;
- the relevant needs and expectations (i.e. requirements) of these interested parties;
- which of these needs and expectations become its compliance obligations.

4.3 Determining the scope of the environmental management system

The Mining Company shall determine the boundaries and applicability of the environmental management system to establish its scope.

When determining this scope, the Mining Company shall consider:

- the external and internal issues referred to in 4.1;
- the compliance obligations referred to in 4.2;
- its organizational units, functions and physical boundaries;
- its activities, products and services;
- its authority and ability to exercise control and influence.

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Once the scope is defined, all activities, products and services of the Mining Company within that scope need to be included in the environmental management system.

The scope shall be maintained as documented information and be available to interested parties.

4.4 Environmental management system

To achieve the intended outcomes, including enhancing its environmental performance, the Mining Company shall establish, implement, maintain and continually improve the EMS, including the processes needed and their interactions, in accordance with the requirements of the ISO 14001 Standard.

The Mining Company shall consider the knowledge gained in 4.1 and 4.2 when establishing and maintaining the environmental management system.

5 Leadership

5.1 Leadership and commitment

Top management shall demonstrate leadership and commitment with respect to the environmental management system by:

- taking accountability for the effectiveness of the environmental management system;
- ensuring that the environmental policy and environmental objectives are established and are compatible with the strategic direction and the context of the Mining Company;
- ensuring the integration of the environmental management system requirements into the Mining Company's business processes;
- ensuring that the resources needed for the environmental management system are available;
- communicating the importance of effective environmental management and of conforming to the environmental management system requirements;
- ensuring that the environmental management system achieves its intended outcomes;
- directing and supporting persons to contribute to the effectiveness of the environmental management system;
- promoting continual improvement;
- supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

NOTE Reference to "business" in this International Standard can be interpreted broadly to mean those activities that are core to the purposes of the Mining Company's existence.

5.2 Environmental policy

Top management shall establish, implement and maintain an environmental policy that, within the defined scope of its environmental management system:

- is appropriate to the purpose and context of the Mining Company, including the nature, scale and environmental impacts of its activities, products and services;

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- provides a framework for setting environmental objectives;
- includes a commitment to the protection of the environment, including prevention of pollution and
- other specific commitment(s) relevant to the context of the Mining Company;

NOTE Other specific commitment(s) to protect the environment can include sustainable resource use, climate change mitigation and adaptation, and protection of biodiversity and ecosystems.

- includes a commitment to fulfill its compliance obligations;
- includes a commitment to continual improvement of the environmental management system to enhance environmental performance.

The environmental policy shall be:

- maintained as documented information;
- communicated within the Mining Company;
- available to interested parties.

CMC ENVIRONMENTAL POLICY STATEMENT

CMC the primary mining company on Homonhon Island, responsible for the conservation, management and development of the island's natural resources and the protection of the environment, plays a key role in promoting sustainable development.

CMC commits to ensure that all its activities and services will contribute towards a better quality of the environment for the present and future generations of Filipinos.

To pursue this commitment, CMC shall:

1. Serve as a role model in environmental management by:

1.1 Fulfilling its compliance obligations under all applicable environmental laws and regulations;

1.2 Minimizing the adverse impacts of our operations on the environment through resource conservation, pollution prevention and control, and the best management practices related to mining waste management and ecosystem restoration;

1.3 Introducing adhering to life-cycle thinking in availing products and services from suppliers and contractors as well as understanding and promoting biodiversity in the sustained provision of ecological services of the natural systems such as the hydrological cycle and food webs among others.

2. Adhere to the principles of good environmental stewardship through transparency, accountability, and participatory decision-making;

3. Encourage other sectors to practice and promote sustainable environment and natural resources through sound policies and regulations;

4. Strengthen partnerships and collaborative mechanisms with other government agencies, business sectors, members of civil society, and international community to consider their needs and expectations;

5. Conduct an effective information, education and communication program for all stakeholders, including its officials and employees, to heighten environmental awareness and responsibility;

6. Implement emergency preparedness and response program to provide safe and healthy

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work environment as well as security and protection of sensitive buffer areas from degradation due to wildfire and illegal activities.

7. Aim for continual improvement in the practice of environmental management in CMC through periodic management reviews of environmental performance based on effective monitoring and risk assessment system and by setting specific measureable goals and objectives in .

This policy will provide the framework for setting environmental objectives and shall be available to interested parties.

5.3 CMC Organizational roles, responsibilities and authorities

Top management shall ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the Mining Company to facilitate effective EMS.

Top management shall assign the responsibility and authority for:

- ensuring that the environmental management system conforms to the requirements of the ISO 14001:2015 standard
- reporting on the performance of the environmental management system, including environmental performance, to top management.

Organizational Chart with List of Primary EMS functions at each level of Responsibility for CMC.



6 Planning

6.1 Actions to address risks associated with threats and opportunities

6.1.1 General

The Mining Company shall establish, implement and maintain the processes needed to meet the requirements in 6.1.1 to 6.1.4.

When planning for the environmental management system, the Mining Company shall consider:

- the issues referred to in 4.1;
- the requirements referred to in 4.2;
- the scope of the EMS;

and determine the risks and opportunities, related to its

- environmental aspects (see 6.1.2),
- compliance obligations (see 6.1.3) and
- other issues and requirements, identified in 4.1 and 4.2,

that need to be addressed to:

- give assurance that the EMS can achieve its intended outcomes;
- prevent or reduce undesired effects, including the potential for external environmental conditions to affect the Mining Company;

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- achieve continual improvement.

Within the scope of the environmental management system, the Mining Company shall determine potential emergency situations, including those that can have an environmental impact.

The Mining Company shall maintain documented information of its:

- risks and opportunities that need to be addressed;
- processes needed in 6.1.1 to 6.1.4, to the extent necessary to have confidence they are carried out as planned.

6.1.2 Significant Environmental Aspects

Within the defined scope of the EMS, the Mining Company shall determine the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts, considering a life cycle perspective.

When determining environmental aspects, the Mining Company shall take into account:

1. change, including planned or new developments, and new or modified activities, product and services;
2. abnormal conditions and reasonably foreseeable emergency situations.

The Mining Company shall determine those aspects that have or can have a significant environmental impact by using established criteria.

The Mining Company shall communicate its significant environmental aspects among the various levels and functions of the Mining Company.

The Mining Company shall maintain documented information of its:

- environmental aspects and associated environmental impacts;
- criteria used to determine its significant environmental aspects;
- significant environmental aspects.

(Reference: DENR Environmental Risk Analysis (ERA) Rating Guide and Rating Sheet)

NOTE Significant environmental aspects can result in risks and opportunities associated with either adverse environmental impacts (threats) or beneficial environmental impacts (opportunities).

6.1.3 Compliance obligations

The Mining Company shall:

- a) determine and have access to the compliance obligations pertaining to its environmental aspects;
- b) determine how these compliance obligations apply to the Mining Company;
- c) take these compliance obligations into account when establishing, implementing, maintaining and continually improving its EMS.

The Mining Company shall maintain documented information of its compliance obligations.

NOTE Compliance obligations can result in risks and opportunities to the Mining Company.

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Presidential Decree No. 705 Revised Forestry Code;

Presidential Decree No. 856, Sanitation Code;

Presidential Decree No. 979, Marine Pollution Decree;

Presidential Decree No. 1067, Water Code;

Presidential Decree No. 1151, Philippine Environmental Policy of 1977;

Presidential Decree No. 1433, Plant Quarantine Law of 1978;

Presidential Decree No. 1586, Establishing an environmental Impact Statement System Including Other Environmental Management Related Measures for Other purposes;

Republic Act No. 7611, Strategic Environmental Plan for Palawan Act;

Republic Act No. 7942, Philippine Mining Act;

Republic Act No. 8371, Indigenous Peoples Rights Act;

Republic Act No. 8550, Philippine Fisheries Code;

Republic Act No. 8749, Clean Air Act;

Republic Act No. 9003, Solid Waste Management Act;

Republic Act No. 9072, National Caves and Cave Resource Management Act;

Republic Act No. 9147, Wildlife Conservation and Protection Act;

Republic Act No. 9175, Chainsaw Act;

Republic Act No. 9275, Clean Water Act;

Republic Act No. 9483, Oil Spill Compensation Act of 2007; and

Commonwealth Act No. 141, The Public Land Act;

Other existing laws that relate to the conservation, development, preservation, protection and utilization of the environment and natural resources related Agrarian Reform, Local Government, Tax Law, Coconut Preservation, among others.

6.1.4 Planning action

The Mining Company shall plan:

- a) to take actions to address its:
 - 1) significant environmental aspects;
 - 2) compliance obligations;
 - 3) risks and opportunities identified in 6.1.1;
- b) how to:
 - integrate and implement the actions into its EMS processes, or other business processes;
 - evaluate the effectiveness of these actions.

When planning these actions, the Mining Company shall consider its technological options and its financial, operational and business requirements.

6.2 Environmental objectives and planning to achieve them

6.2.1 Environmental objectives

The Mining Company shall establish environmental objectives at relevant functions and levels, taking into account the Mining Company's significant environmental aspects and associated compliance obligations, and considering its risks and opportunities.

The environmental objectives shall be:

- a) consistent with the environmental policy;
- b) measurable (if practicable);
- c) monitored;
- d) communicated;
- e) updated as appropriate.

The Mining Company shall retain documented information on the environmental objectives.

6.2.2 Planning actions to achieve environmental objectives

When planning how to achieve its environmental objectives, the Mining Company shall determine:

- what will be done;
- what resources will be required;
- who will be responsible;
- when it will be completed;
- how the results will be evaluated, including indicators for monitoring progress toward achievement of its measurable environmental objectives.

The Mining Company shall consider how actions to achieve its environmental objectives can be integrated into the Mining Company's business processes.

7 Support

7.1 Resources

The Mining Company shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the EMS.

7.2 Competence

The Mining Company shall:

- a) determine the necessary competence of person(s) doing work under its control that affects its environmental performance and its ability to fulfill its compliance obligations;
- b) ensure that these persons are competent on the basis of appropriate education, training or experience;
- c) determine training needs associated with its environmental aspects and its EMS;
- d) where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken.

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NOTE Applicable actions can include, for example, the provision of training to, the mentoring of, or the re-assignment of currently employed persons; or the hiring or contracting of competent persons.

The Mining Company shall retain appropriate documented information as evidence of competence.

7.3 Awareness

The Mining Company shall ensure that persons doing work under the Mining Company's control are aware of:

- a) the environmental policy;
- b) the significant environmental aspects and related actual or potential environmental impacts associated with their work;
- c) their contribution to the effectiveness of the environmental management system, including the benefits of enhanced environmental performance;
- d) the implications of not conforming with the environmental management system requirements, including not fulfilling the Mining Company's compliance obligations.

7.4 Communication

7.4.1 General

The Mining Company shall establish, implement and maintain a process for internal and external communications relevant to the EMS, including:

- a) on what it will communicate;
- b) when to communicate;
- c) with whom to communicate;
- d) how to communicate.

When establishing its communication processes, the Mining Company shall:

- take into account its compliance obligations; and
- ensure that environmental information communicated is consistent with information generated within the environmental management system, and is reliable.

The Mining Company shall respond to relevant communications on its EMS.

The Mining Company shall retain documented information as evidence of its communications, as appropriate.

7.4.2 Internal communication

The Mining Company shall:

- a) internally communicate information relevant to the environmental management system among the various levels and functions of the Mining Company, including changes to the environmental management system, as appropriate;
- b) ensure its communication processes enable(s) persons doing work under the Mining Company's control to contribute to continual improvement.

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7.4.3 External communication

The Mining Company shall externally communicate information relevant to the environmental management system, as established by the Mining Company's communication processes and as required by its compliance obligations.

7.5 Documented information

7.5.1 General

The Mining Company's environmental management system shall include:

- a) documented information required by the ISO 14001 Standard;
- b) documented information determined by the Mining Company as being necessary for the effectiveness of the EMS.

NOTE The extent of documented information for an environmental management system can differ from one Mining Company to another due to:

- the size of Mining Company and its type of activities, processes, products and services;
- the need to demonstrate fulfillment of its compliance obligations;
- the complexity of processes and their interactions;
- the competence of persons doing work under the Mining Company's control.

7.5.2 Creating and updating

When creating and updating documented information, the Mining Company shall ensure appropriate:

- a) identification and description (e.g. a title, date, author, or reference number);
- b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- c) review and approval for suitability and adequacy.

7.5.3 Control of documented information

Documented information required by the EMS and by the ISO 14001 Standard shall be controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
- b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).

For the control of documented information, the Mining Company shall address the following activities as applicable:

- distribution, access, retrieval and use;

- storage and preservation, including preservation of legibility;
- control of changes (e.g. version control);
- retention and disposition.

Documented information of external origin determined by the Mining Company to be necessary for the planning and operation of the EMS shall be identified, as appropriate, and controlled.

NOTE Access can imply a decision regarding the permission to view the documented information only, or the permission and authority to view and change the documented information.

8 Operation

8.1 Operational planning and control

The Mining Company shall establish, implement, control and maintain the processes needed to meet environmental management system requirements, and to implement the actions identified in 6.1 and 6.2, by:

- establishing operating criteria for the processes;
- implementing control of the processes, in accordance with the operating criteria.

NOTE Controls can include engineering controls and procedures. Controls can be implemented following a hierarchy (e.g. elimination, substitution, administrative) and can be used individually or in combination.

The Mining Company shall control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

The Mining Company shall ensure that outsourced processes are controlled or influenced. The type and extent of control or influence to be applied to the processes shall be defined within the environmental management system.

Consistent with a life cycle perspective, the Mining Company shall:

- a) establish controls, as appropriate, to ensure that its environmental requirement(s) is (are) addressed in the design and development process for the product or service, considering each life cycle stage;
- b) determine its environmental requirement(s) for the procurement of products and services, as appropriate;
- c) communicate its relevant environmental requirement(s) to external providers, including contractors;
- d) consider the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of its products and services.

The Mining Company shall maintain documented information to the extent necessary to have confidence that the processes have been carried out as planned.

8.2 Emergency preparedness and response

The Mining Company shall establish, implement and maintain the processes needed to prepare for and respond to potential emergency situations identified in 6.1.1.

The Mining Company shall:

- a) Prepare to respond by planning actions to prevent or mitigate adverse environmental impacts from emergency situations;

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- b) respond to actual emergency situations;
- c) take action to prevent or mitigate the consequences of emergency situations, appropriate to the magnitude of the emergency and the potential environmental impact;
- d) periodically test the planned response actions, where practicable;
- e) periodically review and revise the processes and planned response actions, in particular after the occurrence of emergency situations or tests;
- f) provide relevant information and training related to emergency preparedness and response, as appropriate, to relevant interested parties, including persons working under its control.

The Mining Company shall maintain documented information to the extent necessary to have confidence that the processes are carried out as planned.

9 Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

The Mining Company shall monitor, measure, analyse and evaluate its environmental performance.

The Mining Company shall determine:

- a) what needs to be monitored and measured;
- b) the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;
- c) the criteria against which the Mining Company will evaluate its environmental performance, and appropriate indicators;
- d) when the monitoring and measuring shall be performed;
- e) when the results from monitoring and measurement shall be analyzed and evaluated.

The Mining Company shall ensure that calibrated or verified monitoring and measurement equipment is used and maintained, as appropriate.

The Mining Company shall evaluate its environmental performance and the effectiveness of the environmental management system.

The Mining Company shall communicate relevant environmental performance information both internally and externally, as identified in its communication processes and as required by its compliance obligations.

The Mining Company shall retain appropriate documented information as evidence of the monitoring, measurement, analysis and evaluation results.

9.1.2 Evaluation of compliance

The Mining Company shall establish, implement and maintain the processes needed to evaluate fulfillment of its compliance obligations. The Mining Company shall:

- a) determine the frequency that compliance will be evaluated;
- b) evaluate compliance and take action if needed;

- c) maintain knowledge and understanding of its compliance status.

The Mining Company shall retain documented information as evidence of the compliance evaluation result(s).

9.2 Internal audit

9.2.1 General

The Mining Company shall conduct internal audits at planned intervals to provide information on whether the environmental management system:

- a) conforms to:
 - 1) the Mining Company's own requirements for its environmental management system;
 - 2) the requirements of this International Standard;
- b) is effectively implemented and maintained.

9.2.2 Internal audit

The Mining Company shall conduct internal audits at planned intervals to provide information of whether the EMS:

- a) conforms to:
 - 1) the Mining Company's own requirements for its EMS
 - 2) the requirements of ISO 14001 Standard;
- b) is effectively implemented and maintained.

The Mining Company shall establish, implement and maintain an audit programme, including the frequency, methods, responsibilities, planning requirements and reporting of its internal audits.

When establishing the internal audit programme, the Mining Company shall take into consideration the environmental importance of the processes concerned, changes affecting the Mining Company and the results of previous audits.

The Mining Company shall:

- a) define the audit criteria and scope for each audit;
- b) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- c) ensure that the results of the audits are reported to relevant management.

The Mining Company shall retain documented information as evidence of the implementation of the audit programme and the audit results.

9.3 Management review

Top management shall review the Mining Company's EMS, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

The management review shall include consideration of:

- a) the status of actions from previous management reviews;
- b) changes in:
 - 1) external and internal issues that are relevant to the environmental management system;

- 2) the needs and expectations of interested parties, including compliance obligations;
- 3) its significant environmental aspects;
- 4) risks and opportunities;
- c) the extent to which environmental objectives have been achieved;
- d) information on the Mining Company's environmental performance, including trends in:
 - 1) nonconformities and corrective actions;
 - 2) monitoring and measurement results;
 - 3) fulfillment of its compliance obligations;
 - 4) audit results;
- e) adequacy of resources;
- f) relevant communications from interested parties, including complaints; and
- g) opportunities for continual improvement.

The outputs of the management review shall include:

- conclusions on the continuing suitability, adequacy and effectiveness of the EMS;
- decisions related to continual improvement;
- decisions related to any need for changes to the environmental management system, including resources;
- actions, if needed, when environmental objectives have not been achieved;
- opportunities to improve integration of the environmental management system with other business processes, if needed;
- any implications for the strategic direction of the Mining Company.

The Mining Company shall retain documented information as evidence of the results of management review.

10.1 Improvement

10.1 General. The Mining Company shall determine opportunities for improvement (see 9.1, 9.2 and 9.3) and implement necessary actions to achieve the intended outcomes of its environmental management system.

10.2 Nonconformity and corrective action

When a nonconformity occurs, the Mining Company shall:

- a) react to the nonconformity and, as applicable:
 - 1) take action to control and correct it;
 - 2) deal with the consequences, including mitigating adverse environmental impacts;
- b) evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
 - 1) reviewing the nonconformity;
 - 2) determining the causes of the nonconformity;
 - 3) determining if similar nonconformities exist, or could potentially occur;

- c) implement any action needed;
- d) review the effectiveness of any corrective action taken;
- e) make changes to the environmental management system, if necessary.

Corrective actions shall be appropriate to the significance of the effects of the nonconformities encountered, including the environmental impacts.

The Mining Company shall retain documented information as evidence of:

- the nature of the nonconformities and any subsequent actions taken;
- the results of any corrective action.

10.3 Continual improvement

The Mining Company shall continually improve the suitability, adequacy and effectiveness of the EMS to enhance environmental performance.