



Seabed Minerals Authority
Runanga Takere Moana
COOK ISLANDS



NATIONAL ENVIRONMENT SERVICE
TU'ANGA TAPOROPORO
COOK ISLANDS



G09: Environmental Management and Monitoring Plans

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1. Purpose

A key function of the Seabed Minerals Authority (**Authority**) is to regulate seabed minerals activities in the Cook Islands jurisdiction through monitoring the performance of title holders and taking enforcement action as required under the Seabed Minerals Act 2019 (**SBM Act**). A key function of the National Environment Service (**Service**) is to permit or consent to activities after passing environmental impact assessment and review as required by the Environmental Act 2003 (**Environmental Act**).

This guideline is to assist licence holders and other stakeholders with the content of an environmental management monitoring plan (**EMMP**) which is required for mining (which includes minerals harvesting) under the Environment (Seabed Minerals Activities) Regulations 2023 (**Environmental Regulations**). A draft EMMP is also required to complete an Environmental Impact Statement for all Tier 3 activities i.e., trial mining or trial minerals harvesting, or mining or minerals harvesting.

This Guideline should be read in conjunction with the Authority’s and Service’s publication, “*Information Note: An Operating Framework for Standards and Guidelines relating to Seabed Minerals Activities.*”

2. Legislative context

This Guidelines is issued by the Authority and the Service pursuant to section 11(e) of the SBM Act: *Functions of Authority*, section 13A: *Authority may issue standards and guidelines*; Part 9 of the Environment Regulations: *Applicable standards and applicable guidelines* to assist licence holders with meeting obligations in relation to:

- a) part 5 of the Environment Act 2003: *Environmental Impact Assessment*

b) part 6, schedule 8 of the Environment Regulations: *Environmental management and monitoring plan*

The contents of this document are for guidance only, and do not constitute formal legal requirements. Licence Holders remain subject to the applicable legal requirements under the SBM Act, Exploration Regulations, Licence conditions, Environment Act and Environment Regulations. If a Licence Holder chooses not to follow any particular part of this Guideline, the Authority may request an adequate written explanation as to why this is the case, to help assess whether the statutory requirements have been met.

Any information the Licence Holder supplies to the Authority will be managed in accordance with section 17 and 18 of the SBM Act.

3. Scope

This guideline applies to all Licence Holders and their affiliates applying for or conducting mining activities within the Cook Islands Exclusive Economic Zone under exploration or mining licence granted by the Cook Islands Government. A draft EMMP is required in an Environmental Impact Statement (**EIS**; G06: Environmental Impact Statement) supporting an application for an environmental permit to conduct trial mining or minerals harvesting or mining or minerals harvesting. The EMMP itself is a sub-component of the Environmental Management System (**EMS**; G08: Environmental Management System) used during mining or minerals harvesting.

4. Environmental Management and Monitoring Plan

The EMMP is defined and detailed in regulation 4 of the Environmental Regulations.

The plan will deal with adaptive management and monitoring of effects identified in Environmental Risk Assessment (**ERA**; G17: Environmental Risk Assessments) and reported in the EIS.

In addition to these requirements, an EMMP may be structured and comprised per more detailed guidance in Annex A.

5. Other References

None

Disclaimer: This Guideline, developed by the Seabed Minerals Authority in conjunction with the National Environment Service, does not replace, or amend the requirements of the SBM Act, Environment Act, Explorations Regulations, Environment Regulations, or Exploration Licence obligations, which should be read in conjunction with the Guideline.

This Guideline is made available on the understanding that the Cook Islands Government is not thereby engaged in rendering legal or other professional advice. Before relying on this material

in any important matter, users should carefully evaluate its accuracy, currency, completeness, and relevance for their purposes, and obtain appropriate legal or other professional advice relevant to their particular circumstances.

It is anticipated the Guideline will be amended from time to time. The most up-to-date version of the Guideline is available at www.sbma.gov.ck.

6. Version Control

Version	Date
Version 1	12 April 2024

7. Annex A: Structure and Summary Content of an EMMP

The content of this guidance is taken, summarised and restructured from Schedule 8 of Environmental Regulations as well as in part from ISBA/27/C/6.

7.1 Summary

A non-technical summary of the information and elements of the plan.

This may be structured by the headings below.

7.2 Introduction

Purpose and scope of the plan against the broader requirements in the regulations

The environmental policy for the activities, as may be defined in the Environmental Management System (EMS).

A description of the applicable legislative requirements and administrative frameworks, and how these will be met under the plan.

A description of the project, including maps of the project and activity areas, and schedules for the implementation stages of each activity.

Area and activities the EMMP will specifically address in context of the areas and activities described in the EIS.

7.3 Baseline

A description of the existing marine and where relevant, on-island environments and environmental factors, the socio-economic and cultural context and existing uses and users of the project area and the activity area.

May include links and references to more detailed reports or annexes.

7.4 Monitoring and Management Plan

Details likely to be finalised at the end of the EIA (a high level EMMP is a requirement of the EIS).

May be presented as a series of sub-plans for different aspects of the activities, and/or effects and/or environmental factor.

May include a sub-plan that brings all monitoring requirements into one document that becomes the playbook for operational monitoring.

7.4.1 Objectives and standards

Project-specific environmental management objectives.

All environmental management objectives, environmental performance outcomes, environmental performance standards and related targets and indicators ideally SMART (specific, measurable, achievable, relevant, and time-bound).

By activity and/or regulatory system:

- *Environmental performance outcomes and targets, including adopted environmental quality standards and indicators for each environmental factor.*
- *Environmental performance standards for the control measures these being As Low As Reasonably Practicable (ALARP).*
- *Measurement criteria and technical measurement methods for determining whether each environmental management objective, environmental performance outcome, environmental performance standard and related targets and indicators are being met or not.*

7.4.2 Management and incorporation within EMS

Description and/or references to relevant parts of the environmental management system, including specific measures to be used to ensure that, for the duration of the activity:

- *Effects and risks of the activity continue to be identified, monitored, and reduced to a level that is as low as reasonably practicable.*
- *Control measures are effective in reducing the effects and risks of the activity to as low a level as reasonably practicable.*
- *The activity under the plan will adhere to best environmental practice and use the best available technology and techniques as defined in the regulations.*
- *Environmental management objectives and environmental performance outcomes and standards set out in the EMMP are being met.*
- *Roles and responsibilities of personnel are defined, including in relation to the implementation, management, review, and continual improvement of the EMMP.*
- *Measures to be used to ensure that each employee or any other person working on, or in connection with, the activity is aware of their responsibilities in relation to the EMMP and has the appropriate competencies and necessary training.*
- *Process for the monitoring of, audit of, management of non-compliance with, and review of environmental performance to ensure that the environmental performance outcomes and standards in the plan are being met.*
- *Independent verification scheme to ensure that the EMS remains adequate and that the equipment and methods, including equipment and methods for monitoring, remain in good repair and condition.*
- *Adopted risk management framework, including reference to relevant environmental performance standards.*

7.4.3 Operational planning and control

List and detail the operational mitigation measures necessary for ensuring effective protection of the marine values and other uses and users, both for Licence Holder's and subcontractor's operations.

Illustrate how the operational mitigation measures:

- are suitable;
- reduce the environmental effects to a level that is as low as reasonably practicable (ALARP)
- take into account the Environmental Impact Assessment and the Environmental Impact Statement;
- are based on the Best Available Scientific Evidence, Best Environmental Practices, Best Available Technology and Best Available Techniques.

For each operation mitigation measure or group of measures:

- establish measurement criteria, targets and indicators (ideally SMART);
- detail the relevant technical methods for measuring and monitoring;
- explain related communications of the criteria;
- explain how implementation will be ensured;
- explain monitoring and reporting;
- explain storage of related reports and documentation.

For the measures as a whole, take into account the following hierarchy of controls (likely via references):

- design of technical and engineering controls that eliminate or reduce the harmful effects;
- organisational and operational controls that eliminate or reduce the harmful effects;
- limiting of effects to the smallest area practicable;
- rehabilitating or restoring of effected ecosystems.

7.4.4 Effects and Management

In line with the EIS/ERA:

- Potential effects and risks that the activity may have on each environmental factor.
- Significance of the potential effects on the environmental factors, proposed measures to manage the effects, and management control procedures and response actions.
- Associated parameters to monitor and thresholds to manage.
- What management response there will be to any measurement that exceed thresholds.

7.4.5 Monitoring

By activity.

- The planned monitoring programmes (including the methodology, spatial locations, frequency and duration of monitoring activities).

- *Relationship between the monitoring programmes and the risk ranking of effects per the EIS/ERA.*
- *Specifying the role of monitoring, i.e., compliance, validation, long term (baseline). The later matching with the associated closure plan.*
- *Monitoring technology and system to be deployed, including details of the types of data to be collected and monitored. Justification for any non-real-time systems.*
- *Applicable quality assurance and quality control processes.*
- *Tests and regime to assess the performance and accuracy of the equipment used for the monitoring.*

Details of shipboard processing, treatment, and discharges, including a waste assessment and prevention audit, to good industry practice and ideally a recognised standard or protocol.

Location and planned monitoring and management of preservation reference zones and impact reference zones, and other spatial management planning tools.

Storage and reporting of results.

7.4.6 Mitigation and Adaption

By activity.

- *The adaptive management techniques in relation to management and mitigation measures and monitoring (where required) to meet the environmental management objectives.*
- *Planned procedures or process for, and review of the continual improvement of environmental performance.*

7.5 Incidents and Compliance Measures

List of events that are classified as reportable events under the EMS in relation to the activity.

Reporting protocols to the Service and Authority and other required regulators such as Ministry of transport, including involvement of independent auditors.

Details on the recording of incidents and severity levels.

Schedule of performance assessments of the plan and reporting on those assessments.

Draft performance assessment (annex) against the objectives and standards above.

Process and measures to be taken in the case of non-compliance with the plan, including potential variations to the plan.

7.6 Resourcing

Commitments regarding:

- *Provision of competent experts*
- *Assignment of team to implement the EMMP*
- *Minimum qualifications expertise and training for team members.*

7.7 Consultation

Report of stakeholder consultations undertaken by the applicant during the preparation of the plan.

Plans for future stakeholder consultation, including any Resource Group.

7.8 Annex of sections versus clauses

Table explaining where each requirement per Environment (Seabed Minerals Activities) Regulations, especially Schedule 8, may be found in the report.