The Marine Mining Code
of the International Marine Minerals Society:
a marine environmental initiative by and for
an emerging marine industry

Presentation prepared for
the Hawai'i Section
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INTERNATIONAL MARINE MINERALS SOCIETY   www.immsoc.org

- Founded in 1987
- Focus: marine minerals as resources for study and sustainable use
- Membership: worldwide – individuals from industry, academia, national and international governmental agencies
- Underwater Mining Institute – 39th annual meeting, Gelendzhik, Russia, 14-16 September 2009

Marine Mining Environmental Code

- **Industry initiated in 2000**
  - before full-scale mining occurs
  - anticipate & integrate environmental issues
  - facilitate financial and operational planning
  - self-regulation preferable
  - active industry expertise
  - Set bar high

- **Wide consultation on draft Code**

- **Code adopted in 2001**

- **Available on www.immsoc.org**

Marine Mining Code – Concept and Format

- **Concept:**
  - **set broad directions in a context of shared values rather than prescribing specific practices**
  - **provide benchmarks to develop and implement environmental management plans**
  - **offer advice on best environmental practices for marine mining**
- **Format:**
  - **Statement of Environmental Principles**
  - **Operating Guidelines**

Marine Mining Code: Target Audience and Principal Functions

❖ **Audience:**

▪ **Companies with an interest or active in marine mining, governments, intergovernmental and non-governmental organizations, communities, and other stakeholders at marine mining sites.**

❖ **Functions:**

▪ **Complement/improve existing and supplement inadequate environmental regulations**

▪ **Provide framework to appraise actual and proposed environmental practices by companies**

▪ **Establish consistent environmental 'playing field'**

▪ **Set transparent environmental reporting standards**

▪ **Provide mechanism for feedback on implementation and facilitate improvement of Code**

Marine Mining Code Principles

- To observe the laws and policies, and respect the aspirations, of sovereign governments and their regional sub-divisions, and of relevant international agencies, as appropriate to underwater mineral developments.

- To apply best practical procedures for environmental and resource protection, with consideration for future activities and developments within the area that might be affected.

- In initiating a project, to consider environmental implications through all stages from exploration through development and operations to eventual closure.

- To facilitate community partnerships on environmental matters.

- To maintain an environmental quality review program.

- To report publicly on environmental performance and implementation of the Code.

Marine Mining Code Operating Guidelines

- **Sustainable Development**
- **Environmentally Responsible Company Ethic**
- **Community Partnership**
- **Environmental Risk Management**
- **Integrated Environmental Management**
- **Company Environmental Performance Targets**
- **Environmental Improvement and Upgrading**
- **Rehabilitation and Decommissioning**
- **Reporting and Documentation**
- **Archiving**
- **Performance Reviews**

Marine Mining Code Review

- **The Code is intended to be a living, adaptive document, responsive to, e.g., experience with its implementation, improvements in best environmental practices, technological developments, and changes in applicable regulations.**

- **The Code is now under review by IMMS, in consultation with the marine mining industry and other stakeholders in marine mining operations.**

Marine Mining Code Review Schedule

- Revised draft posted/circulated for comments 31 January 2009

- Comments due 30 April 2009 to:
   ## pverlaan@gmail.com
Comments from Hawai'i MTS section most welcome

- Final draft posted 31 July 2009

- Revised Code proposed for adoption at IMMS AGM, UMI 39, 16 September 2009

Conclusion

- Hawaii is a marine pioneer – as usual – 1987 Mn crust mining EIS – still an excellent model
- 2008: seafloor massive sulphide mining EIS by Nautilus Minerals: www.cares.nautilusminerals.com
- The IMMS Code and its development process and experience are available to other marine industries
- IMMS welcomes your comments.

Thank you for your attention

SUMMARY OF OPERATING GUIDELINES

(Not included in oral presentation; added here for further information – 12 slides)

Sustainable Development

❖ Manage activities in a manner consistent with sustainable development of the operating area, such that economic, environmental and social considerations are integrated into decision-making and management.

Environmentally Responsible Company Ethic

❖ **Develop an environmentally responsible company ethic by showing management commitment, implementing environmental management systems, and providing time and resources to demonstrate requirements of the ethic to employees and contractors.**

Community Partnership

❖**Consult interested communities on their concerns, aspirations and values regarding development and operation of marine mining projects, recognizing that environmental, socio-economic and cultural values are linked.**

Environmental Risk Management

❖Apply **the precautionary principle overall** and risk management techniques site-specifically to identify environmental risks, their possible consequences, and their probabilities of occurrence.

Integrated Environmental Management

❖**Recognize environmental management as a company priority and integrate environmental management into all operations from exploration, through design and construction to mining, minerals processing, rehabilitation and decommissioning.**

Company Environmental Performance Targets

❖Set environmental performance targets **that meet and preferably exceed** the requirements of directly applicable legislation, regulations, licenses and permits.

Environmental Improvement and Upgrading

❖ **Implement management strategies to meet current and anticipated environmental standards and regularly review targets in the context of changing company and community needs, aspirations and legal requirements.**

Rehabilitation and Decommissioning

❖ Ensure that decommissioned sites are rehabilitated and left in a safe and stable condition, after taking into account beneficial uses of the site and surrounding seabed.

Reporting and Documentation

❖ **Demonstrate commitment to the Code's principles by reporting on the company's implementation of the Code and its environmental performance. Make reports publicly available, free of charge, particularly to regulatory agencies, the community and within the company.**

Reporting and Documentation

❖ **Reports should describe the Company's processes for:**

- **Communicating environmental policy**
- **Communicating environmental performance**
- **Community consultation and responding to concerns**
- **Code implementation**

Environmental Data Collection, Exchange and Archiving

❖ **Ensure free exchange and easily accessible availability of environmental information and collections gathered (other than proprietary technical information) for international scientific peer review and understanding and national and global heritage use.**

Performance Reviews

❖ **Regularly evaluate company performance under the Environmental Code by a team of qualified, externally accredited environmental auditors both from within and independent of the adopting company.**

Performance reviews are to be conducted and reported by the company at least every three years.