International Seabed Authority 14-20 Port Royal Street Kingston Jamaica

Potsdam, 24 June 2021

To: ola@isa.org.jm

## IASS Comments on the Draft Guidelines for the preparation of environmental management and monitoring plans

Dear Madam/Sir,

The Institute for Advanced Sustainability Studies (IASS), which has had observer status at the Authority since 2017, is pleased to provide comments, as annexed to this cover letter, on the *Draft Guidelines for the preparation of environmental management and monitoring plans*, open for public consultation until 3 July 2021 (https://isa.org.jm/mining-code/standards-and-guidelines).

We provide express consent for this document to be uploaded to the Authority's website and for wider dissemination. The following persons have contributed to this document: Dr Sabine Christiansen, Pradeep Singh, Dr Aline Jaeckel, and Sebastian Unger.

If you have any questions, kindly contact us at Sebastian.Unger@iass-potsdam.de. We thank you for your kind attention.

Yours sincerely,

Sebastian Unger

Lead, Ocean Governance Research Group

Institute for Advanced Sustainability Studies e.V. (IASS)

Board of Directors: Prof. Dr Patrizia Nanz, Scientific Director Prof. Dr Mark G. Lawrence, Scientific Director Jakob Meyer, Administrative Director Prof. Dr Ortwin Renn, Managing Scientific Director The minimum number of directors jointly authorised to represent the Institute at any one time is two. Court at which the Institute is registered: Amtsgericht Potsdam, VR-Nr.: 7365

## **TEMPLATE FOR COMMENTS**

		Document reviewed
Title of t	the draft	Draft Guidelines for the preparation of environmental management and
being re	eviewed:	monitoring plans
		Contact information
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E-mail:		Sebastian.Unger@iass-potsdam.de
		General Comments
Rev	iew of EMM	<b>P</b> : Draft exploitation regulation 11 requires all Environmental Plans to be subject to
		ut the EMMP draft Guideline fails to mention such review. We strongly suggest
•		der review into the Guideline.
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		pports adaptive management without setting clear limits and rules around when
adaj	ptive manag	ement is appropriate and when it would lead to a watering down of environmental
prot	tection. The	table below makes specific suggestions for improvements.
	draft Guidel	ine should include considerations around <b>climate change</b> to ensure EMMPs factor in
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		management process, the management procedures are changed in steps un <u>til</u> <u>monitoring shows that the desired outcome is obtained.</u> The monitoring program has to be designed so that there is <u>statistical confidence in the</u> <u>outcome</u> . In adaptive management the goal to be achieved is set, so there is no uncertainty as to the outcome and conditions requiring adaptive management do not lack certainty, but rather they establish a regime which would permit changes, within defined parameters, to the way the outcome is achieved" (See Newcastle & Hunter Valley Speleological Society Inc. v Upper Hunter Shire Council [2010] NSWLEC 48 (emphasis added).)
		Suggest adding the following bullet point to page 26.
		<ul> <li>Suggest adding the following bullet point to para 26:</li> <li>Adaptive management should only be used if it is capable of reducing risk and uncertainty within reasonable time scales and before serious harm occurs. It is unsuitable for activities that must be measured on long-term scales and for any activities that can cause serious and irreversible harm quickly.</li> </ul>
		<ul> <li>Adaptive management can only be applied where the contractor and the ISA have been able to set clear and measurable environmental goals, objectives, targets, indicators, and thresholds and designed a monitoring programme that can demonstrate, with statistical confidence, that the strategic objectives, targets, indicators, and thresholds are achieved.</li> <li>Environmental baselines and monitoring capacity are both essential prerequisites for adaptive management</li> </ul>
		See also: A Jaeckel, T Morato (2017) ' <u>Adaptive Management' in First Report of the</u> <u>CODE Project – Developing ISA Environmental Regulations</u> . PEW Charitable Trusts; pp. 23-33
6	273-284	Monitoring Program: Suggest adding the following bullet point to para 34:
	275 201	<ul> <li>An evaluation of results that compares the exploitation monitoring results with the exploration baseline to quantify impact.</li> </ul>
		The monitoring programme should also mention a minimum number and operational duration of the monitoring stations as well as statistical robustness. At present, only general considerations are requested (para.82, under "Additional considerations") and statistical power has to be "considered" only in IRZ and PRZ monitoring (in Annex B).
7	302	<i>"37. The specific details relating to each potential significant Environmental Effect will vary based on the planned activities, management objectives, character and magnitude of potential Environmental Effects, site characteristics, <del>the techniques to be used, and available equipment and resources (including financial and human).</del></i>
		Suggest adding the following sentence: "Any variance in specific details relating to each potential <b>significant Environmental Effect</b> should not be due to a difference in effort, such as the techniques used, available equipment or other resources (including financial and human)."

7	317	<b>Compliance monitoring</b> (para. 37): To provide a level playing field, all compliance monitoring should be conducted periodically with the same timing for all projects to ensure that the prescribed mitigation measures are effective in reducing the residual impacts to acceptable levels.
	327	Long-term monitoring: The details of long-term monitoring (para. 38) may be developed in accordance with the Closure Plan, but their time-scale beyond the closure of the mine has to be determined by the presence of statistically significant differences between IRZ and PRZ due to environmental impacts of mining activities (e.g. to allow for final estimation of reparations by the contractor). Furthermore, the "Standard and Guidelines on Closure Plans" appears to be still outstanding.
8	347	Paragraph 41 should require the collection <b>and storage</b> of samples (as required during exploration monitoring, for example) for future and external studies.
9	389	Monitoring should not only focus on evaluating the characteristics of the <b>plumes</b> but also their effects on the marine environment.
9	398	Performance assessment should be conducted independently, not by the contractor.
10	455-461	The <b>trigger values</b> should be determined through independent scientific assessment, not by the contractor themselves.
11	493-502	Suggest adding a more specific guideline for the <b>frequency of performance</b> assessments. A rigorous schedule of performance assessments should not depend on <i>"the</i> <i>nature and scale of the impacts and risks of the</i> [] <i>impacts and risks of the</i> <i>activity, with consideration given to the level of confidence in the cause-effect</i> <i>relationship for each risk/impact"</i> but instead apply to all mining projects in the same way to provide a level playing field for all contractors. These performance assessments should take place every 3-5 years by an independent assessor.
11	506	Questionable whether non-scheduled <b>performance assessments</b> (para. 59) make sense when they are based entirely on information provided by the contractor.
12	524	The prescription to the <b>area-based management tools</b> that are key to environmental impact assessment and to contractor performance assessment (para. 61) appears to fall short of cardinal information, e.g. how the contractor is to fit IRZ and PRZ into the highly fragmented claim areas for massive sulphides (PMS) and cobalt crusts (CRC).

12	532	The section on <b>mining discharges</b> (paras 63-71) should clearly prohibit the dumping of chemical additives (e.g. flocculation agents etc.).
	543	The Mining Discharge Guideline appears to be still outstanding.
14	581	Unclear what "Guideline 5" is in para. 68.

Comments should be sent by e-mail to ola@isa.org.jm