Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group:

Informal Working Group on the protection and preservation of the marine environment

2. Name(s) of Delegation(s) making the proposal:

Canada

3. Please indicate the relevant provision to which the textual proposal refers.

Annex IV 2.6

- 4. Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.
 - 2.6 Ecologically and/or Biologically Significant Areas (EBSAs) and Area-based management tools

Describe any relevant area-based <u>designation and/or</u> management established under subregional, regional or global processes and the scope, geographical coverage, <u>supporting data</u>, and objectives of such tools. Also describe any relevant area-based <u>designation and/or management</u> in adjacent areas under national jurisdiction.

5. Please indicate the rationale for the proposal. [150-word limit]

Canada suggests including "Designation and/or" in the body of the text, so it would read "describe any relevant area-based designation and/or management established" at the two areas of the text this applies. Ecologically and/or biologically significant areas (known as EBSAs) are included in the section header but not in the body text, so inclusion of 'designations' will cover these and other management measures. Inclusion of 'supporting data' will ensure that the supporting data that is used to make such designations are known.

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group:

Informal Working Group on the protection and preservation of the marine environment

2. Name(s) of Delegation(s) making the proposal:

Canada

3. Please indicate the relevant provision to which the textual proposal refers.

Annex IV 3.1.1. Location

4. Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.

3.1.1 Location

Include coordinates of the project area, detailed location maps (drawn to scale), showing the relevant sites proposed as Contract Area and Mining Area and any other features that can be usefully marked upon the map at the time of application, including the locations of impact reference zones and preservation reference zones as well as locations of other nearby contract areas or known seabed infrastructure. Provide general location of the project on a regional map.

Areas of Particular Environmental Interest, Sites/Areas in Need of Protection, or other sites designated for particular status under the rules, regulations, procedures, Standards, or Regional Environmental Management Plans of the Authority. This may also include sites of other competent authorities, as well as information on any other known conservation or spatial measures and other uses of the marine environment (e.g. submarine cables and pipelines, long-standing scientific research sites and established fishing areas) in the vicinity of the project area. The map shall also identify the nearest coastal States and States that may be affected by mining activities as determined through particle tracking modelling or other means of establishing dispersal kernels or connectivity paths, and any adjacent ISA contract sites. This map may be the same as the map supplied in Annex 1 Section II.

5. Please indicate the rationale for the proposal. [150-word limit]

Canada notes that the International Seabed Authority has used the term "Areas in need of Protections (AINPs), in the context of regional environment management plans, and therefore we would suggest including a revision to the first sentence so it reads as "Area of particular environmental interest, sites/areas in need of protection". Canada thinks that these assessments should include modeling of potential downstream effects of the activity conducted in 3D at the depth where the activity will occur (so likely surface and bottom). This will indicate the most likely direction of downstream impacts.

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group:

Informal Working Group on the protection and preservation of the marine environment

2. Name(s) of Delegation(s) making the proposal:

Canada

3. Please indicate the relevant provision to which the textual proposal refers.

IV 3.3.4

4. Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.

3.3.4 On-site processing

Provide a <u>detailed</u> description of the <u>plan for</u> processing of the mineralized material that will occur within or above the Area, including water column activities (such as riser pipe transfer) and shipboard processing. Include a description of any methods to be used on the sea floor to separate the mineralized material from surrounding sediment and/or rock, as well as any dewatering and separation of the mineralized material at the surface. This section should also cover any disposal of seawater/fines and include the spatial layout of the activities over time which will provide a comprehensive map of the disturbance area from which to assess harm to the Marine Environment.

5. Please indicate the rationale for the proposal. [150-word limit]

Canada would recommend the inclusion of more detail in the last sentence of paragraph one, related to disposal of seawater/fines. We would suggest additional language requiring the inclusion of maps detailing extraction, discharge and spoil deposition activities. This will further support assessment of potential harm to the Marine Environment.

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group:

Informal Working Group on the protection and preservation of the marine environment

2. Name(s) of Delegation(s) making the proposal:

Canada

3. Please indicate the relevant provision to which the textual proposal refers.

IV 4.6

4. Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.

4.6 Oceanographic setting

Provide a description of oceanographic aspects including but not limited to thermohaline conditions, optical properties and turbidity, currents regime, tides, waves, turbulence, and oceanographic fronts, eddies and climate change projections, including spatial variation at and above the site. Seasonal variability is an important element. Detail is required on the regional setting, as well as the specific mining site and impact area, and should include changes in physical conditions and processes according to depth and horizontal distance from the proposed mine site to boundaries of the Impact Area. For activities conducted in areas of seamount chains, hydrothermal vent fields, trenches and canyons or other areas with complex bathymetry, oceanographic currents will be influence by topographic forcing and will require a more detailed oceanographic assessment, including targeted sampling programs, to determine the impact area. Climate change projections should also be included.

5. Please indicate the rationale for the proposal. [150-word limit]

Canada thinks it is critical that there is an understanding these types of areas will require a more detailed oceanographic review over areas such as an abyssal plain.

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group:

Informal Working Group on the protection and preservation of the marine environment

2. Name(s) of Delegation(s) making the proposal:

Canada

3. Please indicate the relevant provision to which the textual proposal refers.

Annex IV Section 15

4. Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.

15. Study team

Outline the people involved in carrying out the environmental impact assessment studies and in writing the Environmental Impact Statement. If independent scientists or other experts were involved in any of the work, they should be listed. The names, <u>current and validated contact information</u>, occupational qualifications and their role in the generation of the Environmental Impact Statement of such people should also be included. <u>A statement that those individuals so named concur with the content of the report should be included.</u> Any conflict of interest must be identified, disclosed in detail in this section including the way it was and continues to be managed.

5. Please indicate the rationale for the proposal. [150-word limit]

Inclusion of a statement by the study team noting their concurrence with the content of the report will bring accountability and transparency to the process.

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council@isa.org.jm.

1. Name of Working Group:

Informal Working Group on the protection and preservation of the marine environment

2. Name(s) of Delegation(s) making the proposal:

Canada

3. Please indicate the relevant provision to which the textual proposal refers.

Annex IV, Executive Summary (d)

- 4. Kindly provide the proposed amendments to the regulation or standard or guideline in the text box below, using the "track changes" function in Microsoft Word. Please only reproduce the parts of the text that are being amended or deleted.
 - (d) Measures to mitigate anticipated and cumulative environmental impacts, <u>-support recovery of the marine environment from impacts</u>, and a description of any anticipated and cumulative residual impacts, that may occur despite Mitigation, noting how the mitigation hierarchy is being employed in assessing impacts;

Alt (d bis) A description of any residual impacts;
Alt (d ter) Expected recovery rate of the marine environment impacted;

5. Please indicate the rationale for the proposal. [150-word limit]

Our preference is for the original (d) paragraph, which provides additional level of detail. We would recommend including (d ter) as it is also important to include the information on expected recovery rate.