

**TEMPLATE FOR SUBMISSION OF TEXTUAL PROPOSALS DURING THE 27TH SESSION:
COUNCIL - PART II**

Informal Working Group - Environment

Please fill out one form for each textual proposal which your delegation(s) wish(es) to amend, add or delete and send to council2022@isa.org.jm.

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

Submitted by WODA

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

Annex IV, Part 4

3. 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. Description of the existing
physiochemical–oceanographic
environment**

Give a detailed account of knowledge of the environmental (physical, chemical, geological, oceanographic) conditions at the mine site~~impact area~~, which should include information from a thorough literature review as well as from on-site studies. The Guidelines on baseline data collection shall guide the drafting of this section by providing information on the minimum amount of detail required for an acceptable baseline description. The account will provide the baseline description of the physical, chemical, geological and oceanographic conditions against which impacts will be measured and assessed. The detail in this section is ~~expected to be~~ based on a prior environmental risk assessment that will have identified the main impacts, and thus the elements that need to be emphasized in the environmental impact assessment.

4.1 Key messages

Provide an overview of key content (this information can be provided in a box that contains up to 6 bullet points on either the main aspects covered or the main findings).

4.2 Regional overview

Describe the general baseline environmental conditions of the site and impact area, including but not limited to the physical, chemical geological and oceanographic setting within a broader regional context and ~~refer~~–in accordance with to the applicable Regional Environmental Management Plan if any. This should be brief section that includes a map. A more detailed site-specific and impact area description will be provided in accordance with the sections below.

4.3 Studies completed

Describe any prior research/Exploration (including methods used for completing the studies based on Best Available Techniques) that could provide relevant information for this Environmental Impact Statement and future activities. These should be detailed in the appendices, and the environmental reference baseline data collected for the Authority, as outlined in the exploration contract conditions, should accompany the Environmental Impact Statement.

4.4 Meteorology and air quality

Provide a general overview of ~~meteorology~~~~climatology~~ (e.g., wind directions and speeds, seasonal patterns). This section may be most relevant to surface operations.

4.5 Geological ~~properties and habitat classification setting~~

Describe the nature and extent of the mineral resource and bedrock within a broader geological context. Describe the geological petrographic and geomorphological setting of the site, including high-resolution bathymetric maps and sedimentation rates, and refer to submarine features such as hydrothermal vents, seeps and seamounts. ~~Provide a baseline description of seabed substrate composition characteristics (to benthic subsurface layers), including specific gravity, bulk density, grain size, dissolved and particulate organic and inorganic carbon, nutrients, carbonate, physical and chemical composition of pore water, redox regimes, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics. Substrate composition shall be described to a depth below the seafloor prescribed in the relevant Standard or Regional Environmental Management Plan.~~

4.6 Physical oceanographic setting

Provide a description of oceanographic aspects such as ~~thermohaline conditions, optical properties and turbidity, currents regime, tides, waves, turbulence, and oceanographic fronts and eddies.~~ Seasonal variability is an important element. Detail is required on the regional setting, as well as the specific site, and should include changes in physical conditions and processes according to depth and horizontal distance from the proposed mine site (near-field, far-field).

4.7 Chemical oceanographic setting

Provide a description of water mass characteristics at the site and above the site at various depths of the water column, including the structure and development of the oxygen minimum zone in particular near the sea floor (up to 200m above bottom), that includes nutrients, particle loads, temperature and dissolved gas profiles, vent-fluid characteristics if applicable, turbidity, etc.

~~Provide a description of chemical oceanographic properties at the site and above the site throughout the water column, that includes nutrients, particle loads, temperature, oxygen, salinity, density, particulate and dissolved organic matter, pH, chemical composition, including concentrations of trace metals, dissolved gas profiles, depth range and characteristics of oxygen minimum zone, redox regimes, carbonate saturation, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability of these properties, and vent fluid characteristics if applicable. Provide projections of how and where these aspects are likely to change over the next 50 years (or time period relevant to the contract term and subsequent Closure period.)~~

4.8 Seabed substrate characteristics

Provide a description of seabed substrate composition, including physical and chemical properties (e.g., sediment composition, pore-water profiles, grain size, sediment mechanics, ~~dissolved and particulate organic and inorganic carbon,~~

nutrients, carbonate, redox regimes, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics).

4.9 Natural hazards

Provide a description ~~of~~ and trend analysis of variation related to applicable potential natural hazards for the site, including volcanism, seismic activity, cyclone/hurricane ~~trends~~, tsunamis, etc.

4.10 Noise and light

Provide a description of ambient noise and light, including light intensity, backscatter, and attenuation, and spatial (horizontal and vertical) and temporal (seasonal and interannual) variability in these characteristics, indicating pertinence to fauna where known, and the influence of existing Exploitation, Exploration and maritime activity.

4.11 Greenhouse gas emissions and climate change

Provide a description of the level of gas and ~~chemical- fluid~~ emissions from both natural and anthropogenic activities in the Area, as well as those affecting sea floor and water-column chemistry. Effects of mining on ocean climate mitigation functions and services should be described (including any anticipated alteration of CO2 uptake and sequestration, or nutrient cycling).

4.12 Summary of the existing physicochemical environment

Summarize key findings and include notes on special considerations for hydrothermal vents, seeps, ridges, seamounts and oceanographic fronts or eddies, and other geological and oceanographic features described in this section. It is anticipated that this summary will be up to one page and be more extensive than the key messages section.

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

- The word “oceanographic” in the title is not needed, also it is listed as one of the things to be studied with respect to defining the environmental conditions.
- We believe that sampling and analysis details should be included in guidelines, not regulations.