4.0 Potential Impacts and Measures to Reduce Them

This Chapter of the EIA focuses on identification of the specific environmental and social impacts likely to be associated with the Project, as well as the specific management actions and initiatives that RMGC will undertake to ensure that 1) the environmental and social benefits of the project are maximised, and 2) potentially negative environmental and social impacts are minimised. Any potential transboundary impacts are introduced within the narrative section for each major impact category (Section 4.1 through 4.10); more detailed discussion is provided in Section 10, Transboundary Impacts.

The narrative sections provide a comprehensive description and evaluation of potential impacts, which are defined as those impacts, which have a reasonable probability of occurring under standard conditions, without the implementation of mitigation measures. The presentation of potential impacts is consistent with the level of detail suggested by Romanian legislation and relevant international guidelines, including:

- Romanian government decision No. 918 on August 22, 2002 Regarding the Setting-up of the Framework Procedure for EIA and the Approval of the Public or Private Project List Subject of this Procedure;
- Ministry of Waters and Environmental Protection Order No. 860 of 26.09.2002. Approval of the Environmental Impact Assessment and the Issuance of Environmental Agreement Procedures (M.O. 860);
- Ministry of Waters and Environmental Protection Order No. 863 of 26.09.2002. Approval of the Methodological Guidelines Applicable to the Stages of the Environmental Impact Assessment Framework Procedure (MO 863);
- The Scoping Report compiled in accordance to the M.O. 860; and considering the proposals / comments issued by the Technical Review Committee and the Competent Authority of Hungary, in accordance with the Espoo Convention.
- European Union Directive 2001/42/ec of the European Parliament and of the Council of the Assessment of the Effects of Certain Plans and Programmes on the Environment; and,
- IFC Operational Policy (OP) 4.01, “Environmental Assessment” (IFC, October 1998).

The narrative sections in Chapter 4 are introduced with tables that present the potential impacts and sources, proposed mitigation measures, and cross-references to applicable management plans for specific details of mitigation implementation. Such impact tables are in a common format for all narrative sections, with the exception of Section 4.2, since MO 863 invokes more detailed requirements for the presentation of air quality impacts.

The subsequent sections of each narrative provide an evaluation of impacts, broken down into subheadings consistent with MO 863 guidance. Typically, these include discussion of:

- Baseline conditions;
- Potential sources of pollution (where applicable) for each project phase;
- Impact identification by project phase; and,
- Mitigation measures.

The baseline sections characterise the conditions for respective environmental and socio-economic features prior to the implementation of the project.

The impact identification section provides a detailed evaluation of potential impacts. Each potential impact is presented by phase of the project (construction, operation, and decommissioning/closure). Impacts are analysed with reference to baseline conditions, i.e. the difference between the environmental conditions expected if the Roşia Montană Project

was not to proceed, and those expected as a consequence of it. Impacts are also evaluated in terms of Romanian regulations, international guidelines, and industry best practice. Discussions on certain potential impacts that are unlikely to occur, but could result in significant negative impacts if they did, are presented and evaluated separately in Chapter 7**,** "Risk."

The mitigation discussions generally present the measures that will be implemented to address identified potential impacts. Mitigation measures are defined as specific engineered systems or project features, management actions, and other programs, commitments, and procedures developed to manage or minimise impacts. Additionally, evaluation of the anticipated post-mitigation impact will typically be discussed based on quantitative assessment (e.g. modelling), international industry experience, or as interpreted through best professional judgement.