Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	265
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	Cluj Napoca, 07.08.2006
RMGC internal unique code	MMGA_0549
Proposal	The questioner reads 2 paragraphs from the EIA regarding the pollution in the area. The questioner presents an excerpt from the Community Sustainable Development Management Plan, Chapter 5, page 43 (Community Definition). The questioner makes the following observations and comments: The statement made in the EIA is partially true, but it doesn't reflect the reality from Rosia Montana. There is indeed a level of water pollution, but only in the industrial area, which represents only a small part of the Rosia Montana commune (approximately 95 ha) compared to the 4200 ha of the commune.
Solution	The quality of water in the area affected by the Project is significantly affected by historic mining activities. These negative impact forms on the environment refer to the ones generated by the present ROŞIAMIN operation, which is located especially in the Seliştea şi Roşia valleys and it is managed by a state-run branch of Minvest. The Valea Corna streams were also affected by present and historic mining activities. The impacts have resulted from waste rock accumulations, mine adit discharges, and runoff from open pit mining. The larger and more prominent of these features are shown on Exhibit [4.1.4], *Existing Waste Rock Stockpiles* from Report on the Environmental Impact Assessment (EIA). Both the larger waste rock accumulations associated with the more recent mining operations shown on Exhibit [4.1.4] from EIA, and numerous smaller accumulations left over from the mining dating back more than a thousand years, contribute to the pollutant loading in the streams, which at the moment, due to the lack of control and treatment processes end up into the regional and national watershed. The main Project influence on the water environment is a positive one, in that the extensive water treatment measures incorporated in the design of the Project, which include interception and treatment of ARD-contaminated waters that are already present, will result in an improvement to water quality downstream in the Roşia, Corna, Abrud and Arieş valleys. Releases from the Project, rather than the currently uncontrolled contaminated surface drainages, will only occur in compliance with the NTPA 001/2005 discharge standards. In the absence of the Project (the zero alternative), the current situation will continue. Furthermore, the physical water management of the Project will also improve ecological conditions by: ▪ Reducing levels of suspended solids in the river systems; ▪ Maintaining minimum biological flows in the Roşia and Corna valleys, especially important during periods of drought. Residual impacts (including positive impacts) are described further in Section [7] from EIA.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	379
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	Bucuresti, 21.08.2006
RMGC internal unique code	MMGA_0783
Proposal	What is the probability of no ARD water being generated in the tailings management facility? What is the probability of ARD water to have no impact upon the environment? For how long would ARD water be generated and how long would ARD water treatment plants need to operate?
Solution	In adequate management conditions, the probability for Acid Rock Drainage (ARD) to be generated into the tailings management facility is low. The tailings in the Tailings Management Facility (TMF) will have the potential to generate ARD. However, for ARD to be generated, sulfurs, oxygen and water must be present. During the operation phase of the project, there will be no favorable conditions for ARD to be generated as a result of fast accumulation of saturated tailings in the TMF, which will limit exposure of sulfurs to oxygen. Moreover, the treated water that will be contained by the tailings will be slightly alkaline, which will reduce even more the ARD generation. The real risk for ARD generation only occurs after the depositing of tailings. This risk will be mitigated by adequate closure of the TMF, by means of a protective earth layer that will limit the oxygen and water infiltrations into the tailings. S.C Roşia Montană Gold Corporation S.A (RMGC) is striving to make sure that ARD will have no impact on the environment. The taken measures also include additional control features of sources (i.e. waste rock segregation), retention and treatment, as applicable. RMGC has committed to perform the discharge of waters generated by the project (including ARD) only if they comply with the discharge limits imposed by the technical Standards regarding collection, treatment and discharge of domestic wastewater, NTPA 001/2005. When the duration and level of ARD generation will be discussed (and thus, the period of time that the treatment is required for), one must keep in mind the fact that the mining project will remove most of the rock surfaces that currently generate ARD. The necessary duration for treatment and management of water, together with other long-term maintenance measures, is estimated in Section [4.7] of the Mine Rehabilitation and Closure Management Plan. However, it is difficult to asses the certain required treatment period. Several technologies, among which the sources control, in-pit treatment and semi-passive treatment systems can be used separately or in combination in order to eliminate the necessity of long-term usage of the treatment plant. However, these options will have to be assessed and proved. The following conclusions can be reached following the TMF closure model results: At the end of operations and during the first years of closure, a seepage rate of 77m^3/h is expected based on water balance models. If this rate remains constant, the time needed to flush the tailings pore volume of 63 million m^3 once is of the order of 90 years. In order to bring the seepage quality to a level so that it can be discharged without treatment, at least 3-4 pore volumes will have to be exchanged, provided there are no additional dissolution or mobilization processes within the tailings body. It follows from this model that the seepage would require continued treatment far into the foreseeable future. But, as a result of rehabilitation, with an infiltration-minimizing cover placed on the tailings, the amount of seepage water collected at the Secondary Containment Dam sump decreases, while the characteristic time needed to flush the tailings body increases correspondingly. It is anticipated that with the cover described in Section [4.5], the infiltration will decrease to a range of 10-25% (or 80-200 mm/a) of the annual precipitation, with an according drop of the seepage rate. Thus, the annual load of contaminants released by the TMF dam is smaller, but the time frame over which treatment will be needed to achieve all NTPA 001/2005 limits increases inversely proportional to the infiltration rate.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	392
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	Bucuresti, 21.08.2006
RMGC internal unique code	MMGA_0828

Proposal	In case of a serious ecological accident, how many rivers will be polluted? How many species of birds and fish will be affected? The questioner wants to know exact figures and amounts.
Solution	We appreciate that there is concern about downstream river basins potential impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no significant impact in downstream river basins or transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modeling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modeling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. **For more information, please see included in the Annex 5.1 the Fact Sheet presenting the INCA**

modeling work, entitled "*Mureş River Modeling Program*" together with the full modeling.

The impact on the flora and fauna referring to will occur at local level only but not leading to the disappearance of any of the species. The mining project has been conceived from beginning to accomplish the conditions and norms imposed by national and European legislation in the field of environment protection. Therefore, even if there are species listed in the Habitat Directive, within the perimeter to be impacted, these do not meet the criteria in order to classify this area as one of high conservation importance. This fact has resulted also from the refusal of the SCI proposal (sites of communitarian importance) submitted for this area.

The impact of the proposed project on environment is significant, the more so as it follows to overlapp the preexisting one. But, the investments foreseen for the ecological reconstruction / rehabilitation of the Roşia Montană area in order to solve the complex actual environments issues are possible only after the implementation of some economic projects able to generate and guarantee the commitment to direct and responsible actions and principles substantiating the sustainable development concepts. Only a sound economic system may approach clean processes and technologies, in total respect towards the environment, capable to solve including previous effects of anthropic activities.

The baseline documents of the project present an objective reasoning of its implementation given the extremely complex environmental commitments in the Roşia Montană area.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	462
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	Arad, 25.08.2006
RMGC internal unique code	MMGA_0987
Proposal	What does the investor propose? Pollution, but within European limits, unless an accident occurs. It has been said in the presentation that such an accident can only happen once in 10000 years. What does that mean? Will it happen in the first year? In the last year? The pollution that will result will affect the Mures River.
Solution	"*What does the investor offer?*" The investor proposes an economic development project, with proved benefits in the social field. Taking as starting point a traditional activity in the area, the project proposes a model regarding further development of this activity, through the responsible mining of natural resources on the basis of best available techniques and complying rigorously with legal requirements in force regarding the environmental protection. As for the statement regarding the pollution "*within European limits*", we mention that the values (concentrations) admitted for pollutants in the surrounding environment (air, water or soil) are established on the basis of scientific knowledge in order to avoid, prevent or reduce the harmful effects on people health or environment and represent the requirements stipulated by Romanian legislation harmonized with communautaire acquis of environment. As Member State of European Union, Romania has, also, monitoring and reporting obligations on the compliance with the transposed legislation, and this fact represents an additional guarantee regarding the observance of legal provisions. Regarding the maximum probable precipitations / calculation assurances used for the design of the tailings management facility, we mention its classification in the class I of importance as per STAS 4273 / Hydrotechnical Constructions – Classifying into importance classes and, respectively, in category B as per NTLH - 021 / Technical Norms for Hydrotechnical Works - according to the report on the EIA study, Vol.2, Section 2.4.1.2, p.16. The document regarding the best available techniques for the tailings slurry and waste rock management from mining activities (BREF MTWR) stipulates in Chapter 5: *Best available techniques for tailings slurry and waste rock management from mining activities*, at Paragraph "design of the dam" at page 430, that BAT is: "utilization of a probable maximum precipitation (PMP) with the occurrence probability of 1 at 5,000 – 10,000 years for the dimensioning of the emergency discharge capacity". This PMP was chosen in order to dimension the tailings management facility for the storage of two consecutive PMPs. Considering water recycling under normal operation condition, the impact on surface water streams, including Mureş river, is not possible only in extreme operation conditions, for example in the case (extremely unlikely to occur) of a controlled overflowing of the water from tailings management facility as a result of the occurrence in 24 hours of 2 PMPs and of a precipitation with an occurrence probability of 1:10 years. In this moment the water volume from pond would reach the design level of the spillway for flood waters (with protection purpose of the dam crest against erosion in such extreme conditions). The probability for this succession of events to occur during the project lifetime is higher than 1:10 million (extremely low). The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report

on impacts on water quality downstream of the project and into Hungary. This work includes modeling of water quality under a range of possible operational and accident scenarios and for various flow conditions.

The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană.

The modeling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it.

Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary.

The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions.

For more information, please see included in the Annex 5.1 the Fact Sheet presenting the INCA modeling work, entitled "*Mureş River Modeling Program*" together with the full modeling.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	465
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	Arad, 25.08.2006
RMGC internal unique code	MMGA_0990
Proposal	The questioner makes the following comments and observations:The Project has been very nicely presented but nobody can guarantee that the Mures River won't get polluted by the heavy metals resulting from the proposed mining operations. Romania has had problems with the neighbouring countries in the past, and the local people do not want this to happen anymore. Until 1996, Chernobyl was also said to be safe, and we all know what happened there.
Solution	The project design also reduces the risk of large scale accidents to a very low level and this is explained in Chapter 7 (Risk Cases). Because of the mitigation measures adopted (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF below 10 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution that could significantly affect sensitive receptors in Hungary. It is also worth noting that because it is designed in line with the applicable EU Directive, the proposed Roşia Montană TMF design avoids the problems that arose at Baia Mare, and it is a significantly safer design so that failure is conceivable under conditions that exceed the known long-term extremes of weather and seismic activity. Under such conditions, sensitive receptors downstream of the project will likely be heavily impacted by events that will be unrelated to the Roşia Montană gold project, e.g. extreme flood conditions or earthquake-induced land instability. The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modeling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modeling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river

water before it crosses into Hungary.

The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions.

For more information, please see included in the Annex 5.1 the Fact Sheet presenting the INCA modeling work, entitled "*Mureş River Modeling Program*" together with the full modeling.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	466
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	Arad, 25.08.2006
RMGC internal unique code	MMGA_0995
Proposal	The speaker doubts that the heavy metal levels registered in the Rosia Montana, as shown in the EIA report, are correct, and points out the fact that not even Ruschita registers such values.
Solution	Starting with the development design stage, RMGC has committed to comply with the Romanian legislation, the EU Standards and International Guidelines and Recommendations; this is why Best Available Techniques (BAT) and Best Management Practice (BMP) were considered by the design criteria; the result of these commitments is represented by the environmental permit documentation that contains, beside the Report on the Environmental Impact Assessment (EIA) and the Baseline Reports developed during 1999-2006, the Management Plans prepared during the assessment of environmental impact process, which is probably news in Romania as far as the environmental regulation process is concerned. The statement is not founded because – the baselines were described in [11] Reports that contain detailed analysis on the quality of environmental factors, heritage and health of population at site and in the area impacted by the Project. These reports are included in Volumes 1-6 of the documentation submitted to the Ministry of the Environment and Water Management on the 18th of May, 2006; the document was structured in three major sections: • Baseline Reports volumes [1- 6]; • Report on Environmental Impact Assessment Study (EIA) volumes [7-20] that contains within each chapter/section, a synthesis of baselines that constituted the starting point of the impact assessment process in order to estimate and quantify potential impact; • Management Plans from A to M, included in volumes [21- 33] that present the measures proposed in order to prevent/mitigate/eliminate potential impact as a result of the implementation of the RM Project. As per the legal provisions in force (Government Decision 918/2002 repealed by Government Decision 1213/2006 and Ministerial Order 860 /2002 and Ministerial Order 863/2002, as subsequently amended and supplemented), transposing the Directive on Environmental Impact Assessment 85/337/EEC, RMGC was obliged to submit only the EIA.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	1356, 1357
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 110300/24.08.2006, No. 110302/24.08.2006
RMGC internal unique code	MMGA_1182

Proposal

RMGC does not comply with the EU Water Directive.

Solution

An engineered liner is included in the design of the Tailings Management Facility (TMF) basin to be protective of groundwater. Specifically, the Roşia Montană Tailings Management Facility (TMF or "the facility") has been designed to be compliant with the EU Groundwater Directive (80/68/EEC), transposed as Romanian GD 351/2005. The TMF is also designed for compliance with the EU Mine Waste Directive (2006/21/EC) as required by the Terms of Reference established by the MEWM in May, 2005. The following paragraphs provide a discussion of how the facility is compliant with the directives.

The TMF is composed of a series of individual components including:

- the tailings impoundment;
- the tailings dam;
- the secondary seepage collection pond;
- the secondary containment dam;
- the groundwater monitoring wells/extraction wells located downstream of the Secondary Containment dam.

All of these components are integral parts of the facility and necessary for the facility to perform as designed.

The directives indicated above require that the TMF design be protective of groundwater. For the Roşia Montană project (RMP), this requirement is addressed by consideration of the favorable geology (low permeability shales underlying the TMF impoundment, the TMF dam, and the Secondary Containment dam) and the proposed installation of a low-permeability ($1x10^{-6}$ cm/sec) recompacted soil liner beneath the TMF basin. Please see Chapter 2 of EIA Plan F, "The Tailings Facility Management Plan" for more information.

The proposed low permeability soil liner will be fully compliant with Best Available Techniques (BAT) as defined by EU Directive 96/61 (IPPC) and EU Mine Waste Directive. Additional design features that are included in the design to be protective of groundwater include:

- A low permeability ($1x10^{-6}$ cm/sec) cut off wall within the foundation of the starter dam to control seepage;
- A low permeability ($1x10^{-6}$ cm/sec) core in the starter dam to control seepage;
- A seepage collection dam and pond below the toe of the tailings dam to collect and contain any seepage that does extend beyond the dam centerline;
- A series of monitoring wells, below the toe of the secondary containment dam, to monitor seepage and ensure compliance, before the waste facility limit.

In addition to the design components noted above specific operational requirements will be implemented to be protective of human health and the environment. In the extremely unlikely case that impacted water is detected in the monitoring wells below the secondary containment dam, they will be converted to pumping wells and will be used to extract the impacted water and pump it into the reclaim pond where it will be incorporated into the RMP processing plant water supply system, until the compliance is reestablished.

With respect to your comments made as regards a presumptive infringement of the provisions of Government Decision No.351/2005 ("GD 351/2005"), there are several aspects to be taken into consideration. Thus:

1. Firstly, please note that, according to the provisions of art. 6 of GD 351/2005, any activity that might determine the discharge of dangerous substances into the environment is subject to the prior approval of the water management authorities and shall comply with the provisions of the water permit issued in accordance with the relevant legislation.

The GD 351/2005 provides that the water permit shall be issued only after all technical-construction measures are implemented as prevent the indirect discharge of dangerous substances into the underground waters. The maximum discharge limits are expressly provided under GD 351/2005 and compliance with such is a condition for granting and maintaining the water permit.

In accordance with the provisions of GD 351/2005, the actual discharge limits should be authorized by the relevant authority, such process being understood by the lawmaker in consideration of the complexity and variety of industrial activities, as well as the latest technological achievements.

Therefore, please note that the EIA stage is not intended to be finalized into an overall comprehensive permit, but it represents only a part of a more complex permitting process. Please note that, according with art. 3 of GD 918/2002, the data`s level of detail provided in the EIA is the one available in the feasibility stage of the project, obviously making impossible for both the titleholder and authority to exhaust all required technical data and permits granted.

The adequate protection of the ground water shall be ensured by the terms and conditions of the water permit. The issuance of the water permit shall be performed following an individual assessment of the project, considering its particular aspects and the relevant legal requirements applicable for mining activities. Until the water permit is obtained, any allegation regarding the infringement of GD 351/2005 is obviously premature mainly because the water permit shall regulate, in accordance with the relevant legal provisions, the conditions to be observed by the developer as regards the protection of the ground water.

2. Secondly, kindly note that the complexity and specificity of mining projects generated the need of a particular legal framework. Therefore, for such projects, the reading of the legal provisions of a certain enactment should be corroborated with the relevant provisions of the other regulations applicable.

In this respect, please not that the understanding of GD 351/2005 must be corroborated with the provisions of the entire relevant legislation enforceable as regards Roşia Montană Project, with a particular accent to Directive 2006/21/EC on the management of waste from the extractive industries ("Directive 21").

The very scope of Directive 21 is to provide a specific legal framework for the extractive wastes and waste facilities related to mining projects, considering the complexity of such projects and the particular aspects of mining activities that can not always be subject to the common regulations on waste management and landfill.

From this perspective, Directive 21 provides that, an operator of a waste facility, as such is defined thereunder (please note that the TMF proposed by RMGC is considered a "waste facility" under Directive 21), must inter alia, ensure that:

a) "*the waste facility is [.....]designed so as to meet the necessary conditions for, in the short and long-term perspectives, preventing pollution of the soil, air, groundwater or surface water, taking into account especially Directives 76/464/EEC (1), 80/68/EEC (2) and 2000/60/EC, and ensuring efficient collection of contaminated water and leachate as and when required under the permit, and reducing erosion caused by water or wind as far as it is technically possible and economically viable*;"

b) "*the waste facility is suitably constructed, managed and maintained to ensure its physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater in the short and long-term perspectives as well as to minimize as far as possible damage to landscape*."

In addition, it should be mentioned that RMGC was required by MWEM under the Terms of Reference, to perform the EIA considering the provisions of Directive 21 and the BAT Management of Mining Waste. The Directive 21 was intended by the EU DG of Environment to be the legislative regime applicable to

sound management of mining waste throughout Europe and therefore compliance with its provisions is mandatory.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2984
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 112093/25.08.2006, No. 112092/25.08.2006, No. 112091/25.08.2006, No. 112090/25.08.2006, No. 112089/25.08.2006, No. 112088/25.08.2006, No. 112087/25.08.2006, No. 112086/25.08.2006, No. 112085/25.08.2006, No. 112084/25.08.2006, No. 112083/25.08.2006, No. 112083/25.08.2006, No. 112082/25.08.2006, No. 112081/25.08.2006, No. 112080/25.08.2006, No. 112079/25.08.2006, No. 112078/25.08.2006, No. 112077/25.08.2006, No. 112076/25.08.2006, No. 111551/25.08.2006, No. 111552/25.08.2006, No. 111553/25.08.2006, No. 111554/25.08.2006, No. 111555/25.08.2006, No. 111556/25.08.2006, No. 111557/25.08.2006, No. 111558/25.08.2006, No. 111559/25.08.2006, No. 111560/25.08.2006, No. 111560/25.08.2006, No. 111777/25.08.2006
RMGC internal unique code	MMGA_1280

Proposal	The environment impact produced by the diversion channels is not taken into account
Solution	The primary receiving streams for unimpacted water will be the Roşia Stream and Corna Stream. The North and South Storm Water Diversions at the TMF will both discharge into Corna Valley immediately downstream of the Secondary Containment System. The Northern Roşia Valley Diversion Channel extending from the northern flank of the valley will discharge into Roşia Stream immediately downstream of the Cetate Water Catchment Dam and Pond. The diversion channels will be constructed during the construction phase to minimise the volume of clean surface water entering disturbed areas of the site. These diversion channels will be intended to convey water that is not impacted by historical or proposed mining activities. The diversions will reduce the volume of clean water and storm water mixing with possibly site-impacted waters requiring treatment in the mine area, thus reducing the overall treatment requirements and helping to provide for the biological baseflows in downstream streams. An additional objective of the diversions includes protecting structures, stockpiles and active areas from flood flows. Impacts to surface water flows will occur due to direct interception and containment of contaminated and uncontaminated surface water flows by structures constructed during the implementation of the Project. These structures include the Cetate Water Catchment Dam and the mine pits, with their associated diversion channels in the Roşia Valley; and the TMF and SCD with their associated diversion channels in the Corna Valley. Further drainage will be diverted from waste rock dumps in both valleys, from the old mine wastes and low grade ore stockpile and the 714 adit in the Roşia Valley from the operations area. The net result will be the potential to impact the flows in the Roşia and Corna streams and therefore also the Abrud and ultimately the Aries rivers. Wherever possible, clean water will be diverted around the facilities to the respective catchments downstream of the Project area, without loss of flow – and so any residual impact on surface water flows in the downstream system will be mainly in respect of loss of contaminated water only. The Project intercepts contaminated water from the Roşia and Corna catchments while diverting as much clean surface water as possible for return to the streams. Nevertheless, some of the treated water from the ARD waste water treatment plant is discharged back to the streams as compensation flow. This amount averages 237.42 m^3/hr (66 L/s) over the operational life of the mine (Exhibit 4.1.12, stream 35 of the EIA). This is less than the average baseline flows which total 309.3 m^3/hr (85.9 L/s), although it does not include diverted clean water flows. The apparent reduction in flow in the two streams (71.9 m^3/hr, 20 L/s) is accounted for almost exactly by the intercepted mine water flows which together total 67.3m^3/hr (18.7 L/s) – so the 23% (maximum) reduction in flow is offset by the removal of the most contaminated

component.

The impact on the River Abrud of the 71.9 m^3/hr (20 l/s) reduction is negligible – about 1.4% of its total average flow.

Moreover, the Project is committed to maintaining minimum flows in the Roşia and Corna streams of 72m^3/hr (20 L/s) and 25.2 m3/hr (7 L/s) respectively. These are the estimated biological compensation baseflows which will be conducive to ecological sustainability when the streams have recovered sufficiently in quality terms to support aquatic fauna and flora. In the case of the Roşia stream lower flows than this minimum flow have already been recorded (see baseline data between 2000 and 2005).

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	3113
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 112981/25.08.2006
RMGC internal unique code	MMGA_1378

Proposal	The waters resulted from the technological process manifest grave polluting risks due to their content of heavy toxic metals dissolved from ore
Solution	The ore processing operation generates metal loaded ARD. In the closed mines, (the mine existing at Roşia Montană) the generation of ARD continues and the management of ARD in modern mining industry includes the closure and post-closure stages, too. The technological process presented in the Roşia Montană project generate two sources of metal loaded ARD: - ARD, important source as far as flows and metallic ions concentrations are concerned; - Tailings slurry resulting from the processing of ore using cyanides. 1. For mine waters, there's a water collection and abstraction system (in the ARD dam Cetate and seepage retention dam Cârnic), monitoring and treatment in a specially designed installation, anticipated to be developed during the construction phase of the project. Treatment will be performed in compliance with BAT, with a large application by pH adjustment and metal precipitation in two steps using lime and carbon dioxide as insoluble compounds (hydroxides, carbonates, hydroxycarbonate). The treated effluent will be partially reutilized in the process, after the first precipitation stage, therefore it will not get dispersed into the environment, and the final effluent that will comply with the NTPA 001 limits for metals, will be used to maintain environmental baseflows in Roşia and Corna Streams. The slurry will be directed to the TMF. The installation is conceived to function during the operation, closure and post-closure stages of the Roşia Montană Project. During the last three years of the operation period, the passive treatment processes will be tested in the lagoons. These will replace the ARD active treatment plants in the post-closure period, should the result be satisfactory and the NTPA 001 discharge standards will be complied with. 2. INCO process (oxidation with SO2/air) and lime pH 8-10, for treatment of tailings slurry is mainly used for the destruction of cyanides. Concomitantly, given the above conditions, precipitation of heavy metals as hydroxides takes place – $Me(OH)_2$ or insoluble cyanic complexes with Fe – $Me_2Fe(CN)_6$. Treated slurry is discharged into the TMF, and after settling, water is recirculated in the process. The seepage from the TMF are collected in the secondary dam sump and is recirculated in the decant pond. As per the water flow described in the Project, on this route, there are no metal-loaded waters discharged into the environment, during normal operation stage. Under abnormal operation conditions, when the storage capacity designed for the pond is exceeded, (>2

PMP successive) and if the natural dilution taking place in such extreme situation – does not provide the quality conditions requested by NTPA 001, the project provides a treatment plant for low cyanide content waters where precipitation of metals will be performed.

In conclusion, the Roşia Montană project provides realistic technical solutions to avoid metal pollution risks.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	3115
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 112129/25.08.2006
RMGC internal unique code	MMGA_1393

Proposal	During the operations the pollution degree of the waters from area will increase. In this situation, where are the durable development and environment protection?
Solution	In order to evaluate the residual impacts of the project on surface water quality, two modeling studies were undertaken. The first was an assessment of the ARD wastewater treatment plant discharge on general downstream watercourse quality, particularly metal concentrations and pH (Model 1). The second examined the likely concentration of the major substances introduced by the project in the watercourses, that is, calcium, sulphate (Model 2) and cyanide (Model 3). The results of the first model were presented in Table 4.1-16, Sub chapter 4.1. of the EIA. Reduction of ARD wastewater to comply with the TN001 for all parameters except calcium and sulphate (and hence TDS) is obvious. The lime treatment process is the most common method for treating Acid Rock Drainage from mine sites and is recognized as a Best Available Technology. However, while removing toxic metals and elevating pH, it does have the limitation of often not being able to meet calcium, sulphate and TDS standards. This is a limitation, but the net benefit of this proven and widely used treatment method results in it being the commonly accepted as a standard technology for treating effluents from mine sites with Acid Rock Drainage. In order to bring calcium and sulphate to within NTPA 001, further treatment for these parameters was included within the project design. The second model is a check on the likely residual concentrations of calcium and sulphate that are expected in the watercourses downstream of the project discharges. The modeling results are shown in Exhibits 4.1.25 and 4.1.26 from EIA. Of the parameters analyzed, cyanide presented the most difficult analysis. Baseline cyanide concentrations for area streams and rivers are generally not available. In addition, discharges exceeding the TN001 standard of 0.1 mg/L total cyanide are not expected. Therefore, most water quality points were reported as less than 0.1 mg/L and are not shown on Exhibit 4.1.26 from EIA. The exceptions are the TMF decant pond and the Secondary Containment Dam (SCD) pond and sump. Residual Impacts Calcium does not exceed TN001 at any stage of the project. Sulphate concentrations are also within TN001 in the Roşia valley, but slightly above MO1146 Class IV, even so, they are less than the baseline condition. Due to elevated sulphate levels in the Abrud upstream of the Roşia confluence, downstream of the confluence the levels continue to be elevated under dry conditions. Although elevated levels of sulphate and cyanide occur in the TMF and the SCD, through project mitigation, no exceedances of NTPA 001 or MO1146 Class IV occur downstream of these structures. Thus, the only residual impact by the project on surface water quality occurs in the instance of overspill of the Cetate dam during a 24 hour storm of greater than 1:100yr magnitude. During such an event the pH of the overspill waters are likely to be slightly below TN001 (pH 6.5, see Sub-section 4.3.). The limestone spillway is designed as a partial mitigation against such impact.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	8/D;5463/B
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 114735/15.09.2006
RMGC internal unique code	MMGA_1468

Proposal

Non-observance of the EU Directive on underground waters

Solution

An engineered liner is included in the design of the Tailings Management Facility (TMF) basin to be protective of groundwater. Specifically, the Roşia Montană Tailings Management Facility (TMF or "the facility") has been designed to be compliant with the EU Groundwater Directive (80/68/EEC), transposed as Romanian GD 351/2005. The TMF is also designed for compliance with the EU Mine Waste Directive (2006/21/EC) as required by the Terms of Reference established by the MEWM in May, 2005. The following paragraphs provide a discussion of how the facility is compliant with the directives.

The TMF is composed of a series of individual components including:

- the tailings impoundment;
- the tailings dam;
- the secondary seepage collection pond;
- the secondary containment dam;
- the groundwater monitoring wells/extraction wells located downstream of the Secondary Containment dam.

All of these components are integral parts of the facility and necessary for the facility to perform as designed.

The directives indicated above require that the TMF design be protective of groundwater. For the Roşia Montană project (RMP), this requirement is addressed by consideration of the favorable geology (low permeability shales underlying the TMF impoundment, the TMF dam, and the Secondary Containment dam) and the proposed installation of a low-permeability ($1x10^{-6}$ cm/sec) recompacted soil liner beneath the TMF basin. Please see Chapter 2 of EIA Plan F, "The Tailings Facility Management Plan" for more information.

The proposed low permeability soil liner will be fully compliant with Best Available Techniques (BAT) as defined by EU Directive 96/61 (IPPC) and EU Mine Waste Directive. Additional design features that are included in the design to be protective of groundwater include:

- A low permeability ($1x10^{-6}$ cm/sec) cut off wall within the foundation of the starter dam to control seepage;
- A low permeability ($1x10^{-6}$ cm/sec) core in the starter dam to control seepage;
- A seepage collection dam and pond below the toe of the tailings dam to collect and contain any seepage that does extend beyond the dam centerline;
- A series of monitoring wells, below the toe of the secondary containment dam, to monitor seepage and ensure compliance, before the waste facility limit.

In addition to the design components noted above specific operational requirements will be implemented to be protective of human health and the environment. In the extremely unlikely case that impacted water is detected in the monitoring wells below the secondary containment dam, they will be converted to pumping wells and will be used to extract the impacted water and pump it into the reclaim pond where it will be incorporated into the RMP processing plant water supply system, until the compliance is reestablish.

With respect to your comments made as regards a presumptive infringement of the provisions of Government Decision No.351/2005 ("GD 351/2005"), there are several aspects to be taken into consideration. Thus:

1. Firstly, please note that, according to the provisions of art. 6 of GD 351/2005, any activity that might determine the discharge of dangerous substances into the environment is subject to the prior approval of the water management authorities and shall comply with the provisions of the water permit issued in accordance with the relevant legislation.

The GD 351/2005 provides that the water permit shall be issued only after all technical-construction measures are implemented as prevent the indirect discharge of dangerous substances into the underground waters. The maximum discharge limits are expressly provided under GD 351/2005 and compliance with such is a condition for granting and maintaining the water permit.

In accordance with the provisions of GD 351/2005, the actual discharge limits should be authorized by the relevant authority, such process being understood by the lawmaker in consideration of the complexity and variety of industrial activities, as well as the latest technological achievements.

Therefore, please note that the EIA stage is not intended to be finalized into an overall comprehensive permit, but it represents only a part of a more complex permitting process. Please note that, according with art. 3 of GD 918/2002, the data`s level of detail provided in the EIA is the one available in the feasibility stage of the project, obviously making impossible for both the titleholder and authority to exhaust all required technical data and permits granted.

The adequate protection of the ground water shall be ensured by the terms and conditions of the water permit. The issuance of the water permit shall be performed following an individual assessment of the project, considering its particular aspects and the relevant legal requirements applicable for mining activities. Until the water permit is obtained, any allegation regarding the infringement of GD 351/2005 is obviously premature mainly because the water permit shall regulate, in accordance with the relevant legal provisions, the conditions to be observed by the developer as regards the protection of the ground water.

2. Secondly, kindly note that the complexity and specificity of mining projects generated the need of a particular legal framework. Therefore, for such projects, the reading of the legal provisions of a certain enactment should be corroborated with the relevant provisions of the other regulations applicable.

In this respect, please not that the understanding of GD 351/2005 must be corroborated with the provisions of the entire relevant legislation enforceable as regards Roşia Montană Project, with a particular accent to Directive 2006/21/EC on the management of waste from the extractive industries ("Directive 21").

The very scope of Directive 21 is to provide a specific legal framework for the extractive wastes and waste facilities related to mining projects, considering the complexity of such projects and the particular aspects of mining activities that can not always be subject to the common regulations on waste management and landfill.

From this perspective, Directive 21 provides that, an operator of a waste facility, as such is defined thereunder (please note that the TMF proposed by RMGC is considered a "waste facility" under Directive 21), must inter alia, ensure that:

a) "*the waste facility is [...] designed so as to meet the necessary conditions for, in the short and long-term perspectives, preventing pollution of the soil, air, groundwater or surface water, taking into account especially Directives 76/464/EEC (1), 80/68/EEC (2) and 2000/60/EC, and ensuring efficient collection of contaminated water and leachate as and when required under the permit, and reducing erosion caused by water or wind as far as it is technically possible and economically viable*;"

b) "*the waste facility is suitably constructed, managed and maintained to ensure its physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater in the short and long-term perspectives as well as to minimize as far as possible damage to landscape*."

In addition, it should be mentioned that RMGC was required by MWEM under the Terms of Reference, to perform the EIA considering the provisions of Directive 21 and the BAT Management of Mining Waste.

The Directive 21 was intended by the EU DG of Environment to be the legislative regime applicable to sound management of mining waste throughout Europe and therefore compliance with its provisions is mandatory.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	34
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 114516/13.09.2006
RMGC internal unique code	MMGA_1477
Proposal	The way in which the provisions of GD 351 and 352 regarding the interdiction to discharge dangerous substances into the aquatic environment are observed is not specified;
Solution	With respect to your comments made as regards a presumptive infringement of the provisions of Government Decision No.351/2005 ("GD 351/2005"), there are several aspects to be taken into consideration. Thus: 1. Firstly, please note that, according to the provisions of art. 6 of GD 351/2005, any activity that might determine the discharge of dangerous substances into the environment is subject to the prior approval of the water management authorities and shall comply with the provisions of the water permit issued in accordance with the relevant legislation. The GD 351/2005 provides that the water permit shall be issued only after all technical-construction measures are implemented as prevent the indirect discharge of dangerous substances into the underground waters. The maximum discharge limits are expressly provided under GD 351/2005 and compliance with such is a condition for granting and maintaining the water permit. In accordance with the provisions of GD 351/2005, the actual discharge limits should be authorized by the relevant authority, such process being understood by the lawmaker in consideration of the complexity and variety of industrial activities, as well as the latest technological achievements. Therefore, please note that the EIA stage is not intended to be finalized into an overall comprehensive permit, but it represents only a part of a more complex permitting process. Please note that, according with art. 3 of GD 918/2002, the data`s level of detail provided in the EIA is the one available in the feasibility stage of the project, obviously making impossible for both the titleholder and authority to exhaust all required technical data and permits granted. The adequate protection of the ground water shall be ensured by the terms and conditions of the water permit. The issuance of the water permit shall be performed following an individual assessment of the project, considering its particular aspects and the relevant legal requirements applicable for mining activities. Until the water permit is obtained, any allegation regarding the infringement of GD 351/2005 is obviously premature mainly because the water permit shall regulate, in accordance with the relevant legal provisions, the conditions to be observed by the developer as regards the protection of the ground water. 2. Secondly, kindly note that the complexity and specificity of mining projects generated the need of a particular legal framework. Therefore, for such projects, the reading of the legal provisions of a certain enactment should be corroborated with the relevant provisions of the other regulations applicable. In this respect, please not that the understanding of GD 351/2005 must be corroborated with the provisions of the entire relevant legislation enforceable as regards Roşia Montană Project, with a particular accent to Directive 2006/21/EC on the management of waste from the extractive industries ("Directive 21"). The very scope of Directive 21 is to provide a specific legal framework for the extractive wastes and waste facilities related to mining projects, considering the complexity of such projects and the particular aspects of mining activities that can not always be subject to the common regulations on waste management and landfill.

From this perspective, Directive 21 provides that, an operator of a waste facility, as such is defined thereunder (please note that the TMF proposed by RMGC is considered a "waste facility" under Directive 21), must inter alia, ensure that:

a) "*the waste facility is [.....]designed so as to meet the necessary conditions for, in the short and long-term perspectives, preventing pollution of the soil, air, groundwater or surface water, taking into account especially Directives 76/464/EEC (1), 80/68/EEC (2) and 2000/60/EC, and ensuring efficient collection of contaminated water and leachate as and when required under the permit, and reducing erosion caused by water or wind as far as it is technically possible and economically viable*;"

b) "*the waste facility is suitably constructed, managed and maintained to ensure its physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater in the short and long-term perspectives as well as to minimize as far as possible damage to landscape*;"

In addition, it should be mentioned that RMGC was required by MWEM under the Terms of Reference, to perform the EIA considering the provisions of Directive 21 and the BAT Management of Mining Waste. The Directive 21 was intended by the EU DG of Environment to be the legislative regime applicable to sound management of mining waste throughout Europe and therefore compliance with its provisions is mandatory.

An engineered liner is included in the design of the Tailings Management Facility (TMF) basin to be protective of groundwater. Specifically, the Roşia Montană Tailings Management Facility (TMF or "the facility") has been designed to be compliant with the EU Groundwater Directive (80/68/EEC), transposed as Romanian GD 351/2005. The TMF is also designed for compliance with the EU Mine Waste Directive (2006/21/EC) as required by the Terms of Reference established by the MEWM in May, 2005. The following paragraphs provide a discussion of how the facility is compliant with the directives.

The TMF is composed of a series of individual components including:

- the tailings impoundment;
- the tailings dam;
- the secondary seepage collection pond;
- the secondary containment dam;
- the groundwater monitoring wells/extraction wells located downstream of the Secondary Containment dam.

All of these components are integral parts of the facility and necessary for the facility to perform as designed.

The directives indicated above require that the TMF design be protective of groundwater. For the Roşia Montană project (RMP), this requirement is addressed by consideration of the favorable geology (low permeability shales underlying the TMF impoundment, the TMF dam, and the Secondary Containment dam) and the proposed installation of a low-permeability ($1x10^{-6}$ cm/sec) recompacted soil liner beneath the TMF basin. Please see Chapter 2 of EIA Plan F, "The Tailings Facility Management Plan" for more information.

The proposed low permeability soil liner will be fully compliant with Best Available Techniques (BAT) as defined by EU Directive 96/61 (IPPC) and EU Mine Waste Directive. Additional design features that are included in the design to be protective of groundwater include:

- A low permeability ($1x10^{-6}$ cm/sec) cut off wall within the foundation of the starter dam to control seepage;
- A low permeability ($1x10^{-6}$ cm/sec) core in the starter dam to control seepage;
- A seepage collection dam and pond below the toe of the tailings dam to collect and contain any seepage that does extend beyond the dam centerline;
- A series of monitoring wells, below the toe of the secondary containment dam, to monitor seepage and ensure compliance, before the waste facility limit.

In addition to the design components noted above specific operational requirements will be implemented to be protective of human health and the environment. In the extremely unlikely case that impacted water is detected in the monitoring wells below the secondary containment dam, they will be converted to pumping wells and will be used to extract the impacted water and pump it into the reclaim pond where it

	will be incorporated into the RMP processing plant water supply system, until the compliance is reestablish.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	34
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 114516/13.09.2006
RMGC internal unique code	MMGA_1479

Proposal	There is no a description of the measures recommended by BAT for the occurrence prevention of the acid waters.
Solution	Based on the evaluation of the mining project, the extraction pits contain approximately 256.9 million tones of waste rock, and the tailings – ore ratio is of 1.2:1. The rock in the crushed rock pits and the waste rock obtained from the extraction preparation activities will be used, as required, in the construction of the tailings management facility dam in Valea Corna and other embankments. If the waste rock will not be necessary for construction activities, it will be transported to the Cetate and/or Cârnic TMFs, and by transfer mining, to the depleted pits (mainly Cârnic, Orlea and Jig). BAT [1] stipulates the use of transfer mining if there's an excavation where the waste rock can be economically stockpiled. In order to minimize the formation of ARD, S.C Roşia Montana Gold Corporation S.A will implement a waste segregation and waste encapsulation strategy which is described in the following: • Waste rock dumps will be piled up using a combination of end-dumping and stackdumping. End-dumping will be used for the dumps basements and for the outer rim of the dump, where the NAG material will be used, while stack-dumping, which leads to higher compaction, will be used for the inner parts of the dump, where the PAG material will be deposited. The compaction associated with stack-dumping minimizes exposure to oxygen and water around the body of compacted PAG material. Stackdumping allows the use a relatively thin cover system without strict requirements to be applied on the waste dumps. • End-dumped PAG material will be deposited in a small section along the outer rim of the waste dumps and covered with a less permeable cover system than the (larger) NAG portion where the water balance and oxygen ingress is less of a concern. Wherever technologically feasible, PAG material which is end-dumped according to the mine plan will be covered and encapsulated with NAG material which is rehandled after the end of the operations phase, in order to minimize the amount of sub-soil and top-soil needed for a more elaborate cover. • The material which will be backfilled to the open pits will be sorted in a way which PAG material will predominantly be placed at the bottom of the backfill or be covered by at least 10 m of NAG material, so that oxygen contact with the PAG material is minimized. More details on the waste segregation strategy are contained in the *Mine Rehabilitation and Closure Plan* of the EIA. *References:* [1] Best Available Techniques for Management of Tailings and Waste-Rock in Mining Activities. EUROPEAN COMMISSION, DIRECTORATE-GENERAL JRC JOINT RESEARCH CENTRE, Institute for Prospective Technological Studies, Technologies for Sustainable Development, European IPPC Bureau, Final Report, July 2004 (http://eippcb.jrc.es/pages/FActivities.htm).

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	893
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 110081/22.08.2006 and No. 75170/23.08.2006
RMGC internal unique code	MMGA_1560
Proposal	- the proposed mining project doesn't stipulate that the sulfides will be treated and stored separately onto a special sealed dam.
Solution	The sulphides in the case of the Roşia Montana project may occur disseminated within the ore deposit, and the sulphates in certain concentrations within the sludge resulted from the treatment plant of the acid waters. In the case of the disseminated sulphides, excepting pyrite, these have extremely low contents and will not be recovered and specially treated. For the sludge from the treatment plant of the acid waters, depending on the development stages of the Project, the following flow sheets are designed: ▪ During the operation stage, the thickened sludge, resulting from the sedimentation basin of the treatment plant of the acid waters, will be discharged into the tailings management facility as supplementary waste in a ratio of 1:500 as compared with tailings. ▪ During the mine-closure period, this waste stream will be discharged into the Cetate open pit lake, because the tailings management facility will not be still available for waste discharge. The environment impact caused by the discharging into the tailings management facility of the sludge resulting from the treatment of the acid waters will be negligible comparatively with the impact caused by the processing tailings due to: ▪ Much less quantity of resulted sludge in comparison with the quantity of tailings; ▪ Much lower toxic properties of the sludge in comparison with those of tailings. Thus, the references from the Section [2.8.1.8] of the EIA to the period when the sludge resulted from the acid water treatment plant will be deposited into the tailings management facility are justified. If the sludge of acid water treatment is deposited into the Cetate flooded open pit, the sludge may dissolve and liberate heavy metals and neutral major ions (sulphate, calcium) into the water from open pit, if this water becomes acid. But the water from lake will not be evacuated directly into environment. The water from open pit if is reaching the underground works may be collected by Cetate dam and pumped back to the treatment plant, so that no pollution will be discharged into environment. Moreover, prevention measures are provided in order to minimize the risk that the acid waters generated by the sulphuric portion of the open pit walls to acidulate the waters from open pit. These measures are described in Section [2.8.2.9.] of the EIA.

Domain	WATER
MMDD's item no. for the question which includes the observation identified by the RMGC internal code	912
MMDD's identification no. for the question which includes the observation identified by the RMGC internal code	No. 110063/22.08.2006 and No. 75189/23.08.2006
RMGC internal unique code	MMGA_1574
Proposal	-There isn't a realistic calculation on the Aeolian erosion of the pit's walls and the tailings and waste ore;
Solution	The pit walls will be made of massive rocks most of which will be represented by dacite and breccia with high Aeolian erosion resistance, and at the end of the project, part of these walls will be covered by refilling the pits, and part of them will remain as rock areas that can be re-vegetated either spontaneously or using climbing plants. Presently, Cetate, Cârnic, Orlea or Jig are all composed of rocks and stockpiles resulting from old mining activities where no visible signs of Aeolian erosion can be observed. Both waste rock stockpiles and the low-grade ore stockpile will be composed of massive rock fragments and blocks resulting from blasts inside the pits and that also have high erosion resistance. The waste rock stockpiles will be re-graded and re-vegetated as the project will proceed so that the Aeolian erosion will remain within the same limits as the surrounding areas. The Report on Environmental Impact Assessment Study (EIA) (Vol. 12 – Chapter 4.2, Subchapter 4.2.4) and *The Air Quality Management* Plan (Volume 24, Plan D) include, in detail, technical and operational measures for mitigation/elimination of dust emissions generated by the Project activities and give details regarding the aspects mentioned by the questioner; please find below some of these measures. Measures for the dust emissions control in the pits and the transport roads for ore and waste rock: • The use of a new blasting technology: sequential blasting, that leads to a lower upraise of the pollutant plume and a smaller dispersion area; • Cessation of dust-generating activities in very high-wind situations or when automatic PM10 monitor placed in Roșia Montană Protected Area indicates an alert situation; • Implementing the dust control program for unsealed road surface in dry seasons via water spray trucks and use of inert dust suppression chemicals, measures that will lead to reduction of dust dispersion by 90%. • Minimizing the drop heigh in material handling/placement • Establishment and enforcement of vehicle speed limits • Implementing schedules for periodic routine maintenance of vehicle and motorized equipment. • Automatic air quality and meteorological parameters monitoring • Implementation of additional measures for pollutant emission control in case of noncompliance related to air quality. Such measures may consist of water spraying of ore and waste rocks during loading into vehicles. Measures for dust emissions control from the waste rock dumps and low-grade ore stockpile: • Cleaning and water spraying of platforms during low precipitation periods; • Limiting activities on the stockpiles platforms in order to avoid disturbance of new surfaces that might generate dust emissions by aeolian erosion. Note that with the advancement of ore mining activities, the pit goes deeper (250-300m comparing to the current levels) the pit walls representing physical obstacles against the dust dispersion in the pit surrounding areas. Details: The Report on Environmental Impact Assessment Study (Vol. 12 – Chapter 4.2, Subchapter 4.2.4) and *The Air Quality Management Plan* (Volume 24, Plan D) include, in detail, technical and operational measures for mitigation/elimination of dust emissions generated by the Project activities.