ltem no.	360	Same as: 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376	
No. to identify the observations received from the public	No. 109179/ 11.08.2006 and No. 74592/ 11.08.2006	Same as: No. 109180/11.08.2006 and No. 74593/11.08.2006, No. 109181/11.08.2006 and No. 74594/11.08.2006, No. 109182/11.08.2006 and No. 74595/11.08.2006, No. 109183/11.08.2006 and No. 74596/11.08.2006, No. 109184/11.08.2006 and No. 74597/11.08.2006, No. 109185/11.08.2006 and No. 74598/11.08.2006, No. 109186/11.08.2006 and No. 74599/11.08.2006, No. 109187/11.08.2006 and No. 74600/11.08.2006, No. 109188/11.08.2006 and No. 74601/11.08.2006, No. 109189/11.08.2006 and No. 74602/11.08.2006, No. 109190/11.08.2006 and No. 74603/11.08.2006, No. 109191/11.08.2006 and No. 74604/11.08.2006, No. 109192/11.08.2006 and No. 74605/11.08.2006, No. 109193/11.08.2006 and No. 74606/11.08.2006, No. 109194/11.08.2006 and No. 74607/11.08.2006, No.	
Proposal	 The questioner does not agree to the promotion of the Roşia Montană Project, making the following comments: In EIA there are no presented all the possible risks derived from this project; Total costs for closing the mine are unrealistic; There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; The present urbanism plans of the Roşia Montană commune do not correspond with the mining project proposal described in EIA; The proposed waste deposits will be not constructed according to the legislation in force; Financial guarantees were not fixed There is not a Safety Report submitted for the public consultation and evaluation by the competent authorities; The EIA report does not evaluate the "Zero Alternative"; The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; Modification of the urbanism plan without the public consultation; From archeological point of view, the area proposed to by occupied by project was not legally investigated; The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. 		
Solution	It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following		

Page of answer 1 of 18

discussion presents a summary of the impact discussed in the EIA.

As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures, the implementation of the environmental management and risk systems are mitigating the consequences to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10^{-6} (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roşia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

Page of answer 2 of 18

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia Montană.

The modeling created for Roșia 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 Roșia 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 physical-chemical processes affecting metals, ammonia and cyanide in the river

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roşia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in

Page of answer 4 of 18

the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of

Page of answer 5 of 18

the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roșia Montană. Out of the 41 historical buildings in Roșia Montană, thirty-five (35) are located inside the protected area of the Roșia Montană Historical Centre.

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roşia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training

Page of answer 6 of 18

center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage issues, with its final form determined in consultation with the community.

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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.

Page of answer 7 of 18

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.

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; and
- 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

Page of answer 8 of 18

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 technicalconstruction 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;"

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

Page of answer 10 of 18

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roşia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roşia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Page of answer 11 of 18

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available

Page of answer 12 of 18

Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in

Page of answer 13 of 18

the range of 1 to 3 dB (A).

References:

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roșia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roșia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal

Page of answer 14 of 18

Urbanism Plan, to reflect all changes made to the Roșia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roșia Montană Industrial Area", was prepared and subject to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roșia Montană since 2000 have been carried

Page of answer 15 of 18

out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roşia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

Page of answer 16 of 18

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Note that the type of research undertaken at Roşia Montană, known as preventive/rescue archaeological research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References: [1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E <u>NG</u>

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roşia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Țarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roșia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the

Page of answer 17 of 18

Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roșia Montană Ar*ea, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roșia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	377			
No. to identify the observations received from the public	Nr. 109205/ 14.08.2006 and No. 74616/ 14.08.2006			
Proposal	The questioner does not agree with the proposed gold and silver mining exploitation in Roșia Montană and makes the following comments and observations: -the project will have negative impacts on terrestrial and aquatic ecosystems; -The hydrogen cyanide formation mechanism at the surface of the tailings pond and its consequences.			
	The impact on the protected flora and fauna will be obvious only at local level, and it will not lead to the disappearance of any species nor habitats. The mining project was conceived from the onset so as to comply with the conditions and standards stipulated by the Romanian and European legislation in the field of environmental protection.			
Solution	The company believes that the environmental impact generated by proposed project remains significant the more so as it will add to the pre-existing ones. But the required investments for the ecological restoration/rehabilitation of the Roşia Montană area meant to solve complex environmental issues existing at present can be developed only after the implementation of economic projects able to generate and ensure that direct and responsible measures are taken, as part of the principles that represent the basis for the sustainable development concepts. The presence of a strong economic system is the key for the implementation of clean economic processes and technologies, in full respect of the environment, which are able to remove the previous effects generated by human activities.			
	The documentation drafted to support this mining project represents an objective justification for its implementation given that the company has assumed the environmental responsibility, which is extremely complex in the Roşia Montană area.			
	Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Given the large amount of information contained, these tables are available in the electronic format of the EIA. 6,000 DVD/CDs comprising the EIA Report have been made available to the public both in English and in Romanian. Moreover, the EIA is also available on RMGC's website as well as on the websites of the Ministry of Environment and Waters Management and of the Local and Regional Environment Protection Agencies of Alba County, Cluj County and Sibiu County, etc.			
	From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).			
	Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].			
	References: [1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.			

Page of answer 1 of 4

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11.[...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.[...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

The dispersion into atmosphere of the hydrocyanic acid (HCN) emissions from Roşia Montană project was modeled and evaluated. The two main sources for these emissions are: the tailings management facility and the processing plant site, especially the CIL and thickener tanks.

There were taken into consideration the impact of the tailings management facility surface, as well as the impact of the weather. The average surface of the tailings management facility has been estimated as being 300,274 m². The model has taken into account two seasonal conditions. The first condition, a summer scenario, when the entire surface of the tailings management facility is used, and also the emission rate is higher due to higher temperatures. In order to take into consideration higher temperatures leading to an increase of the volatilization speed, it has been assumed that the ratio of volatilization, more intense is of 1.5 times off the annual ratio. The second condition took into account 50% of the tailings dam's surface in order to consider the ice layer and an volatilization rate of 50% of the average annual rate.

The model of atmospheric dispersion has been developed using the *Best Available Techniques*, in order to simulate the transport of the pollutants generated by the mining activities outside the Project area.

Page of answer 2 of 4

Modern concepts related to the flow and dispersion in complex terrains are incorporated in AERMOD by using a new and simple approach. If this is not necessary, the plume is modelled, either having a path that impacts the terrain or with a path that follows the terrains' topography.

AERMOD can forecast concentrations of pollutants from multiple sources for a wide variety of sites, meteorological conditions, types of pollutants and mediation periods. For this project, the concentrations on short term have been calculated using the maximum hourly rates of emission for activities developed simultaneously and for the averages calculated for intervals of 1 hour, 8 hours and 24 hours. The annual concentrations have been calculated using all active sources during the respective year.

The reasons for which we state the a potential impact due to the HCH emissions from the tailings management facility will not occur are the following:

- The sodium cyanide handling, from the unloading from the supplying trucks up to the processing tailings discharge onto the tailings management facility, will be carried out only in liquid form, represented by alkaline solutions of high pH value (higher than 10.5 11.0) having different sodium cyanide concentrations. The alkalinity of these solutions has the purpose to maintain the cyanide under the form of cyan ions (CN⁻) and to avoid the hydrocyanic acid formation (HCN), phenomenon that occurs only within environments of low pH;
- The cyanide volatilization from a certain solution cannot occur under the form of free cyanides, but only under the form of HCN;
- The handling and storage of the sodium cyanide solutions will take place only by means of some closed systems; the only areas/plants where the HCN can occur and volatilize into air, at low emission percentage, are the leaching tanks and slurry thickener, as well the tailings management facility for the processing tailings;
- The HCN emissions from the surface of the above mentioned tanks and from the tailings management facility surface can occur as a result of the pH decrease within the superficial layers of the solutions (that helps the HCN to form) and of the desorption (volatilization in air) of this compound;
- The cyanide concentrations within the handled solutions will decrease from 300 mg/L within the leaching tanks up to 7 mg/L (total cyanide) at the discharge point into the tailings management facility. The drastic reduction of the cyanide concentrations for discharging into the Tailings Management Facility (TMF) will be done by the detoxification system;
- The knowledge of the cyanide chemistry and on the grounds of the past experience, we estimated the following possible HCN emissions into air: 6 t/year from the leaching tanks, 13 t/year from the slurry thickener and 30 t/year (22.4 t, respectively 17 mg/h/m² during the hot season and 7.6 t, respectively 11.6 mg/h/m² during the cold season) from the tailings management facility surface, which totals 134.2 kg/day of HCN emission;
- Once released into air, the hydrocyanic acid is subject to certain chemical reactions at low pressure, resulting ammonia;
- The mathematical modeling of the HCN concentrations within the ambient air (if the HCN released in the air is not subject to chemical reactions) emphasized the highest concentrations being at the ground level, within the industrial site namely within the area of the tailings management facility and within a certain area near the processing plant. The maximum concentration is of 382 μ g/m³/h;
- The highest HCN concentrations within the ambient air will be 2.6 times lower than the standard value stipulated by the national legislation for occupational safety;
- The HCN concentrations within the ambient air in the populated areas close by the industrial site will be of 4 to 80 $\mu g/m^3$, more than 250 12.5 times lower than standard value stipulated by the national legislation for occupational safety the national legislation and European Union (EU) legislation on the Air Quality don't stipulate standard values for the population's health protection;
- Once released in air, the evolution of the HCN implies an insignificant component resulted from the reactions while liquid (water vapors and rain drops). The reactions are due to HCN being weak water-soluble at partially low pressures (feature of the gases released in open air), and the rain not effectively reducing the concentrations in the air (Mudder, et al., 2001; Cicerone and Zellner, 1983);
- The probability that the HCN concentration value contained by rainfalls within and outside the footprint of the Project be significantly higher than the background values (0.2 ppb) is extremely low.

Page of answer 3 of 4

Details referring to the use of cyanide in the technological processes, to the cyanides balance as well as to the cyanide emission and the impact of the cyanides on the air quality are contained in the Environmental Impact Assessment (EIA) Report, Chapter 2, Subchapter 4.1 and Subchapter 4.2 (Section 4.2.3).

Page of answer 4 of 4

ltem no.	378	Same as: 379		
No. to identify the observations received from the public	No. 109215/ 14.08.2006 and No. 74617/ 14.08.2006	Same as: No. 109215/14.08.2006 and No. 74618/14.08.2006		
	The Complainer addressed comments and observations as follows:			
	- The overall costs for mine closure are not realistic.			
	- The financial guarantees have not been established;			
	- There is no liner proposed for the tailings pond; The EIA report does not atimulate financial guarantees destined to secure the wester rock deposit:			
	- The EIA report does not stipulate financial guarantees destined to secure the waste rock deposit;			
	- There is not a Safety Report submitted for the public consultation and evaluation by the competent authorities;			
	- The EIA report does not assess the "zero alternative";			
	- The Project poses a threat for the protected flora and fauna;			
Proposal	- S.C. Roșia Montană Gold Corporation S.A. does not comply with the provisions of the art.11 from the			
	Mining Law 85/2003;			
	- The EIA report does not contain an impact assessment of the phenomenon "cyanide rain" caused by the cyanide evaporation from the tailings management facility and a description of the trans-boundary impact in case of accident on some natural important areas such as Koros Maros National Park from Hungary located along the Mureş Valley			
	SEE CONTENT CONTESTATION TYPE 3			
		osts for mine closure are realistic. RMGC's closure estimates, which were developed by a team		
	of independent experts with international experience and will be reviewed by third party experts, are			
	based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like. They are engineering calculations and estimates based on the current			
	commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation			
	Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach			

Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
 - Dismantling of disused production facilities and re-vegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainable reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million,

Page of answer 1 of 8

Solution

makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from not being realistic—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roșia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;

Page of answer 2 of 8

- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

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; and
- 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 (1×10^{-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.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in

Page of answer 3 of 8

protected accounts at the Romanian state disposal.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

The EIA Report considered all alternative developments, including the option of not proceeding with any project – an option that would generate no investment, allowing the existing pollution problems and socio-economic decline to continue. (Chapter 5 – Assessment of Alternatives)

The report also considered alternative developments - including agriculture, grazing, meat processing,

Page of answer 4 of 8

tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural and environmental benefits brought by the Roşia Montană Project.

Chapter 5 also examines alternative locations for key facilities as well as alternative technologies for mining, processing and waste management, in line with best practice and as compared against published EU best available techniques (BAT) documentation.

The impact on the protected flora and fauna will be obvious only at local level, and it will not lead to the disappearance of any species. The mining project was conceived from the onset so as to comply with the conditions and standards stipulated by the Romanian and European legislation in the field of environmental protection.

The company believes that the environmental impact generated by proposed project remains significant the more so as it will cover the pre-existing ones. But the required investments for the ecological restoration/rehabilitation of the Roşia Montană area meant to solve complex environmental issues existing at present can be developed only after the implementation of economic projects able to generate and ensure that direct and responsible measures are taken, as part of the principles that represent the basis for the sustainable development concepts. The presence of a strong economic system is the key for the implementation of clean economic processes and technologies, in full respect of the environment, which are able to remove the previous effects generated by anthropic activities.

The documentation drafted to support this mining project represents an objective justification for its implementation given that the company assumed the environmental responsibility, which is extremely complex in the Roşia Montană area.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Given the large amount of information contained, these tables are available in the electronic format of the EIA. 6000 DVD/CDs comprising the EIA Report have been made available to the public both in English and in Romanian. Moreover, the EIA is also available on RMGC's website as well as on the websites of the Ministry of Environment and Waters Management and of the Local and Regional Environment Protection Agencies of Alba County, Cluj County and Sibiu County, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species

Page of answer 5 of 8

which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

The possibility for a "cyanide rain" phenomenon to occur doesn't exist. Moreover, the specialty literature does not indicate a phenomenon called "cyanide rain"; it is known and researched only the "acid rains" phenomenon that has no connection with the behavior of the cyanide compounds in the atmosphere.

The reasons for stating that no "cyanide rains" phenomenon will ever occur are the followings:

- The sodium cyanide handling, from the unloading from the supplying trucks up to the processing tailings discharge onto the tailings management facility, will be carried out only in liquid form, represented by alkaline solutions of high pH value (higher than 10.5 11.0) having different sodium cyanide concentrations. The alkalinity of these solutions has the purpose to maintain the cyanide under the form of cyan ions (CN⁻) and to avoid the hydrocyanic acid formation (HCN), phenomenon that occurs only within environments of low pH;
- The cyanide volatilization from a certain solution can not occur under the form of free cyanides, but only under the form of HCN;
- The handling and storage of the sodium cyanide solutions will take place only by means of some closed systems; the only areas/plants where the HCN can occur and volatilize into air, at low emission percentage, are the leaching tanks and slurry thickener, as well the tailings management facility for the processing tailings;
- The HCN emissions from the surface of the above mentioned tanks and from the tailings management facility surface can occur as a result of the pH decrease within the superficial layers of the solutions (that helps the HCN to form) and of the desorption (volatilization in air) of this

Page of answer 6 of 8

compound;

- The cyanide concentrations within the handled solutions will decrease from 300 mg/l within the leaching tanks up to 7 mg/l (total cyanide) at the discharge point into the tailings management facility; the drastic reduction of the cyanide concentrations for discharging into the Tailings Management Facility (TMF) will be done by the detoxification system;
- The knowledge of cyanide chemistry and on the grounds of past experiences, we estimated the following possible HCN emissions into air: 6 t/year from the leaching tanks, 13 t/year from the slurry thickener and 30 t/year (22.4 t, respectively 17 mg/h/m² during the hot season and 7.6 t, respectively 11.6 mg/h/m² during the cold season) from the tailings management facility surface, which totals 134.2 kg/day of HCN emission;
- Once released, the hydrocyanic acid is subject to certain chemical reactions at low pressure, resulting ammonia;
- The mathematical modeling of the HCN concentrations within the ambient air (if the HCN released in the air is not subject to chemical reactions) emphasized the highest concentrations being at the ground level, within the industrial site namely within the area of the tailings management facility and within a certain area near the processing plant; the maximum concentration being of 382 $\mu g/m^3/h$;
- The highest HCN concentrations within the ambient air will be 2.6 times lower than the limit value stipulated by the national legislation for labor protection;
- The HCN concentrations within the ambient air from the areas situated up to 2 km towards the north-eastern vicinity of the industrial site will be of 4 to 80 μ g/m³/h, more than 250 12.5 times lower than limit value stipulated by the national legislation for labor protection;
- Once released in the air, the evolution of the HCN implies an insignificant component resulted from the reactions while liquid (water vapors and rain drops). HCN is weak water-soluble at partial, low pressures (feature of the gases released in open air), and the rain will not effectively reduce the concentrations in the air (Mudder, et al., 2001, Cicerone and Zellner, 1983);
- The probability that the HCN concentration value contained by rainfalls within and outside the footprint of the Project to be higher than the background values (0.2 ppb) is extremely low.

On the basis of the above presented information, it is very clear that HCN emissions may have a certain local impact on atmosphere quality, restricted to well within legislated limits as described above, but their implication within a possible trans-boundary impact on air quality is excluded.

Also, the specialty literature doesn't comprise information related to the effects of a potential exposure of the vegetation or ecosystems to HCN and neither the effects of the fauna health as a result of inhaling the HCN polluted air.

For details referring to the use of cyanide in the technological processes, the cyanides balance as well as the cyanide emission and impact of the cyanides on the air quality, please see the Environmental Impact Assessment (EIA) Report, Chapter 2, Chapter 4.1 and Chapter 4.2.

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 Mures and Tisa river basins in Hungary. 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 modelling 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 (<u>www.eurolimpacs.ucl.ac.uk</u>). 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 modelling created for Roșia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic,

Page of answer 7 of 8

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, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.

Page of answer 8 of 8

ltem no.	380			
No. to identify the observations received from the public	No. 109217/ 14.08.2006 and No. 74619/ 14.08.2006			
Proposal	 The questioner does not agree to the promotion of the Roşia Montană Project, making the following comments: In EIA there are no presented all the possible risks derived from this project; The overall costs for mine closure are not realistic. There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; The present urbanism plans of the Roşia Montană commune do not correspond with the mining project proposal described in EIA; There is no liner proposed for the tailings pond; The ris no liner proposed for the tailings pond; The re is not a Safety Report submitted for the public consultation and evaluation by the competent authorities; The EIA report does not assess the "Zero Alternative"; The EIA report does not assess the "Zero Alternative"; The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; The Urbanism Plan has been modified without public consultation; From archeological point of view, the area proposed to by occupied by project was not legally investigated; The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. 			
Solution	It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA. As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures,			

Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures, the implementation of the environmental management and risk systems are mitigating the consequences

Page of answer 1 of 18

to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10⁻⁶ (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roșia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for

Page of answer 2 of 18

more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). 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 physical-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

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roşia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

The overall costs for mine closure are realistic. RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with

Page of answer 4 of 18

all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and re-vegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainable reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from not being realistic—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

Page of answer 5 of 18

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roşia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage issues, with its final form determined in consultation with the community.

Page of answer 6 of 18

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

An engineered liner is included in the design of the Tailings Management Facility (TMF) basin. 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; and
- 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;

Page of answer 7 of 18

- 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.

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; and
- 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.

Page of answer 8 of 18

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 technicalconstruction 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

Page of answer 9 of 18

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.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

Roșia Montană Gold Corporation ("RMGC") has invested significant time, energy, and resources assessing the viability of a mining project in the valley of Roșia Montană. This assessment has led RMGC to conclude that Roșia Montană presents an attractive long-term development opportunity – an opinion confirmed by a variety of lending institutions, who have completed detailed reviews of the project's design and profitability. We have every confidence that we will see the project through to the end of its projected 16-year lifespan, regardless of any fluctuations in the market price of gold.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Page of answer 10 of 18

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

The Report on the Environmental impact assessment study (EIA) considered all alternative developments, including the option of not proceeding with any project – an option that would generate no investment, allowing the existing pollution problems and socio-economic decline to continue (Chapter 5 – Assessment of Alternatives).

The report also considered alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the Roşia Montană Project (RMP).

Chapter 5 also examines alternative locations for key facilities as well as alternative technologies for mining, processing and waste management, in line with best practice and as compared against published EU best available techniques (BAT) documentation.

The impact on protected flora and fauna will exist only locally, but this impact will not lead to the loss of any specie. The Project has been designed even from the beginning to fully comply with the requirements and norms imposed by Romanian and European environmental legislation.

The company believes the fact that the project impact on environment remains significant, especially because covers previous impacts. But, the investments required to ecologically restore/rehabilitate Roşia Montană area in order to address current complex environmental issues, are only achievable following the implementation of some economic projects that will generate and warrant implementation of some direct and responsible actions as a component of base principles of sustainable development concepts. Clean processes and technologies may be developed only in the presence of a solid economic environment fully compliant with the environment that will also resolve previous impacts of anthropic activities.

The base documents of the Project are in fact an unbiased reason of its implementation, considering the highly complex environmental commitment within Roşia Montană area.

Some of the Roşia Montană species that are under a certain protection status stand for an insignificant percentage of the scale of populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Due to their large volume of information, the annexes of chapter 4.6 Biodiversity can be found in the electronic version of the EIA disclosed by the company both in Romanian and English through approx. 6,000 DVD/CD copies, being accessible on the company website, and on the websites of Ministry of Environment and Water Management, local and regional environmental protection agencies of Alba, Sibiu, Cluj, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because

Page of answer 11 of 18

within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to reconstruct/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.[...]

Art. 6, 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and

Page of answer 12 of 18

decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

Page of answer 13 of 18

References:

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

Roșia Montană Gold Corporation SA (RMGC) has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roșia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roșia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting

Page of answer 14 of 18

authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roșia Montană Industrial Area", was prepared and subjected to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roșia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by

Page of answer 15 of 18

representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roşia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the

Page of answer 16 of 18

Romanian legal requirements, as well as with European standards and practices in the field.

Note that the type of research undertaken at Roşia Montană, known as preventive/rescue archaeological research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References: [1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E NG

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roșia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Țarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

Page of answer 17 of 18

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the management and conservation of the heritage remains from the Roșia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roșia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roșia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roşia Montană* Area, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roşia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	381		
No. to identify the observations received from the public	No. 109218/ 14.08.2006 and No. 74620/ 14.08.2006		
Proposal	 The questioner formulated remarks and proposals as fallows: Total costs for closing the mine are unrealistic; No financial guarantees have been stipulated; There is no liner proposed for the tailings pond; The EIA report does not stipulate financial guarantees destined to secure the waste rock deposit. there is no safety report available for the public disclosure and competent authorities assessment, in accordance with the legislation in force. The EIA report does not assess the "Zero Alternative"; The Project poses a threat for protected flora and fauna; S.C. Roşia Montană Gold Corporation S.A. does not comply with the provisions of the art.11 from the Mining Law 85/2003. The EIA report does not contain an impact assessment of the phenomenon "cyanide rain" caused by the cyanide evaporation from the tailings management facility and a description of the trans-boundary impact in case of accident on some natural important areas such as Koros Maros National Park from Hungary located along the Mureş Valley. 		
	RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.		

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million,

Page of answer 1 of 8

Solution

makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

Roșia Montană Gold Corporation ("RMGC") has invested significant time, energy, and resources assessing the viability of a mining project in the valley of Roșia Montană. This assessment has led RMGC to conclude that Roșia Montană presents an attractive long-term development opportunity – an opinion confirmed by a variety of lending institutions, who have completed detailed reviews of the project's design and profitability. We have every confidence that we will see the project through to the end of its projected 16-year lifespan, regardless of any fluctuations in the market price of gold.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity

Page of answer 2 of 8

is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

An engineered liner is included in the design of the Tailings Management Facility (TMF) basin. 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; and
- 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.

Page of answer 3 of 8

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

This claim is not true. The safety report was submitted together with the Environmental Impact Assessment (EIA) Report on May 18th, 2006 and was available for public consultation at the locations where the EIA Report was submitted, both as hardcopy and in electronic form. The electronic copy of the report could be accessed both on the web page of the Ministry of Environment and Water Management,

Page of answer 4 of 8

The Report on the Environmental impact assessment study (EIA) considered all alternative developments, including the option of not proceeding with any project – an option that would generate no investment, allowing the existing pollution problems and socio-economic decline to continue (Chapter 5 – Assessment of Alternatives).

The report also considered alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the Roşia Montană Project (RMP).

Chapter 5 also examines alternative locations for key facilities as well as alternative technologies for mining, processing and waste management, in line with best practice and as compared against published EU best available techniques (BAT) documentation.

The impact on protected flora and fauna will exist only locally, but this impact will not lead to the loss of any specie. The Project has been designed even from the beginning to fully comply with the requirements and norms imposed by Romanian and European environmental legislation.

The company believes the fact that the project impact on environment remains significant, especially because covers previous impacts. But, the investments required to ecologically restore/rehabilitate Roşia Montană area in order to address current complex environmental issues, are only achievable following the implementation of some economic projects that will generate and warrant implementation of some direct and responsible actions as a component of base principles of sustainable development concepts. Clean processes and technologies may be developed only in the presence of a solid economic environment fully compliant with the environment that will also resolve previous impacts of anthropic activities.

The base documents of the Project are in fact an unbiased reason of its implementation, considering the highly complex environmental commitment within Roşia Montană area.

Some of the Roşia Montană species that are under a certain protection status stand for an insignificant percentage of the scale of populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Due to their large volume of information, the annexes of chapter 4.6 Biodiversity can be found in the electronic version of the EIA disclosed by the company both in Romanian and English through approx. 6,000 DVD/CD copies, being accessible on the company website, and on the websites of Ministry of Environment and Water Management, local and regional environmental protection agencies of Alba, Sibiu, Cluj, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to reconstruct/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

Page of answer 5 of 8

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.[...]

Art. 6, 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

The possibility for a "cyanide rain" phenomenon to occur doesn't exist. Moreover, the specialty literature does not indicate a phenomenon called "cyanide rain"; it is known and researched only the "acid rains" phenomenon that has no connection with the behavior of the cyanide compounds in the atmosphere.

The reasons for stating that no "cyanide rains" phenomenon will ever occur are the followings:

- The sodium cyanide handling, from the unloading from the supplying trucks up to the processing tailings discharge onto the tailings management facility, will be carried out only in liquid form, represented by alkaline solutions of high pH value (higher than 10.5 11.0) having different sodium cyanide concentrations. The alkalinity of these solutions has the purpose to maintain the cyanide under the form of cyan ions (CN⁻) and to avoid the hydrocyanic acid formation (HCN), phenomenon that occurs only within environments of low pH;
- The cyanide volatilization from a certain solution can not occur under the form of free cyanides, but only under the form of HCN;
- The handling and storage of the sodium cyanide solutions will take place only by means of some closed systems; the only areas/plants where the HCN can occur and volatilize into air, at low

Page of answer 6 of 8

emission percentage, are the leaching tanks and slurry thickener, as well the tailings management facility for the processing tailings;

- The HCN emissions from the surface of the above mentioned tanks and from the tailings management facility surface can occur as a result of the pH decrease within the superficial layers of the solutions (that helps the HCN to form) and of the desorption (volatilization in air) of this compound;
- The cyanide concentrations within the handled solutions will decrease from 300 mg/l within the leaching tanks up to 7 mg/l (total cyanide) at the discharge point into the tailings management facility; the drastic reduction of the cyanide concentrations for discharging into the Tailings Management Facility (TMF) will be done by the detoxification system;
- The knowledge of cyanide chemistry and on the grounds of past experiences, we estimated the following possible HCN emissions into air: 6 t/year from the leaching tanks, 13 t/year from the slurry thickener and 30 t/year (22.4 t, respectively 17 mg/h/m² during the hot season and 7.6 t, respectively 11.6 mg/h/m² during the cold season) from the tailings management facility surface, which totals 134.2 kg/day of HCN emission;
- Once released, the hydrocyanic acid is subject to certain chemical reactions at low pressure, resulting ammonia;
- The mathematical modeling of the HCN concentrations within the ambient air (if the HCN released in the air is not subject to chemical reactions) emphasized the highest concentrations being at the ground level, within the industrial site namely within the area of the tailings management facility and within a certain area near the processing plant; the maximum concentration being of 382 μ g/m³/h;
- The highest HCN concentrations within the ambient air will be 2.6 times lower than the limit value stipulated by the national legislation for labor protection;
- The HCN concentrations within the ambient air from the areas situated up to 2 km towards the north-eastern vicinity of the industrial site will be of 4 to 80 μ g/m³/h, more than 250 12.5 times lower than limit value stipulated by the national legislation for labor protection;
- Once released in the air, the evolution of the HCN implies an insignificant component resulted from the reactions while liquid (water vapors and rain drops). HCN is weak water-soluble at partial, low pressures (feature of the gases released in open air), and the rain will not effectively reduce the concentrations in the air (Mudder, et al., 2001, Cicerone and Zellner, 1983);
- The probability that the HCN concentration value contained by rainfalls within and outside the footprint of the Project to be higher than the background values (0.2 ppb) is extremely low.

On the basis of the above presented information, it is very clear that HCN emissions may have a certain local impact on atmosphere quality, restricted to well within legislated limits as described above, but their implication within a possible trans-boundary impact on air quality is excluded.

Also, the specialty literature doesn't comprise information related to the effects of a potential exposure of the vegetation or ecosystems to HCN and neither the effects of the fauna health as a result of inhaling the HCN polluted air.

For details referring to the use of cyanide in the technological processes, the cyanides balance as well as the cyanide emission and impact of the cyanides on the air quality, please see the Environmental Impact Assessment (EIA) Report, Chapter 2, Chapter 4.1 and Chapter 4.2.

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 Mures and Tisa river basins in Hungary. 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 modelling 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

Page of answer 7 of 8

aquatic systems within the EUROLIMPACS EU research program (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia Montană.

The modelling 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, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.

Page of answer 8 of 8

ltem no.	382	Same as: 383	
No. to identify the observations received from the public	No. 109219/ 14.08.2006 and No. 74622/ 15.08.2006	Same as: No. 109220/14.08.2006 and No. 74623/15.08.2006	
Proposal			
Solution	put this into an accident p activities that A major chapt this chapter incorporated i and diversity of risks associate risks. The exte be proportions been assessed In the larger s mitigation. Sp	SEE CONTENT CONTESTATION TYPE 1 It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA.	

As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the

Page of answer 1 of 18

Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures, the implementation of the environmental management and risk systems are mitigating the consequences to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10^{-6} (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roșia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result

Page of answer 2 of 18

HCN dispersion into the air. At the same time, under certain situations and weather conditions unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia 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 physical-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.

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roşia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its

Page of answer 4 of 18

legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roșia Montană. Out of the 41 historical buildings in Roșia Montană, thirty-five (35)

Page of answer 5 of 18

are located inside the protected area of the Roşia Montană Historical Centre.

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roșia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Page of answer 6 of 18

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage issues, with its final form determined in consultation with the community.

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roşia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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

Page of answer 7 of 18

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.

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; and
- 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

Page of answer 8 of 18

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 technicalconstruction 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."

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet

Page of answer 10 of 18

address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roșia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roșia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to

Page of answer 11 of 18

restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth

Page of answer 12 of 18

maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

References:

Page of answer 13 of 18

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roșia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roșia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roșia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roșia Montană Industrial Area",

Page of answer 14 of 18

was prepared and subject to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roșia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific

Page of answer 15 of 18

coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roșia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Page of answer 16 of 18

Note that the type of research undertaken at Roşia Montană, known as preventive/rescue archaeological research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

Reference	es:									
[1]The	text	of	the	Convention	is	available	at	the	following	address:
http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E										
NG										

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roşia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Țarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

Page of answer 17 of 18

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roşia Montană* Area, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roşia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	384
No. to identify the observations received from the public	No. 109221/ 14.08.2006 and No. 74624/ 15.08.2006
Proposal	 The questioner opposes the promotion of the Roşia Montană project and makes the following observations and commentaries: The tailings pond containing residual cyanide, situated upstream of the town of Abrud, can collapse and cause extreme damages. The Roman galleries from Orlea and Cârnic are unique in their exquisite design and conservation state; Our country will only have a 2% profit out of the total quantity of extracted gold; The mining operation will leave behind a moonlike landscape, a huge quantity of cyanised water, harmful for all living creatures. Roşia Montană possesses a rich flora and fauna biodiversity, perfectly protected under the Romanian legislation. The tailings'pond will be unlined, which constitutes a breach of the directives on waterground protection; The EIM report does not mention financial guarantees regarding the safety assurance of the tailings deposit; The EIA report confirms the fact that RMGC could not find an insurer for the mining project.
Solution	The TMF is located approximately 2 km above the town of Abrud and therefore the design criteria for the dam have been established to address consequence of a dam failure. The proposed dam at the Tailings Management Facility (TMF) and the secondary dam at the catchment basin are rigorously designed to exceed Romanian and international guidelines, to allow for significant rainfall events and prevent dam failure due to overtopping and any associated cyanide discharge, surface or groundwater pollution. Specifically, the facility has been designed for two Probable Maximum Precipitation (PMP) events and the associated Probable Maximum Flood (PMF). The design criterion for TMF includes storage for two PMF flood events, more rain than has ever been recorded in this area. The construction schedule for embankment and basin staging will be completed to ensure that PMP storage requirements are available throughout the project life. The Roşia Montană TMF is therefore designed to hold a total flood volume over four times greater than the Romanian government guidelines. In addition, an emergency spillway for the dam will be constructed in the unlikely event that another event occurs after the second PMP event. A spillway is only built for safety reasons to ensure proper water discharge in an unlikely event and, thus, avoid overtopping which could cause a dam breach. The TMF design therefore very significantly exceeds required standards for safety. This has been done to ensure that the risks involved in using Corna valley for tailings storage are well below what is considered safe in every day life. Additional study was done regarding earthquakes, and, as indicated in the EIA the TMF is engineered to withstand the Maximum Credible Earthquake(MCE). The MCE is the largest earthquake that could be considered to occur at the site based on the historical record. In addition, Section 7 of the EIA report includes an assessment of the risks cases that have been analyzed and include various dam break scenarios. Specifically, the dam br

Page of answer 1 of 10

*

Please note that the Orlea and Cârnic toponyms do not refer to localities, but to massifs within the Roșia Montană area.

The reports and studies published by experts in the field make clear that the Roman galleries at Roşia Montană are significant, but not unique. As indicated in the gazetteer of the Roman mining sites from Transylvania and Banat-prepared as part of the Environmental Impact Assessment Study for the Roşia Montană project, it is difficult to justify the claim that the Roşia Montană site is unique importance if we consider the history of mining in the Roman Empire, and especially in the province of Dacia. There are at least 20 other sites with relatively similar features and some of them (Ruda Brad, Bucium – the Vulcoi Corabia area and Haneş – Amlaşul Mare area) have already produced concrete evidence proving that their archaeological potential is, to a certain extent, similar to that of the ancient *Alburnus Maior* site. This aspect should also be taken into consideration when claiming that Roşia Montană is a site of unique importance. The Roşia Montană galleries, when considered in the larger context of the Apuseni Mountains area, are, indeed, significant, but not unique. Owing to the researches undertaken as part of the "Alburnus Maior" National Research Program, financed by RMGC, they are currently the best known mining galleries in Romania.

With regard to the Orlea massif, since the proposed operations in this area are planned for a later date, preventive archaeological research will begin here in 2007. Construction activities in the Orlea area, necessary for the development of the proposed mining project, cannot start until the archaeological investigations have been completed, in accordance with the Romanian legal provisions and international practices and guidelines.

With regard to the Cârnic area, based on the scientific report submitted by French experts, on the proposal by the National Archaeology Commission, the Ministry of Culture and Religious Affairs has granted the archaeological discharge certificate for the Cârnic Massif, with the exception of an area of approximately 5 hectares, including Piatra Corbului area and the associated Roman mining remains. As part of the effort to minimize negative impacts, in addition to the thorough investigation of the area and publication of its results, specialists have deemed it appropriate to make a 3-D representation as well as replicas of these structures (at a scale of 1:1). These will be included in the new mining museum that is proposed at Roşia Montană. Mention should be made that a lawsuit has been filed with regard to the archaeological discharge certificate and that the case is currently in progress.

It should also be noted that there are other Roman mining structures at Cătălina Monulești and Păru Carpeni, similar to the ones uncovered at Orlea and Cârnic, that have been proposed for in situ preservation and development for public access.

Given the significance of the Roșia Montana's cultural heritage, and the current legal requirements, S.C. Roșia Montană Gold Corporation S.A allocated more than US& 10 million for the archaeological investigations carried out between 2001-2006. The budget for the next years, allocated for the research, conservation and restoration of the Roșia Montană's cultural heritage amounts to more than US\$ 25 million.

The Cultural Heritage Baseline Study - Volume 6 p.48 - specifies that, with regard to the Orlea area, preventive surface and underground archaeological research is planned to continue in an area of identified archaeological potential. It also specifies that the research undertaken to date is preliminary in character. Also, please note that the EIA report mentions the following: given that mining activities in the Orlea area are to be developed at a later stage, surface archaeological research in this area is planned to start in 2007. "As a result, construction activities will not begin in these areas until proper archaeological investigation consistent with the Romanian law and international best practice is concluded".(Cultural Heritage Baseline Report, vol. 6, p. 46).

In 2004, the preliminary underground investigations, undertaken in the Orlea Massif, have led to a significant discovery. The value of the discovery was confirmed in the summer of 2005. The French team led by Dr. Beatrice Cauuet uncovered a chamber equipped with a hydraulic wheel, and subsequently an entire mine dewatering system. This complex, uncovered in the Păru Carpeni area, was dated to Roman times and has been subject to extensive archaeological investigations, while special measures have been taken to ensure its preservation *in situ*. The discovery would not be affected by the future development of the Orlea open pit. Surface preventive archaeological research in the Orlea area, as well as underground

Page of answer 2 of 10

archaeological research in the Orlea- Țarina segment are planned to be undertaken between 2007 and 2012, as indicated in the Cultural Heritage Baseline Report, vol. 6, p. 48.

In the 1980s, a mining museum was developed in the Orlea massif. The museum included a series of galleries in a good state of preservation, that have been separated from adjacent, access galleries by concrete walls. The Orlea galleries, as well as those in the Cârnic massif and in other mining areas in Roșia Montană, are trapezoidal in form. During the successive reworking of these galleries, part of the Roman remains have been destroyed. In addition, the galleries suffered further deterioration, especially due to the recent mining works using drilling-blasting techniques that caused cave-ins and deterioration of underground mining remains. The removal of mine waste in the course of archaeological research adds to the process of deterioration of the Roman galleries, further accentuated by the closure of mining operations at Minvest (1st June, 2006) –given that the mining activities have ensured a minimal level of mine dewatering. Under the existing legislation, shutting down mining activities requires a comprehensive set of conservation measures. However, at Roșia Montană the mine was abandoned without any other restoration works. Just a couple of months later, drainage channels inside the Sfânta Cruce gallery, the main drainage gallery, got clogged, which led to the flooding of a number of galleries, several kilometers long. Proper maintenance works are needed if the archaeological remains are to be preserved for future generations. In the absence of such measures, the result will be disastrous, and the parts of galleries that have been preserved will disappear as a result of cave-ins and flooding. The Roman steps at Brad (Roman mining remains covered by Law 5/2000) are illustrative in this respect-once maintenance works stopped, the galleries became inaccessible.

In accordance with the List of Historic Monuments published in the Official Gazette nr. 646 bis of 16 July 2004, the industrial area that is to be developed in the Orlea Massif includes 2 archaeological sites classified as historic monuments –the Roman settlement at Alburnus Maior, the Orlea area (code LMI AB-I-m-A-00065.01), and the Roman mining exploitation at Alburnus Maior, the Orlea Massif (AB-I-m-A-00065.02).

Law 422/2001 on the protection of historical monuments, as last amended, provides for the declassification of archaeological sites, once the archaeological discharge certificate has been granted, as approved by the National Archaeological Commission within The Ministry of Culture and Religious Affairs. The archaeological discharge procedure, as defined by the law, is the procedure by means of which an area of archaeological interest may be restored to its current use (Law 258/2006, art. 5, paragraph 2). Consequently, it is true that RMGC plans to mine the gold-silver deposits located in the Orlea Massif area, in the second phase of the proposed mining project. Also, under the Governmental Ordinance no. 43/2000 on the protection of the archaeological heritage and the designation of some archaeological sites as areas of national interest, as last amended, "the investor shall finance a feasibility study and a technical proposal, describing the measures to be taken (later to be presented in detail) and the funds necessary for conducting preventive archaeological researches or, as the case may be, archaeological surveillance. Also, the investor shall finance the necessary works for the preservation of the archaeological heritage or, where appropriate, for the archaeological discharge of the area affected by works. The investor shall finance the enforcement of such measures".

Consequently, the proposed mining operations in the Orlea Massif can be developed only after the completion of preventive, surface and underground archaeological researches, that will produce a comprehensive body of data on the Roman site located in the Orlea area. As shown in Annex I to the Cultural Heritage Baseline Report (Archaeological Site Record Card-9. Orlea Massif, p.231-236), no archaeological investigations have been undertaken in this area, nor any expert studies that would determine in detail the characteristics and the spatial distribution of the archaeological remains in the area. RMGC has, therefore, committed to financing a preventive archaeological research program, to be undertaken between 2007-2012 by an expert team. Based on the research findings, a decision will be made as to whether the archaeological discharge procedure should be applied. There are no legal requirements that would prohibit conducting preventive archaeological researches in the areas with an identified archaeological heritage, such as the Orlea area.

Most of the Roman mining works in the Cârnic massif and in other mining sectors are only accessible, and in difficult conditions, to specialists, and actually partially inaccessible to the public at large. Moreover, under the EU safety rules regulating similar activities in museums all over Europe, rules that have been transposed into Romanian legislation, Roman galleries that pose safety risks cannot be opened for public

Page of answer 3 of 10

access. Note that a number of other similar Roman gallery segments will be preserved in situ.

As an alternative, the company considered the preparation of a specialized study comprising financial estimates for the conservation in their entirety of the galleries from the Cârnic massif and for opening them to tourists. Moreover, note that the costs for the development and maintenance of a public circuit in this massif are prohibitive and such an investment would not be economically feasible (see Annex "Costs Estimate for the Development of Ancient Mining Networks from Cârnic", prepared by the UK-based companies Gifford, Geo-Design and Forkers Ltd).

Given the significance of the cultural heritage at Rosia Montana and in accordance with the legal requirements, the allocated heritage research budget for 2001-2006 by S.C. Roșia Montană Gold Corporation S.A. amounted to more than US \$10 million. Moreover, based on the research results, the specialist opinions and competent authority decisions, the budget estimated by the Company for the research, conservation and restoration of the cultural heritage at Rosia Montana in future years, provided the Project is implemented, will be US\$ 25 million, as disclosed in the Environmental Impact Assessment published in May 2006 (see EIA Report vol. 32, Archaeological Heritage Management Plan for the Rosia Montana area, p. 84-85). Therefore, the company plans to continue work in Orlea area, and, above all, as indicated in the National Research Program "Alburnus Maior", to create a **modern Mining Museum** with **geological, archaeological, industrial and ethnographic heritage** exhibits, and the development of tourist access to the **Cătălina-Monulești** gallery and to the monument at **Tău Găuri**, as well as to **preserve and restore the 41 historic monument buildings and the protected area of Roșia Montană Historic Center.**

After the approval of the Roşia Montană mining project, RMGC will provide the necessary funds for in situ preservation of representative structures (The Cătălina Monulești Gallery, Piatra Corbului, Păru Carpeni), as well as for the creation of exact replicas of the mining works that have been deteriorated or of those that will be affected by the proposed operations. These activities will be developed as part of a new Mining museum, including replicas of galleries of Roman and later periods, and also displays of tools, working methods, mining techniques, metal smelting techniques. As a sign of its commitment, starting with October 2006, RMGC has initiated a maintenance program for the Sfânta Cruce Gallery in Orlea, although this is not the company's responsibility.

For further information on the most important archaeological remains, as well as for a series of comments on their protection and on the special measures proposed in the Management Plans, please see Annex "Information on the Cultural Heritage of Roșia Montană and Related Management Aspects".

The questioner is only including a small portion of the direct financial benefits to the Romanian State. The royalty benefit, for which the questioner refers, only represents 10% of the direct financial benefits to the Romanian State. In addition to royalties, the Romanian State receives direct financial benefits through its share of profits of RMGC, as well as, profit taxes, excise and payroll taxes paid by RMGC. The Romanian State's shareholding of 19.3% is fully carried at no cost to the government. In total the direct financial benefits to the Romanian State are estimated at US\$1,032 million, as listed on the table below. In addition, RMGC will purchase US\$1.5 billion in Romanian goods and services over the life of the project.

The financial benefits to the Romanian state are as follows, assuming a gold price of \$600/ounce and a silver price of \$10.50/ounce:

Page of answer 4 of 10

Taxes, Fees and Government share of profits (incl. historical taxes paid)	TOTAL (\$USD million)
Payroll taxes	177
Profit tax (16% Corporate tax rate)	284
Royalties (2% net smelter revenue)	101
Property taxes (Roșia Montană)	12
Land taxes (Roșia Montană)	21
Forestry taxes	13
Agriculture taxes	1
Land registration taxes	3
Customs and excise taxes	113
Other taxes & fees	1
Dividends (Ministry of Industry and Commerce)	306
Total	1,032

The mining operation will not create a "moonlike landscape." In fact, after completion of closure and rehabilitation, the 584 hectares (of the total 1646 hectares included in the PUZ) that compose the areas between the mine pits and processing facilities as well as the buffer zone will show no visual signs of the mining project. The infrastructure projects (i.e. roads, sewage treatment facilities, etc.) will be left for community use. In the case of the remaining 1062 hectares(see Chapter 4, Section 4.7 Landscape, table 3.1, from the EIA report), though they will be altered, they will also be remediate (reshaped, treated with an engineered soil-covering system, and revegetated) to blend with the surrounding landscape to the greatest extent possible.

RMGC's Mine Closure and Rehabilitation Management Plan (Plan J) sets out a series of measures to ensure that the mine leaves as small an imprint as possible on Roşia Montana's landscape. These measures are as follows:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake
- Covering and vegetating the tailings pond and its dam areas
- Dismantling of disused production facilities and revegetation of the cleaned-up areas
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

The mine's rehabilitation will meet or exceed the standards set by the EU Mine Waste Directive, which dictates that RMGC must "restore the land to a satisfactory state, with particular regard to soil quality, wild life, natural habitats, freshwater systems, landscape, and appropriate beneficial uses."

Concerning the questioner's specific concern about "cyanidised water," the cyanide content in the tailings management facility (TMF) will comply with European standards (EU Mine Waste Directive 2006/21/EC). No water with a cyanide concentration exceeding the very strict NTPA 001/2002 limit of 0.1 mg/l CNtot will be discharged into the environment or pumped from the TMF to the open pits. All seepage will be captured downstream of the TMF in a secondary containment dam. If any effluent does not comply with the CNtot limit, it will be treated to ensure that the cyanide remains confined to the TMF.

The impact on the protected flora and fauna will be obvious only at local level, and it will not lead to the disappearance of any species nor habitats. The mining project was conceived from the onset so as to comply with the conditions and standards stipulated by the Romanian and European legislation in the field of environmental protection.

Page of answer 5 of 10

The company believes that the environmental impact generated by proposed project remains significant the more so as it will add to the pre-existing ones. But the required investments for the ecological restoration/rehabilitation of the Roşia Montană area meant to solve complex environmental issues existing at present, can be developed only after the implementation of economic projects able to generate and ensure that direct and responsible measures are taken, as part of the principles that represent the basis for the sustainable development concepts. The presence of a strong economic system is the key for the implementation of clean economic processes and technologies, in full respect of the environment, which are able to remove the previous effects generated by human activities.

The documentation drafted to support this mining project represents an objective justification for its implementation given that the company has assumed the environmental responsibility, which is extremely complex in the Roşia Montană area.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Given the large amount of information contained, these tables are available in the electronic format of the EIA. 6000 DVD/CDs comprising the EIA Report have been made available to the public both in English and in Romanian. Moreover, the EIA is also available on RMGC's website as well as on the websites of the Ministry of Environment and Waters Management and of the Local and Regional Environment Protection Agencies of Alba County, Cluj County and Sibiu County, etc.

From practical point of view, the low value of the impact on protected flora and fauna is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Under these circumstances, we consider that the proposed project complies with the provisions of Directive 92/43 Habitats [1] and Directive 79/409 Birds [2], the more so as Plan H- Biodiversity Management Plan includes active and responsible measures for the restoration/rehabilitation of natural habitats consistent with the provisions of the aforementioned documents [3].

References:

[1]Habitats

- Article 3, paragraph 2: Each Member State shall contribute to the creation of Natura 2000 in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect, each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.
- Article 4, paragraph 1: On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species, which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11.[...]

Paragraph2: [...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5% of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Article 6, paragraph 4: If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member

Page of answer 6 of 10

State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Article 16: Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b): [...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Birds:

Article 4, paragraph 1: The species mentioned in Annex I shall be subject to special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations.

Members States shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land where this Directive applies.

[3] Directive 92/43 Habitats, art. 2 paragraph.2.; Directive 79/409 Birds, art. 3 paragraph. 2 letter. c.

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; and
- 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;

Page of answer 7 of 10

- 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

Page of answer 8 of 10

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.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of

Page of answer 9 of 10

the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

With respect to the issues indicated by you, namely the insurance of mining projects, we would like to underline the fact that the Directive no. 2004/35/CE regarding the responsibility for environmental pollution, prevention and rehabilitation of the prejudices caused to the environment, which has been published in the Official Journal of European Community no. L143/56 ("Directive no. 35/2004") establishes the general governing framework for environmental pollution.

According to the provisions stipulated by art. 1 of Directive no. 35/2004 "The purpose of this directive is to establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage."

Directive no. 35/2004 states as a principle pursuant to the provisions of art. 14 (1) the fact that "Member States shall take measures to encourage the development of financial security instruments and markets by the appropriate economic and financial operators, including financial mechanisms in case of insolvency, with the aim of enabling operators to use financial guarantees to cover their responsibilities under this Directive".

Moreover, according to the provisions of art. 19(1) Directive no. 35/2004, Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 30 April 2007. We would like to underline the fact that, up to now, the Directive no. 35/2004 hasn't been transposed into our legislation. Taking into account the previously mentioned aspects, we kindly ask you to take notice of the fact that, at this moment there are no internal legal regulations to establish the material and procedural aspects related to the establishment of such a guarantee.

However, if specific legal dispositions are going to be created with regard to the establishment of certain guarantees, RMGC is going to take all necessary measures to fulfill all mandatory legal liabilities.

We would also like to ask you to take notice of the fact that Roşia Montană Gold Corporation ("RMGC") is committed to maintaining the highest standards of occupational health and safety for its employees and service providers. Our utilization of Best Available Techniques helps us to ensure this goal is achieved. No organization gains from a loss, and to that end we will work to implement engineering solutions to risk, as they are far superior to insurance solutions to risk. Up to 75% of loss risk can be removed during the design and construction phase of a project.

In this respect we also underline the fact that RMGC has retained one of the world's leading insurance brokers, which is well established in Romania and has a long and distinguished record of performing risk assessments on mining operations. The broker will use the most appropriate property and machinery breakdown engineers to conduct risk analysis and loss prevention audit activities, during the construction and operations activity at Roşia Montană, to minimize hazards. The broker will then determine the appropriate coverage, and work with A-rated insurance companies to put that program in place on behalf of RMGC, for all periods of the project life from construction through operations and closure.

Page of answer 10 of 10

ltem no.	385	Same as: 386, 387, 388, 389		
No. to identify the observations received from the public	No. 109222/ 14.08.2006 and No. 74625/ 15.08.2006	Same as: No. 109223/14.08.2006 and No. 74626/15.08.2006, No. 109224/14.08.2006 and No. 74627/15.08.2006, No. 109225/14.08.2006 and No. 74628/15.08.2006, No. 109226/14.08.2006 and No. 74629/15.08.2006		
Proposal	 15.08.2006 The questioner made the following comments Total costs for closing the mine are unrealistic; No financial guarantees have been stipulated; There is no liner proposed for the tailings pond; The EIA report does not stipulate financial guarantees destined to secure the waste rock deposit. there is no safety report available for the public disclosure and competent authorities assessment, in accordance with the legislation in force. The EIA report does not assess the "Zero Alternative"; The Project poses a threat for protected flora and fauna; S.C. Roşia Montană Gold Corporation S.A. does not comply with the provisions of the art.11 from the Mining Law 85/2003 The EIA report does not contain an impact assessment of the phenomenon "cyanide rain" caused by the cyanide evaporation from the tailings management facility and a description of the trans-boundary impact in case of accident on some natural important areas such as Koros Maros National Park from Hungary located along the Mureş Valley. SEE CONTENT CONTESTATION TYPE 3 			
	experience an completed acc calculations at the EIA's Min	the estimates, which were developed by a team of independent experts with international d will be reviewed by third party experts, are based on the assumption that the project can be cording to the plan, without interruptions, bankruptcy or the like They are engineering nd estimates based on the current commitments of the closure plan and are summarized in e Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be a more detailed approach looking at every individual year and calculating the amount of		

updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million,

Page of answer 1 of 8

Solution

makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

Roșia Montană Gold Corporation ("RMGC") has invested significant time, energy, and resources assessing the viability of a mining project in the valley of Roșia Montană. This assessment has led RMGC to conclude that Roșia Montană presents an attractive long-term development opportunity – an opinion confirmed by a variety of lending institutions, who have completed detailed reviews of the project's design and profitability. We have every confidence that we will see the project through to the end of its projected 16-year lifespan, regardless of any fluctuations in the market price of gold.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity

Page of answer 2 of 8

is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

An engineered liner is included in the design of the Tailings Management Facility (TMF) basin. 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; and
- 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.

Page of answer 3 of 8

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

This claim is not true. The safety report was submitted together with the Environmental Impact Assessment (EIA) Report on May 18th, 2006 and was available for public consultation at the locations where the EIA Report was submitted, both as hardcopy and in electronic form. The electronic copy of the report could be accessed both on the web page of the Ministry of Environment and Water Management,

Page of answer 4 of 8

The Report on the Environmental impact assessment study (EIA) considered all alternative developments, including the option of not proceeding with any project – an option that would generate no investment, allowing the existing pollution problems and socio-economic decline to continue (Chapter 5 – Assessment of Alternatives).

The report also considered alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the Roşia Montană Project (RMP).

Chapter 5 also examines alternative locations for key facilities as well as alternative technologies for mining, processing and waste management, in line with best practice and as compared against published EU best available techniques (BAT) documentation.

The impact on protected flora and fauna will exist only locally, but this impact will not lead to the loss of any specie. The Project has been designed even from the beginning to fully comply with the requirements and norms imposed by Romanian and European environmental legislation.

The company believes the fact that the project impact on environment remains significant, especially because covers previous impacts. But, the investments required to ecologically restore/rehabilitate Roşia Montană area in order to address current complex environmental issues, are only achievable following the implementation of some economic projects that will generate and warrant implementation of some direct and responsible actions as a component of base principles of sustainable development concepts. Clean processes and technologies may be developed only in the presence of a solid economic environment fully compliant with the environment that will also resolve previous impacts of anthropic activities.

The base documents of the Project are in fact an unbiased reason of its implementation, considering the highly complex environmental commitment within Roşia Montană area.

Some of the Roşia Montană species that are under a certain protection status stand for an insignificant percentage of the scale of populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Due to their large volume of information, the annexes of chapter 4.6 Biodiversity can be found in the electronic version of the EIA disclosed by the company both in Romanian and English through approx. 6,000 DVD/CD copies, being accessible on the company website, and on the websites of Ministry of Environment and Water Management, local and regional environmental protection agencies of Alba, Sibiu, Cluj, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to reconstruct/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

Page of answer 5 of 8

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.[...]

Art. 6, 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

The possibility for a "cyanide rain" phenomenon to occur doesn't exist. Moreover, the specialty literature does not indicate a phenomenon called "cyanide rain"; it is known and researched only the "acid rains" phenomenon that has no connection with the behavior of the cyanide compounds in the atmosphere.

The reasons for stating that no "cyanide rains" phenomenon will ever occur are the followings:

- The sodium cyanide handling, from the unloading from the supplying trucks up to the processing tailings discharge onto the tailings management facility, will be carried out only in liquid form, represented by alkaline solutions of high pH value (higher than 10.5 11.0) having different sodium cyanide concentrations. The alkalinity of these solutions has the purpose to maintain the cyanide under the form of cyan ions (CN⁻) and to avoid the hydrocyanic acid formation (HCN), phenomenon that occurs only within environments of low pH;
- The cyanide volatilization from a certain solution can not occur under the form of free cyanides, but only under the form of HCN;
- The handling and storage of the sodium cyanide solutions will take place only by means of some closed systems; the only areas/plants where the HCN can occur and volatilize into air, at low

Page of answer 6 of 8

emission percentage, are the leaching tanks and slurry thickener, as well the tailings management facility for the processing tailings;

- The HCN emissions from the surface of the above mentioned tanks and from the tailings management facility surface can occur as a result of the pH decrease within the superficial layers of the solutions (that helps the HCN to form) and of the desorption (volatilization in air) of this compound;
- The cyanide concentrations within the handled solutions will decrease from 300 mg/l within the leaching tanks up to 7 mg/l (total cyanide) at the discharge point into the tailings management facility; the drastic reduction of the cyanide concentrations for discharging into the Tailings Management Facility (TMF) will be done by the detoxification system;
- The knowledge of cyanide chemistry and on the grounds of past experiences, we estimated the following possible HCN emissions into air: 6 t/year from the leaching tanks, 13 t/year from the slurry thickener and 30 t/year (22.4 t, respectively 17 mg/h/m² during the hot season and 7.6 t, respectively 11.6 mg/h/m² during the cold season) from the tailings management facility surface, which totals 134.2 kg/day of HCN emission;
- Once released, the hydrocyanic acid is subject to certain chemical reactions at low pressure, resulting ammonia;
- The mathematical modeling of the HCN concentrations within the ambient air (if the HCN released in the air is not subject to chemical reactions) emphasized the highest concentrations being at the ground level, within the industrial site namely within the area of the tailings management facility and within a certain area near the processing plant; the maximum concentration being of 382 μ g/m³/h;
- The highest HCN concentrations within the ambient air will be 2.6 times lower than the limit value stipulated by the national legislation for labor protection;
- The HCN concentrations within the ambient air from the areas situated up to 2 km towards the north-eastern vicinity of the industrial site will be of 4 to 80 μ g/m³/h, more than 250 12.5 times lower than limit value stipulated by the national legislation for labor protection;
- Once released in the air, the evolution of the HCN implies an insignificant component resulted from the reactions while liquid (water vapors and rain drops). HCN is weak water-soluble at partial, low pressures (feature of the gases released in open air), and the rain will not effectively reduce the concentrations in the air (Mudder, et al., 2001, Cicerone and Zellner, 1983);
- The probability that the HCN concentration value contained by rainfalls within and outside the footprint of the Project to be higher than the background values (0.2 ppb) is extremely low.

On the basis of the above presented information, it is very clear that HCN emissions may have a certain local impact on atmosphere quality, restricted to well within legislated limits as described above, but their implication within a possible trans-boundary impact on air quality is excluded.

Also, the specialty literature doesn't comprise information related to the effects of a potential exposure of the vegetation or ecosystems to HCN and neither the effects of the fauna health as a result of inhaling the HCN polluted air.

For details referring to the use of cyanide in the technological processes, the cyanides balance as well as the cyanide emission and impact of the cyanides on the air quality, please see the Environmental Impact Assessment (EIA) Report, Chapter 2, Chapter 4.1 and Chapter 4.2.

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 Mures and Tisa river basins in Hungary. 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 modelling 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

Page of answer 7 of 8

aquatic systems within the EUROLIMPACS EU research program (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia Montană.

The modelling 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, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.

Page of answer 8 of 8

ltem no.	390	Same as: 391, 392, 393, 394			
No. to identify the observations received from the public	No. 109227/ 14.08.2006 and No. 74630/ 15.08.2006	Same as: No. 109228/14.08.2006 and No. 74631/15.08.2006, No. 109229/14.08.2006 and No. 74632/15.08.2006, No. 109230/14.08.2006 and No. 74633/15.08.2006, No. 109231/14.08.2006 and No. 74634/15.08.2006			
Proposal	 The questioner does not agree to the promotion of the Roşia Montană Project, making the following comments: In EIA there are no presented all the possible risks derived from this project; Total costs for closing the mine are unrealistic; There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; The present urbanism plans of the Roşia Montană commune do not correspond with the mining project proposal described in EIA; The tailings management facility is not lined; The proposed waste deposits will be not constructed according to the legislation in force; Financial guarantees were not fixed; There is not a Safety Report submitted for the public consultation and evaluation by the competent authorities; The EIA report does not evaluate the "Zero Alternative"; The project represents a threatening for the protected flora and fauna; The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; Modification of the urbanism plan without the public consultation; From archeological point of view, the area proposed to by occupied by project was not legally investigated; The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. 				
Solution	put this into a an accident p activities that A major chapt this chapter incorporated i and diversity of risks associate risks. The extense be proportionand been assessed In the larger as mitigation. Sp discussion press	It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA. As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the			

As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures,

Page of answer 1 of 18

the implementation of the environmental management and risk systems are mitigating the consequences to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10⁻⁶ (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roşia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions

Page of answer 2 of 18

unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia 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 physical-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

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roșia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best

Page of answer 4 of 18

practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

Page of answer 5 of 18

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roşia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage

Page of answer 6 of 18

issues, with its final form determined in consultation with the community.

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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:

Page of answer 7 of 18

- 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.

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; and
- 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

Page of answer 8 of 18

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 technicalconstruction 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."

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed

Page of answer 10 of 18

version which could have been found at several information locations established for public hearings.

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roșia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roşia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

Page of answer 11 of 18

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment

Page of answer 12 of 18

methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

.

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

References:

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

Page of answer 13 of 18

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roşia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roşia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roşia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roşia Montană Industrial Area", was prepared and subject to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the

Page of answer 14 of 18

technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roşia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each

Page of answer 15 of 18

archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roșia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Note that the type of research undertaken at Roșia Montană, known as preventive/rescue archaeological

Page of answer 16 of 18

research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References:

[1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E <u>NG</u>

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roșia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Tarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the

Page of answer 17 of 18

management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roșia Montană Ar*ea, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roșia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	395	Same as: 396, 397, 398, 399, 400, 401, 402, 403	
No. to identify the observations received from the public	No. 109232/ 14.08.2006 and No. 74635/ 15.08.2006	Same as: No. 109233/14.08.2006 and No. 74636/15.08.2006, No. 109234/14.08.2006 and No. 74642/15.08.2006, No. 109235/14.08.2006 and No. 74643/15.08.2006, No. 109236/14.08.2006 and No. 74644/15.08.2006, No. 109237/14.08.2006 and No. 74645/15.08.2006, No. 109238/14.08.2006 and No. 74646/15.08.2006, No. 109239/14.08.2006 and No. 74647/15.08.2006, No. 109240/14.08.2006 and No. 74648/15.08.2006	
		er addressed comments and observations as follows:	
Proposal	 The overall costs for mine closure are not realistic. The financial guarantees have not been established; There is no liner proposed for the tailings pond; The EIA report does not stipulate financial guarantees destined to secure the waste rock deposit. There is not a Safety Report submitted for the public consultation and evaluation by the competent authorities; 		
		rt does not assess the "Zero Alternative";	
	 The Project poses a threat for the protected flora and fauna; S.C. Roşia Montană Gold Corporation S.A. does not comply with the provisions of the art.11 from the Mining Law 85/2003 The EIA report does not contain an impact assessment of the phenomenon "cyanide rain" caused by the cyanide evaporation from the tailings management facility and a description of the trans-boundary impact in case of accident on some natural important areas such as Koros Maros National Park from Hungary located along the Mureş Valley 		
Solution			

Page of answer 1 of 8

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from not being realistic—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;

Page of answer 2 of 8

• Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

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; and
- 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 (1×10^{-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.

Information regarding our Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). The EFG is updated annually and will always reflect the costs associated with reclamation. These funds will be held in protected accounts at the Romanian state disposal.

Page of answer 3 of 8

In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

The EIA Report considered all alternative developments, including the option of not proceeding with any project – an option that would generate no investment, allowing the existing pollution problems and socio-economic decline to continue. (Chapter 5 – Assessment of Alternatives)

The report also considered alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural and

Page of answer 4 of 8

environmental benefits brought by the Roșia Montană Project.

Chapter 5 also examines alternative locations for key facilities as well as alternative technologies for mining, processing and waste management, in line with best practice and as compared against published EU best available techniques (BAT) documentation.

The impact on the protected flora and fauna will be obvious only at local level, and it will not lead to the disappearance of any species. The mining project was conceived from the onset so as to comply with the conditions and standards stipulated by the Romanian and European legislation in the field of environmental protection.

The company believes that the environmental impact generated by proposed project remains significant the more so as it will cover the pre-existing ones. But the required investments for the ecological restoration/rehabilitation of the Roşia Montană area meant to solve complex environmental issues existing at present can be developed only after the implementation of economic projects able to generate and ensure that direct and responsible measures are taken, as part of the principles that represent the basis for the sustainable development concepts. The presence of a strong economic system is the key for the implementation of clean economic processes and technologies, in full respect of the environment, which are able to remove the previous effects generated by anthropic activities.

The documentation drafted to support this mining project represents an objective justification for its implementation given that the company assumed the environmental responsibility, which is extremely complex in the Roşia Montană area.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Given the large amount of information contained, these tables are available in the electronic format of the EIA. 6000 DVD/CDs comprising the EIA Report have been made available to the public both in English and in Romanian. Moreover, the EIA is also available on RMGC's website as well as on the websites of the Ministry of Environment and Waters Management and of the Local and Regional Environment Protection Agencies of Alba County, Cluj County and Sibiu County, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area

Page of answer 5 of 8

representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

The possibility for a "cyanide rain" phenomenon to occur doesn't exist. Moreover, the specialty literature does not indicate a phenomenon called "cyanide rain"; it is known and researched only the "acid rains" phenomenon that has no connection with the behavior of the cyanide compounds in the atmosphere.

The reasons for stating that no "cyanide rains" phenomenon will ever occur are the followings:

- The sodium cyanide handling, from the unloading from the supplying trucks up to the processing tailings discharge onto the tailings management facility, will be carried out only in liquid form, represented by alkaline solutions of high pH value (higher than 10.5 11.0) having different sodium cyanide concentrations. The alkalinity of these solutions has the purpose to maintain the cyanide under the form of cyan ions (CN⁻) and to avoid the hydrocyanic acid formation (HCN), phenomenon that occurs only within environments of low pH;
- The cyanide volatilization from a certain solution can not occur under the form of free cyanides, but only under the form of HCN;
- The handling and storage of the sodium cyanide solutions will take place only by means of some closed systems; the only areas/plants where the HCN can occur and volatilize into air, at low emission percentage, are the leaching tanks and slurry thickener, as well the tailings management facility for the processing tailings;
- The HCN emissions from the surface of the above mentioned tanks and from the tailings management facility surface can occur as a result of the pH decrease within the superficial layers of the solutions (that helps the HCN to form) and of the desorption (volatilization in air) of this compound;
- The cyanide concentrations within the handled solutions will decrease from 300 mg/l within the

Page of answer 6 of 8

leaching tanks up to 7 mg/l (total cyanide) at the discharge point into the tailings management facility; the drastic reduction of the cyanide concentrations for discharging into the Tailings Management Facility (TMF) will be done by the detoxification system;

- The knowledge of cyanide chemistry and on the grounds of past experiences, we estimated the following possible HCN emissions into air: 6 t/year from the leaching tanks, 13 t/year from the slurry thickener and 30 t/year (22.4 t, respectively 17 mg/h/m² during the hot season and 7.6 t, respectively 11.6 mg/h/m² during the cold season) from the tailings management facility surface, which totals 134.2 kg/day of HCN emission;
- Once released, the hydrocyanic acid is subject to certain chemical reactions at low pressure, resulting ammonia;
- The mathematical modeling of the HCN concentrations within the ambient air (if the HCN released in the air is not subject to chemical reactions) emphasized the highest concentrations being at the ground level, within the industrial site namely within the area of the tailings management facility and within a certain area near the processing plant; the maximum concentration being of $382 \,\mu\text{g/m}^3/\text{h}$;
- The highest HCN concentrations within the ambient air will be 2.6 times lower than the limit value stipulated by the national legislation for labor protection;
- The HCN concentrations within the ambient air from the areas situated up to 2 km towards the north-eastern vicinity of the industrial site will be of 4 to 80 μ g/m³/h, more than 250 12.5 times lower than limit value stipulated by the national legislation for labor protection;
- Once released in the air, the evolution of the HCN implies an insignificant component resulted from the reactions while liquid (water vapors and rain drops). HCN is weak water-soluble at partial, low pressures (feature of the gases released in open air), and the rain will not effectively reduce the concentrations in the air (Mudder, et al., 2001, Cicerone and Zellner, 1983);
- The probability that the HCN concentration value contained by rainfalls within and outside the footprint of the Project to be higher than the background values (0.2 ppb) is extremely low.

On the basis of the above presented information, it is very clear that HCN emissions may have a certain local impact on atmosphere quality, restricted to well within legislated limits as described above, but their implication within a possible trans-boundary impact on air quality is excluded.

Also, the specialty literature doesn't comprise information related to the effects of a potential exposure of the vegetation or ecosystems to HCN and neither the effects of the fauna health as a result of inhaling the HCN polluted air.

For details referring to the use of cyanide in the technological processes, the cyanides balance as well as the cyanide emission and impact of the cyanides on the air quality, please see the Environmental Impact Assessment (EIA) Report, Chapter 2, Chapter 4.1 and Chapter 4.2.

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 Mures and Tisa river basins in Hungary. 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 modelling 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 (<u>www.eurolimpacs.ucl.ac.uk</u>). 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 modelling created for Roșia 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 Roșia Montană as well as the complete Abrud-Arieş-Mureş

Page of answer 7 of 8

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, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.

Page of answer 8 of 8

ltem no.	404			
No. to identify the observations received from the public	No. 109241/ 15.08.2006 and No. 74649/ 15.08.2006			
Proposal	 The questioner does not agree to the promotion of the Roşia Montană Project, making the following comments: In EIA there are no presented all the possible risks derived from this project: Total costs for closing the mine are unrealistic; There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; The present urbanism plans of the Roşia Montană commune do not correspond with the mining project proposal described in EIA; The tailings management facility is not lined; The roposed waste deposits will be not constructed according to the legislation in force; Financial guarantees were not fixed; The re is not a Safety Report submitted for the public consultation and evaluation by the competent authorities; The EIA report does not evaluate the "Zero Alternative"; The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; Modification of the urbanism plan without the public consultation; From archeological point of view, the area proposed to by occupied by project was not legally investigated; The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. 			
Solution	It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA. As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures, the implementation of the environmental management and risk systems are mitigating the consequences			

Page of answer 1 of 18

to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10⁻⁶ (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roșia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for

Page of answer 2 of 18

more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). 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 physical-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

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roşia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and

Page of answer 4 of 18

regulations.

Closure and rehabilitation at Roşia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

Page of answer 5 of 18

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roşia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage issues, with its final form determined in consultation with the community.

Page of answer 6 of 18

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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

Page of answer 7 of 18

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.

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; and
- 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.

Page of answer 8 of 18

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 technicalconstruction 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

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

Page of answer 10 of 18

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roşia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roşia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

Page of answer 11 of 18

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment

Page of answer 12 of 18

methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

.

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

References:

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

Page of answer 13 of 18

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roşia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roşia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roşia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roşia Montană Industrial Area", was prepared and subject to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the

Page of answer 14 of 18

technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roşia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each

Page of answer 15 of 18

archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roșia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Note that the type of research undertaken at Roșia Montană, known as preventive/rescue archaeological

Page of answer 16 of 18

research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References:

[1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E <u>NG</u>

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roșia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Tarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the

Page of answer 17 of 18

management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roșia Montană Ar*ea, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roșia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	405				
Netether	No.				
No. to identify the	109242/				
observations	and No				
received from					
the public					
	The questioner does not agree with the promotion of the Roșia Montană Project and makes the following				
Proposal	 comments and observations: The Roman galleries in Orlea si Cârnic are unique in terms of their exquisite design and their preservation; There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; 				
	- The proposed waste deposits will be not constructed according to the legislation in force.				
	Please note that the Orlea and Cârnic toponyms do not refer to localities, but to massifs within the Roșia Montană area.				
	The reports and studies published by experts in the field make clear that the Roman galleries at Roșia Montană are significant, but not unique. As indicated in the gazetteer of the Roman mining sites from Transylvania and Banat-prepared as part of the Environmental Impact Assessment Study for the Roșia Montană project, it is difficult to justify the claim that the Roșia Montană site is unique importance if we consider the history of mining in the Roman Empire, and especially in the province of Dacia. There are at least 20 other sites with relatively similar features and some of them (Ruda Brad, Bucium – the Vulcoi Corabia area and Haneş – Amlaşul Mare area) have already produced concrete evidence proving that their archaeological potential is, to a certain extent, similar to that of the ancient <i>Alburnus Maior</i> site. This aspect should also be taken into consideration when claiming that Roșia Montană is a site of unique importance. The Roșia Montană galleries, when considered in the larger context of the Apuseni Mountains area, are, indeed, significant, but not unique. Owing to the researches undertaken as part of the "Alburnus Maior" National Research Program, financed by RMGC, they are currently the best known mining galleries in Romania.				
Solution	With regard to the Orlea massif, since the proposed operations in this area are planned for a later date, preventive archaeological research will begin here in 2007. Construction activities in the Orlea area, necessary for the development of the proposed mining project, cannot start until the archaeological investigations have been completed, in accordance with the Romanian legal provisions and international practices and guidelines.				
	With regard to the Cârnic area, based on the scientific report submitted by French experts, on the proposal by the National Archaeology Commission, the Ministry of Culture and Religious Affairs has granted the archaeological discharge certificate for the Cârnic Massif, with the exception of an area of approximately 5 hectares, including Piatra Corbului area and the associated Roman mining remains. As part of the effort to minimize negative impacts, in addition to the thorough investigation of the area and publication of its results, specialists have deemed it appropriate to make a 3-D representation as well as replicas of these structures (at a scale of 1:1). These will be included in the new mining museum that is proposed at Roşia Montană. Mention should be made that a lawsuit has been filed with regard to the archaeological discharge certificate and that the case is currently in progress.				
	It should also be noted that there are other Roman mining structures at Cătălina Monulești and Păru Carpeni, similar to the ones uncovered at Orlea and Cârnic that have been proposed for in situ preservation and development for public access.				
	Given the significance of the Roșia Montana's cultural heritage, and the current legal requirements, S.C. Roșia Montană Gold Corporation S.A allocated more than US\$ 10 million for the archaeological investigations carried out between 2001-2006. The budget for the next years, allocated for the research, conservation and restoration of the Roșia Montană's cultural heritage amounts to more than US\$ 25 million				

Page of answer 1 of 6

million.

The Cultural Heritage Baseline Study - Volume 6 p.48 - specifies that, with regard to the Orlea area, preventive surface and underground archaeological research is planned to continue in an area of identified archaeological potential. It also specifies that the research undertaken to date is preliminary in character. Also, please note that the EIA report mentions the following: given that mining activities in the Orlea area are to be developed at a later stage, surface archaeological research in this area is planned to start in 2007. "As a result, construction activities will not begin in these areas until proper archaeological investigation consistent with the Romanian law and international best practice is concluded".(Cultural Heritage Baseline Report, vol. 6, p. 46).

In 2004, the preliminary underground investigations, undertaken in the Orlea Massif, have led to a significant discovery. The value of the discovery was confirmed in the summer of 2005. The French team led by Dr. Beatrice Cauuet uncovered a chamber equipped with a hydraulic wheel, and subsequently an entire mine dewatering system. This complex, uncovered in the Păru Carpeni area, was dated to Roman times and has been subject to extensive archaeological investigations, while special measures have been taken to ensure its preservation *in situ*. The discovery would not be affected by the future development of the Orlea open pit. Surface preventive archaeological research in the Orlea area, as well as underground archaeological research in the Orlea-Țarina segment are planned to be undertaken between 2007 and 2012, as indicated in the Cultural Heritage Baseline Report, vol. 6, p. 48.

In the 1980s, a mining museum was developed in the Orlea massif. The museum included a series of galleries in a good state of preservation that have been separated from adjacent, access galleries by concrete walls. The Orlea galleries, as well as those in the Cârnic massif and in other mining areas in Roșia Montană, are trapezoidal in form. During the successive reworking of these galleries, part of the Roman remains have been destroyed. In addition, the galleries suffered further deterioration, especially due to the recent mining works using drilling-blasting techniques that caused cave-ins and deterioration of underground mining remains. The removal of mine waste in the course of archaeological research adds to the process of deterioration of the Roman galleries, further accentuated by the closure of mining operations at Minvest (1st June, 2006) –given that the mining activities have ensured a minimal level of mine dewatering. Under the existing legislation, shutting down mining activities requires a comprehensive set of conservation measures. However, at Rosia Montană the mine was abandoned without any other restoration works. Just a couple of months later, drainage channels inside the Sfânta Cruce gallery, the main drainage gallery, got clogged, which led to the flooding of a number of galleries, several kilometers long. Proper maintenance works are needed if the archaeological remains are to be preserved for future generations. In the absence of such measures the result will be disastrous, and the parts of galleries that have been preserved will disappear as a result of cave-ins and flooding. The Roman steps at Brad (Roman mining remains covered by Law 5/2000) are illustrative in this respect-once maintenance works stopped, the galleries became inaccessible.

In accordance with the List of Historic Monuments published in the Official Gazette nr. 646 bis of 16 July 2004, the industrial area that is to be developed in the Orlea Massif includes 2 archaeological sites classified as historic monuments –the Roman settlement at Alburnus Maior, the Orlea area (code LMI AB-I-m-A-00065.01), and the Roman mining exploitation at Alburnus Maior, the Orlea Massif (AB-I-m-A-00065.02).

Law 422/2001, as last amended by Law 259/2006, provides for the declassification of archaeological sites, once the archaeological discharge certificate has been granted, as approved by the National Archaeological Commission within The Ministry of Culture and Religious Affairs. The archaeological discharge procedure, as defined by the law, is the procedure by means of which an area of archaeological interest may be restored to its current use (Law 258/2006, art. 5, paragraph 2). Consequently, it is true that RMGC plans to mine the gold-silver deposits located in the Orlea Massif area, in the second phase of the proposed mining project. Law 258/2006, article 7, point a) also stipulates that "the investor shall finance a feasibility study and a technical proposal, describing the measures to be taken (later to be presented in detail) and the funds necessary for conducting preventive archaeological researches or, as the case may be, archaeological surveillance. Also, the investor shall finance the necessary works for the preservation of the archaeological heritage or, where appropriate, for the archaeological discharge of the area affected by works. The investor shall finance the enforcement of such measures".

Consequently, the proposed mining operations in the Orlea Massif can be developed only after the

Page of answer 2 of 6

completion of preventive, surface and underground archaeological researches that will produce a comprehensive body of data on the Roman site located in the Orlea area. As shown in Annex I to the Cultural Heritage Baseline Report (Archaeological Site Record Card-9. Orlea Massif, p.231-236), no archaeological investigations have been undertaken in this area, nor any expert studies that would determine in detail the characteristics and the spatial distribution of the archaeological remains in the area. RMGC has, therefore, committed to financing a preventive archaeological research program, to be undertaken between 2007-2012 by an expert team. Based on the research findings, a decision will be made as to whether the archaeological discharge procedure should be applied. There are no legal requirements that would prohibit conducting preventive archaeological researches in the areas with an identified archaeological heritage, such as the Orlea area.

Most of the Roman and later period mining works in the Cârnic massif are only accessible, and in difficult conditions, to specialists, and actually partially inaccessible to the public at large. Moreover, under the EU safety rules regulating similar activities in museums all over Europe, rules that have been transposed into Romanian legislation, Roman galleries that pose safety risks cannot be opened for public access. Note that a number of other similar Roman gallery segments will be preserved *in situ*.

As an alternative, the company considered the preparation of a specialized study comprising financial estimates for the conservation in their entirety of the galleries from the Cârnic massif and for opening them to tourists. Moreover, note that the costs for the development and maintenance of a public circuit in this massif are prohibitive and such an investment would not be economically feasible (see Annex "Costs Estimate for the Development of Ancient Mining Networks from Cârnic", prepared by the UK-based companies Gifford, Geo-Design and Forkers Ltd).

Given the significance of the cultural heritage at Roșia Montană and in accordance with the legal requirements, the allocated heritage research budget for 2001-2006 by S.C. Roșia Montană Gold Corporation S.A. amounted to more than US \$10 million. Moreover, based on the research results, the specialist opinions and competent authority decisions, the budget estimated by the Company for the research, conservation and restoration of the cultural heritage at Roșia Montană in future years, provided the Project is implemented, will be US\$ 25 million, as disclosed in the Environmental Impact Assessment published in May 2006 (see EIA Report vol. 32, Archaeological Heritage Management Plan for the Roșia Montană area, p. 84-85). Therefore, the company plans to continue work in Orlea area, and, above all, as indicated in the National Research Program "Alburnus Maior", to create a **modern Mining Museum** with **geological, archaeological, industrial and ethnographic heritage** exhibits, and the development of tourist access to the **Cătălina-Monulești** gallery and to the monument at **Tău Găuri**, as well as to **preserve and restore the 41 historic monument buildings and the protected area of Roșia Montană Historic Center.**

After the approval of the Roşia Montană mining project, RMGC will provide the necessary funds for in situ preservation of representative structures (The Cătălina Monulești Gallery, Piatra Corbului, Păru Carpeni), as well as for the creation of exact replicas of the mining works that have been deteriorated or of those that will be affected by the proposed operations. These activities will be developed as part of a new Mining museum, including replicas of galleries of Roman and later periods, and also displays of tools, working methods, mining techniques, metal smelting techniques. As a sign of its commitment, starting with October 2006, RMGC has initiated a maintenance program for the Sfânta Cruce Gallery in Orlea, although this is not the company's responsibility.

For further information on the most important archaeological remains, as well as for a series of comments on their protection and on the special measures proposed in the Management Plans, please see Annex "Information on the Cultural Heritage of Roșia Montană and Related Management Aspects".

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan -3^{rd} Section - protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized

Page of answer 3 of 6

studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

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; and
- 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

Page of answer 4 of 6

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 technicalconstruction 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

Page of answer 5 of 6

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.

Page of answer 6 of 6

ltem no.	406	Same as: 407
No. to identify the observations received from the public	No. 109243/ 14.08.2006 and No. 74651/ 15.08.2006	Same as: No. 109244/14.08.2006 and No. 74652/15.08.2006
Proposal	 The questioner does not agree to the promotion of the Roşia Montană Project, making the following comments: In EIA there are no presented all the possible risks derived from this project; Total costs for closing the mine are unrealistic; There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; The present urbanism plans of the Roşia Montană commune do not correspond with the mining project proposal described in EIA; The tailings management facility is not lined; The proposed waste deposits will be not constructed according to the legislation in force; Financial guarantees were not fixed; The ris not a Safety Report submitted for the public consultation and evaluation by the competent authorities; The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; Modification of the urbanism plan without the public consultation; From archeological point of view, the area proposed to by occupied by project was not legally investigated; The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. 	
Solution	put this into an accident p activities that A major chap this chapter incorporated and diversity risks associat risks. The ext be proportion been assessed In the larger mitigation. Sp discussion pro-	re of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to context, the common action of walking on the street or developing everyday activities have botential. This accident potential is twice higher than within the framework of industrial cuse hazardous substances. ter of the EIA report was dedicated to the identification of risks for the project. In addition, provides a discussion of the mitigation measures for each risk and how they were into the project designs. It is recognized that risk identification is difficult due to the number of events that can be envisioned. The EIA report cannot assume to cover all of he potential ed with the project. However, it has attempted to identify and address the most relevant tent of risk assessment and the intensity of the prevention and mitigation measures should hal to the risk involved and therefore only the risks that have been considered important have lin detail. Each is described below. sense, the entire EIA report is focused on the assessment of impacts and their associated becifically, Chapter 4 of the EIA presents that impact assessment of the project. The following esents a summary of the impact discussed in the EIA. ural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the avironmental Impact Assessment, emphasizes the fact that safety and prevention measures,

Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures, the implementation of the environmental management and risk systems are mitigating the consequences

Page of answer 1 of 18

to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10⁻⁶ (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roșia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for

Page of answer 2 of 18

more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). 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 physical-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

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roşia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and

Page of answer 4 of 18

regulations.

Closure and rehabilitation at Roşia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

Page of answer 5 of 18

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the $15^{\rm th}$ May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roşia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage issues, with its final form determined in consultation with the community.

Page of answer 6 of 18

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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

Page of answer 7 of 18

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.

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; and
- 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.

Page of answer 8 of 18

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 technicalconstruction 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

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

Page of answer 10 of 18

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roşia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roşia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

Page of answer 11 of 18

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment

Page of answer 12 of 18

methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

.

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

References:

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

Page of answer 13 of 18

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roşia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roşia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roşia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roşia Montană Industrial Area", was prepared and subject to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the

Page of answer 14 of 18

technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roşia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each

Page of answer 15 of 18

archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roșia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Note that the type of research undertaken at Roșia Montană, known as preventive/rescue archaeological

Page of answer 16 of 18

research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References:

[1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E NG

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roșia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Tarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the

Page of answer 17 of 18

management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roșia Montană Ar*ea, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roșia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	408	Same as: 409	
No. to identify the observations received from the public	No. 109245/14. 08.2006 and No. 74653/15.0 8.2006	Same as: No. 109246/14.08.2006 and No. 74654/15.08.2006	
Proposal	The questioner does not agree to the promotion of the Roșia Montană Project, making the following comments: - In EIA there are no presented all the possible risks derived from this project - Total costs for closing the mine are unrealistic; - There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; - The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; - Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; - The present urbanism plans of the Roșia Montană commune do not correspond with the mining project proposal described in EIA; - The tailings management facility is not lined; - The proposed waste deposits will be not constructed according to the legislation in force; - Financial guarantees were not fixed; - The EIA report does not evaluate the "Zero Alternative"; - The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; - The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; - Modification of the urbanism plan without the public consultation; - The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. SEB CONTENT CONTESTATION TYPE 1		
Solution	put this into a an accident p activities that A major chapt this chapter incorporated i and diversity risks associate risks. The exte be proportion been assessed In the larger a mitigation. Sp discussion pre	It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA. As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the	

As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures,

Page of answer 1 of 18

the implementation of the environmental management and risk systems are mitigating the consequences to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10⁻⁶ (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roşia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions

Page of answer 2 of 18

unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia 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 physical-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

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roșia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best

Page of answer 4 of 18

practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

Page of answer 5 of 18

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roşia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage

Page of answer 6 of 18

issues, with its final form determined in consultation with the community.

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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:

Page of answer 7 of 18

- 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.

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; and
- 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

Page of answer 8 of 18

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 technicalconstruction 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."

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed version which could have been found at several information locations established for public hearings.

Page of answer 10 of 18

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roşia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roşia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

Page of answer 11 of 18

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8** through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment

Page of answer 12 of 18

methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

•

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

References:

[1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number FHWA-RD-77-108, USA, Washington, D.C., 1978.

Page of answer 13 of 18

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roşia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roşia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roşia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roşia Montană Industrial Area", was prepared and subject to public debate in June 2006 in accordance with the provisions of Order no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the

Page of answer 14 of 18

technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roșia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roşia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been conducted in full compliance with the existing legislation. The investigations undertaken during each

Page of answer 15 of 18

archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roșia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Note that the type of research undertaken at Roșia Montană, known as preventive/rescue archaeological

Page of answer 16 of 18

research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References:

[1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E NG

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roşia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Tarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

In compliance with the requirements of the Ministry of Environment and Waters Management and the Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the

Page of answer 17 of 18

management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roșia Montană Ar*ea, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roșia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).

Page of answer 18 of 18

ltem no.	410	Same as: 411
No. to identify the observations received from the public	No. 109247/ 14.08.2006 and No. 74655/ 15.08.2006	Same as: No. 109248/14.08.2006 and No. 74656/15.08.2006
Proposal	The questioner does not agree to the promotion of the Roşia Montană Project, making the following comments: - In EIA there are no presented all the possible risks derived from this project - Total costs for closing the mine are unrealistic; - There isn't until now an approved Zonal Urbanism Plan for the Protected Areas; - The phase of public consultation and quality evaluation of the impact assessment study report begun without a valid urbanism certificate; - Information about the foundation which RMGC will establish and subsidize is not given. This foundation follows to assume the obligations which the mining operation can not assume; - The present urbanism plans of the Roşia Montană commune do not correspond with the mining project proposal described in EIA; - The tailings management facility is not lined; - The proposed waste deposits will be not constructed according to the legislation in force; - Financial guarantees were not fixed; - There is not a Safety Report submitted for the public consultation and evaluation by the competent authorities; - The EIA report does not evaluate the "Zero Alternative"; - The EIA report does not refer to the impact on the listed heritage buildings of noise and vibrations caused by the mining operations; - The public/ONGs whish to consult the contracts and agreements between Company and Romanian State; - Modification of the urbanism plan without the public consultation; - From archeological point of view, the area proposed to be occupied by project was not legally investigated; - The questioner contests the protection of the architectural and spiritual monuments with the responsibility of the state institutions for the protection operation. SEE CONTENT CONTESTATION TYPE 1	
Solution	It is the nature of risk that it can be mitigated and diminished; it cannot be made to disappear. In order to put this into context, the common action of walking on the street or developing everyday activities have an accident potential. This accident potential is twice higher than within the framework of industrial activities that use hazardous substances. A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA. As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the	

As far as natural and technological risks assessments are concerned, Chapter 7, "Risk Cases", from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures,

Page of answer 1 of 18

the implementation of the environmental management and risk systems are mitigating the consequences to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario.

More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10⁻⁶ (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). To put this in context, simply living in southern Florida rates a 25 on the risk scale.

A global assessment of the risks associated with the Roşia Montană Project is obtained by the quick environmental and health risk assessment methodology initially developed by the Italian Ministry of the Environment and the World Health Organization. Natural hazard and risk identification and analysis presents key data and information in assessing potential technological accidents. Thus:

- In designing the Tailings Management Facility, the design parameters were chosen to fully cover the characteristic seismic risk of the area. These seismic design parameters adopted for the TMF and other facilities on the proposed site result in a safety factor much greater than the minimum accepted under the Romanian and European design standards for such facilities;

- in the sector physically impacted by the Project, the risk of floods will remain very low due to the small catchments (controlled by the Roşia and Corna Streams) the area affected by the operation, and the creation of containment, diversion and drainage hydro-technical structures for storm waters on the site, and in the Abrud catchment in general;

- risks caused by meteorological events have been reviewed and used in assessing the hazards of the affected technological processes.

From the analysis of morphometrical parameters and their correlation with other sets of information on the natural slopes on and near the site shows that the (qualitatively estimated) landslide occurrence risk is low to moderate and its consequences will not cause major impacts on the structural components of the Project.

There is no significant risk associated with resource depletion. Mining activities are planned judiciously, so as to extract only the profitable gold and silver resources and only the necessary construction rock for the Project. The management of the mining concession site will minimize reserve "sterilization" (limitation of future access to the reserves).

In assessing technological hazards and risks, the quantity of hazardous substances on the site was calculated as a total and by category, as provided by the *Notification Procedure* approved by Ministry of Agriculture, Forestry, Water and Environment (MAFWE) Order 1084/2003. Based on an evaluation of hazardous substances in stock on the Project site in relation to the relevant quantities provided by the Government Decision 95/2003 which transposes the Seveso Directive, the Project ranges between the upper and the lower limits, and therefore S.C. Roşia Montană Gold Corporation S.A. is required to prepare a Report on Environmental Impact Assessment Study to be sent to the local environmental authority and the local civilian protection authority a *Safety Report* on its operations to prevent major accident risks.

In assessing the consequences of major accidents involving dangerous substances, physical-mathematical models accepted internationally and especially at EU level, and the current version of the SLAB (Canada) software have been used, the latter for the atmospheric dispersion of denser than air gases, that may handle a multitude of situations and scenarios. Similarly, the EFFECTSGis 5.5 (Netherlands) software, developed for the analysis of the effects of industrial accidents and of consequences. Several scenarios were considered in response to the internal legislative requirements, especially related to the implementation of the Internal Emergency Plans (GD 647/2005). The conclusions of the risk assessment for major accidents were:

- The total destruction of plant facilities may only be caused by terrorist attack with classic or nuclear weapons. Simultaneous damage to the HCl tank (including containment) and to the NaCN solution tank, the tanks containing enriched solution, to one or more leaching tanks, having as a result HCN dispersion into the air. At the same time, under certain situations and weather conditions

Page of answer 2 of 18

unfavorable for dispersion, people within 40 m of the emission source, surprised by the toxic cloud for more than 1 minute without respiratory protection equipment, will most certainly die. It may also be considered that, on a radius of about 310 m, persons exposed for more than 10 minutes may suffer serious intoxications that may also lead to death. Toxic effects may occur in persons up to about 2 km downwind of the process plant;

- Operating errors and/or failures in the measurement and control devices, resulting in a lower pH in the leaching tank, thickener and/or DETOX slurry and accidental emissions of hydrocyanic acid. The area affected by concentrations of 290 ppm over a 10 min exposure time is within a circle of 36 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 157.5 m radius. The center of these circles is the middle of the CIL tanks platform;

- Accidental HCN emission from the decanter. The accident may be caused by a drop of pH in the CIL tanks combined with an overdose of flocculent solution and faulty pH monitoring systems. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 65 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 104 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Accidental HCN emission from the DETOX facility. The accident may be caused by a drop of pH in the reactors generated by an overdose of metabisulfite solution and/or copper sulphate combined with faulty pH monitoring systems. The area affected by high 1900 ppm concentrations for a 1 min exposure time is located within a 10 m radius circle. The area affected by concentrations of 300 ppm over a 10 min exposure time is within a circle of 27 m radius and the 50 ppm IDLH threshold for 30 min exposure will be reached over an area of 33 m radius. The center of these circles is mid-distance between the two DETOX facilities;

- Explosion of the LPG storage tank. The LPG storage tank has a 50 ton capacity and is located outdoors, near the heating plant. The simulation was conducted for the worst case scenario, considering an explosion of the full tank. Threshold I with heat 12.5 kW/m2 is within a 10.5 m radius circle and Threshold II, of heat radiation 5 kW/m2 is within a circle of 15 m radius;

- Damage and/or fire at the fuel tanks. Simulations were conducted for the worst case scenarios, considering ignition and combustion of all the diesel (fire in the tank, or in the containment vat, when full of diesel);

- Corna Dam break and breach development. Two credible accident scenarios were considered in simulating tailings flow out of the Tailings Management Facility, and six credible scenarios for the flow of decant water and tailings pore water, with significant effects on the terrestrial and aquatic ecosystems, in different weather conditions;

- Tailings flow may occur along Corna Valley, on a 800 m (starter dam break) or over 1600 m reach should the Corna dam break in its final stage;

- In regard to water quality impacts, cyanide concentrations in the water in the shape of a pollution plume may reach Arad, near the Romanian-Hungarian border on the Mureş River, in concentrations ranging between 0.03 and 0.5 mg/L. Due to inherent mathematical limitations in the models, these values and the accident effects are considered overestimated. Therefore, the results describe the "worst case scenario" based on extreme dam break assumptions for the Corna Dam.

A new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilization and breakdown of cyanides during the downstream movement of the pollutant flow (Whiteland et al., 2006).

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 (<u>www.eurolimpacs.ucl.ac.uk</u>). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roșia 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 physical-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

Page of answer 3 of 18

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, an information sheet presenting the INCA modeling work is presented under the title of the Mureş River Modeling Program and the full modeling report is presented in Annex 5.1:

- Development of HCN on the tailings pond surface. Simulated emissions of HCN from the Tailings Management Facility pond surface and of their dispersion into the ambient air show that the level of 400 μ g/m3 hourly average and 179 μ g/m3 8hr average will not be exceeded. These HCN concentrations are only slightly over the odor threshold (0.17ppm) and much below potentially dangerous concentrations;

- Cetate Dam break and breach development. Flood modeling was in case of a break in Cetate dam was based on the design parameters obtained from the hydrometeorological study "Assessment of rainfall intensity, frequency and runoff for the Roşia Montană Project - Radu Drobot". The breach characteristics were predicted using the BREACH model, and the maximum height of the flood wave in various flow sections was modeled using the FLDWAV software. The assumptions included a total 800000 m³ discharge for one hour, when the peak of the flood hydrograph is about 4.9 m above base flow immediately below the dam and in the narrow Abrud valley 5.9-7,5 km downstream of the dam, while in the last section considered (10,5 km) water depth is about 2.3 m above base flow and the maximum flow rate 877 m³/s. Further, the broader Aries valley allows the flood wave to propagate on a significantly wider bed, which results in a highly attenuated hydrograph. These results describe the "worst case scenario" based on extreme dam break assumptions:

- Accidents during cyanide transportation. Due to the large quantities of cyanide transported (about 30t /day) the risks associated to this activity were assessed in detail using the ZHA- Zurich Hazard Analysis method. As a consequence, the optimum transport route was selected from the manufacturer to the Process Plant, e.g.;

- Cyanide transport (in solid state) will exclusively involve special SLS (Solid to Liquid System) containers, 16 tons each. The ISO compliant container will be protected by a framework with legs, which allows separation from the transport trailer for temporary storage. The wall is 5.17 mm thick, which, together with the protective framework, provides additional protection to the load in case of accident. This system is considered BAT and is currently one of the safest cyanide transportation options.

It is being mentioned the fact that the study develops the occurrence possibility of these scenarios (pages 166-171, Conclusions).

As regards the cyanides management, there is a baseline study named "Roșia Montană Golden Project, Cyanides Management Plan" prepared in compliance with the "International Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (International Cyanide management Institute) May 2002". S.C. Roșia Montană Gold Corporation is signatory to this code.

Bibliographical references for Chapter 7 "Risk Cases" are listed at page173-176.

RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best

Page of answer 4 of 18

practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations.

Closure and rehabilitation at Roșia Montană involves the following measures:

- Covering and vegetating the waste dumps as far as they are not backfilled into the open pits;
- Backfilling the open pits, except Cetate pit, which will be flooded to form a lake;
- Covering and vegetating the tailings pond and its dam areas;
- Dismantling of disused production facilities and revegetation of the cleaned-up areas;
- Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment;
- Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached.

While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US \$65 million, makes up 87% of closure and rehabilitation costs.

Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production.

We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US \$683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US \$25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US \$73 million reported in the EIA based on additional information, currently total US \$76 million.

According to Law 5/2000, regarding the approval of the Territory Arrangement Plan – 3^{rd} Section – protected areas ("Law 5/2000") (article 5, paragraphs 2-3), local public authorities, with the support of the competent central public authorities, had the obligation to establish the boundaries of the protection areas for the cultural heritage elements stipulated in Annex III to the above-mentioned law. This measure should have been taken within 12 months from the effective date of Law 5/2000, based on specialized studies. For this purpose, the local public authorities had to prepare the town planning documentation and its related regulations, developed and approved according to the law. This documentation must comprise the necessary protection and conservation measures for the national cultural heritage elements located in this area.

Concurrently, Law 350/2001 on the territory arrangement and urbanism stipulates the right of legal or natural persons interested in arranging the territory, to initiate the development of urbanism plans.

In accordance with these legal provisions, in 2001, RMGC initiated the preparation of these specific townplanning documentations - the General Urbanism Plan and the Zonal Urbanism Plan. These plans have been developed by Romanian certified companies and followed the legal approval procedure. The permit for the establishment of the Roşia Montană Historical Centre Protected Area was issued by the Ministry of Culture and Religious Affairs in 2002 (permits no. 61/14.02.2002 and no. 178/20.06.2002) as part of the procedure for the approval of the town planning documentation. Based on these permits, the Ministry of Culture and Religious Affairs requested the company to develop a Zonal Urbanism Plan for the Historical Centre of Roşia Montană. Out of the 41 historical buildings in Roşia Montană, thirty-five (35) are located inside the protected area of the Roşia Montană Historical Centre.

Page of answer 5 of 18

As for the heritage elements located in the future industrial development area (6 historical buildings), these are discussed in the Industrial Zonal Urbanism Plan prepared by SC Proiect Alba SA. The regulations included in this document will contain measures for the protection of these monuments.

In conclusion, the town planning studies and the specialized studies conducted for the purpose of establishing the boundaries of the protection areas within the future mining operations perimeter are currently pending approval, in accordance with the legal provisions, by the competent institutions and committees. Please note that none of the historical houses located in the perimeter of the proposed project will be affected; on the contrary, all the 41 historic buildings will be included in a complex restoration and rehabilitation program (see the Management Plan). This program is mandatory, regardless of the implementation of the mining project, if we want to prevent these buildings from collapsing because of their advanced degradation.

Your assertion regarding the failure to obtain an applicable urbanism certificate at the start up of the public debates and of the evaluation o the quality of the report to the environmental impact assessment, is not correct.

Thus, by the time when the public debate stage started up there was an applicable urbanism certificate and namely the urbanism certificate no. 78/26.04.2006 issued by Alba County Council. This certificate was obtained prior to the evaluation stage of the quality of the report to the environmental impact assessment which started up once the EIA was submitted to the Ministry of Environment and Water Management on the 15th May 2006.

For better understanding the applicable legal provisions and the facts developped within the mining project of Roșia Montană zone we would like to make several comments:

- The procedure for issuing the environmental permit for Roşia Montană project started up on the 14th December 2004 by submitting the technical memorandum and the urbanism certificate no.68/26.August 2004 (certificate applicable by that time). S.C. Roșia Montană Gold Corporation S.A. (RMGC) applied for and obtained a new urbanism certificate no.78/26.04.2006 issued by Alba County Council for the entire Roșia Montană Project applicable on the date of the EIA Report submission (15th May 2006) and prior to the public debate strat up (June 2006);
- The Section 1 of the urbanism certificate no.78 of 26th 04.2006 entitled Work construction, position 10 "Processing plant and associated constructions " including the tailing management facility which existence is compulsory for the processing plant running. The Tailing management facility is also specified on the layout plans which are integral part of the urbanism certificate and they were sealed by Alba County Council so that they cannot be modified;
- The Urbanism Certificate is an informative document and its goal is only to inform the applicant about the legal, economic and technical regime of the existing lands and buildings and to establish the urbanism requirements and the approvals necessary to obtain the construction permit (including the environmental permit) as per art.6 of Law 50/1991 referring to the completion of construction works, republished and art 27 paragraph 2 of the Norms for the application of Law 50/1991 Official Journal 825 bis/13.09.2005).

As it is an informative document, it does not limit the number of certificates an applicant may obtain for the same land plot (art. 30 of Law no. 350/2001 regarding the territorial planning and urbanism).

Introduced as part of the Environmental Impact Assessment Report Study (EIA), the Roșia Montană Foundation is shifting in focus. The Community Sustainable Development Plan activities initially conceived as coming under the Foundation umbrella (business oriented activities: business incubator, business advisory center, micro-finance facility, as well as social oriented activities: education and training center) have been advanced independently, via partnerships and with community participation in decision-making – a preferable way to advance social and economic development programs.

Going forward, the Foundation will take shape around preservation, patrimony and cultural heritage

Page of answer 6 of 18

issues, with its final form determined in consultation with the community.

In terms of the philosophy that guides the company's Sustainable Development efforts, the Roşia Montană Gold Corporation (RMGC) sees itself not as principal provider, but as a partner. Community involvement is considered the starting point; over time, as the community builds the capacity to maintain programs in its own right, the company will turn over control of currently-established programs to the community and its institutions.

For more information, please see Roșia Montană Sustainable Development and the Roșia Montană Project – annex 4.

We underline the fact that your statement is false. The General Urbanism Plan for the Roşia Montană commune, endorsed in 2002 allows the development of Roșia Montană project, as it has been presented during the public consultations.

Concurrently, pursuant to the provisions of art. 41, paragraph 2, from the Mining Law no.85/2003, the authorities from the local administration have the liability to adjust and/or update the territory arrangement plans and the general urbanism plans, in order to allow the development of all operations necessary for the development of mining activities.

RMGC has also initiated the preparation of two zonal urbanism plans: Zonal Urbanism Plan Modification – Roșia Montană Industrial Area and Zonal Urbanism Plan – Roșia Montană Historical Area. The first urbanism plan is required by the urbanism certificate no.78/26.04.2006, which updates the Zonal Urbanism Plan for the Industrial Area approved in 2002. As far as the historical area is concerned, its Zonal Urbanism Plan is required by the General Urbanism Plan approved also in 2002. Both urbanism plans are pending approval and have been subject to public consultations.

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; and
- 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:

Page of answer 7 of 18

- 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.

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; and
- 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

Page of answer 8 of 18

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 technicalconstruction 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."

Page of answer 9 of 18

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.

Detailed financial guarantees are in place, in the form of the Environmental Financial Guarantee ("EFG"), which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US \$76 million, which is based on the mine operating for its full 16-year lifespan.

The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003).

Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană.

RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US \$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;
- Surety bonds;
- Insurance policy.

Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roșia Montană project.

The Security Report has been made available for public access by being posted at the following Internet address <u>http://www.mmediu.ro/dep_mediu/rosia_montana_securitate.htm</u> as well as through the printed

Page of answer 10 of 18

version which could have been found at several information locations established for public hearings.

Chapter 5 of the Report on the environment impact assessment study (EIA) (*Assessment of Alternatives*) presents an assessment of the "no-project" alternative in Section 1 (*No-Project Alternatives*). This section covers the immediate impact of not advancing the project and looks beyond this at potential alternative industries. The conclusions are clear: "A diverse multi-sector economic base is important for the sustained economic growth of the region", and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity.

The EIA also assessed a wide range of alternative developments – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the RMP. But while other industries do not have this capability, their development in parallel is not precluded "and to the contrary, [the RMP] solves several key problems for attracting investment".

Clearly, the assessment of the no-project alternative has been undertaken in a full and considered manner.

The impacts on protected flora and fauna will occur only locally, but these impacts will not lead to the disappearance of any species. The mining project was designed even from the beginning to meet all Romanian and European environmental legal requirements.

The company believes that the project's impact on the environment remains significant, especially because the project will cover previous environmental impact. But, the investments required to restore/rehabilitate Roșia Montană area in order to resolve current complex environmental issues, are possible only after the implementation of economic projects capable of generating and warranting responsible and direct courses of action as a base component of sustainable development concepts. Clean economic processes and technologies may develop only in the presence of a solid economic system, in a total respect towards environment that will resolve even previous impacts caused by all anthropic activities.

Project's base documents are an unbiased reasoning of its implementation, taking into account the complex environmental commitments assumed for Roşia Montană area.

For a complete answer, the annexes will be consulted, because all issues included in contestations as well as the ones included in reports submitted by various experts are addressed in Annex 6.

Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The species characterization can be found in the species tables included in Chapter 4.6, Biodiversity of the Report on Environmental Impact Assessment Study (EIA) as well as in its Annexes. Due to the large amount of information, these tables are available in the electronic format of EIA. 6,000 electronic copies of EIA Report presented on DVD/CDs have been disclosed to the public both in English and Romanian. Moreover, the EIA is also available on RMGC's website and on the websites of Ministry of Environment and Waters Management and Local and Regional Environment Protection Agencies of Alba, Cluj and Sibiu, etc.

From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area an SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance).

Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to restore/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3].

Page of answer 11 of 18

References:

[1] art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11. [...]

2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. [...]

Art. 6. 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...]

- in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

[2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.[...]

Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species , taking into account their protection requirements in the geographical sea and land area where this directive applies.

[3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.

This statement is ungrounded, because the environmental impact assessment (EIA) process has included preliminary cumulative estimates for stationary motorized equipment and linear (vehicular) sources were prepared in order to provide an initial understanding of the potential cumulative noise and vibration impacts from background and Roşia Montană Project sources, and to guide future monitoring and measurement activities as well as the selection of appropriate Best Management Practices/Best Available Techniques for further mitigation of the potential noise and vibration impacts from Project activities. These preliminary estimates apply to major construction activities, as well as the operation and decommissioning/closure of the mine and process plant. They are documented as data tables and isopleth maps for major noise-generating activities in selected, representative Project years; see **Tables 4.3.8**

Page of answer 12 of 18

through **4.3.16** and **Exhibits 4.3.1** through **4.3.9**. All these details related to the applied assessment methodology, the input data of the dispersion model, the modeling results and the measures established for the prevention/mitigation/elimination of the potential impact for all project stages (construction, operation, closure) are included in Chapter 4, Section 4.3 Noise and Vibrations of the EIA Report.

Project Years 0, 9, 10, 12, 14, and 19 were selected for modeling because they are considered to be representative of the most significant levels of noise-generating activity. They are also the same years used for air impact modeling purposes in Section 4.2, as air and noise impacts share many of the same sources or are otherwise closely correlated. In order to more accurately reflect potential receptor impacts, all of these exhibits integrate the background traffic estimates discussed in Section 4.3.6.1.

The Project site plan and process plant area and facility drawings were used to establish the position of the noise sources and other relevant physical characteristics of the site. Receptor locations were established using background reports and project engineering and environmental documentation provided by RMGC. With this information, the source locations and receptor locations were translated into input (x, y, and z) co-ordinates for the noise-modeling program.

Tables 4.3.8 through 4.3.16 and **Exhibits 4.3.1 through 4.3.9** present the average maximum noise values likely to be experienced by the receptor community over all Project phases after incorporation of a variety of initial mitigation measures designed specifically to reduce the impacts associated with mobile and stationary machinery sources. The influence of non-mining related background (primarily traffic) noise is also included.

To evaluate the sound levels associated with haul trucks and other mobile sources crossing the site carrying excavated ore, waste rock, and soil, a noise analysis program based on the (U.S.) Federal Highway Administration's (FHWA) standard RD-77-108 [1] model was used to calculate reference noise emissions values for heavy trucks along the project roadways. The FHWA model predicts hourly L_{eq} values for free-flowing traffic conditions and is generally considered to be accurate within 1.5 decibels (dB).

The model is based on the standardized noise emission factors for different types and weights of vehicles (e.g., automobiles, medium trucks, and heavy trucks), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

To evaluate the sound sources from the proposed mine processing facility and the semi-stationary material handling equipment (at the ore extraction, waste rock and soil stockpiling areas), a proprietary computerized noise prediction program was used by AAC to simulate and model the future equipment noise emissions throughout the area. The modeling program uses industry-accepted propagation algorithms based on the following American National Standards Institute (ANSI) and International Organization for Standardization (ISO) standards:

• ANSI S1.26-1995 (R2004), Method for the Calculation of the Absorption of Sound by the Atmosphere;

• ISO 9613-1:1993, Acoustics -- Attenuation of sound during propagation outdoors-- Part 1: Calculation of the absorption of sound by the atmosphere;

• ISO 9613-2:1996, Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation;

ISO 3891:1978, Acoustics -- Procedure for describing aircraft noise heard on the ground.

The calculations account for classical sound wave divergence (i.e., spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption, minimal ground effects, and barriers/shielding.

This model has been validated by AAC over a number of years via noise measurements at several operating industrial sites that had been previously modeled during the engineering design phases. The comparison of modeled predictions versus actual measurements has consistently shown close agreement; typically in the range of 1 to 3 dB (A).

References: [1] FHWA Highway Traffic Noise Prediction Model; see Federal Highway Administration Report Number

Page of answer 13 of 18

A detailed presentation of blasting technology can be found in the annex 7.1 - Proposed blasting technology for the operational phase of Roșia Montană Project.

The partnership between Gabriel Resources and Regia Autonomă a Cuprului Deva (currently, CNCAF Minvest SA) has been established based on Law no. 15/1990 on the reorganization of the state owned companies as autonomous directions and trade companies, published in the Official Gazette, Section I, no. 98/08.08.1990, as subsequently amended and supplemented. Art. 35 of this law provides the possibility of the regies autonomous to enter into partnerships with legal third parties, Romanian or foreign, for the purpose of setting up new trading companies.

Roșia Montană Gold Corporation SA was set up in 1997, according to the legal provisions in force as at that time, the setting up being made by observing all the conditions imposed by Company Law no. 31/1990 and Trade Register Law no. 26/1990, in regard of the setting up of the joint stock companies with mixed capital.

We underline that the Articles of Associations of Roșia Montană Gold Corporation SA, representing the result of the parties agreement in regard of the terms and conditions under which the partnership between the Romanian state and investor takes place represents a public document, being included in the category of documents which, as per Law no. 26/1990 on the Trade Register, are published in the Romanian Official Gazette and for which the Trade Register is obliged to issue, on the expense of the persons submitting a request, certified copies.

As for the agreement concerning the setting up of the mixed company together with Gabriel Resources Ltd., this has been expressed by the Ministry of Industry and Trade, the conditions imposed by the setting up of the mixed company being the following: (i) ensuring of the jobs at the level existing upon the conclusion of the agreement concerning the setting up of the mixed company; (ii) the expenses incurred by the fulfillment of the exploration stage should be fully supported by Gabriel; (iii) the obtaining of the approval from the ANRM by the Copper Autonomous Direction Deva and (iv) the observance of all legal provisions in force concerning the setting up of the mixed companies with foreign partners. These conditions have been fully complied withy as at the setting up of the company and during the development of its activity.

We also specify that the establishing of the shareholders' quotas to the benefits and losses of Roşia Montană Gold Corporation SA has been made by considering their contribution quota to the company's share capital. The current percentage of 80% for Gabriel Resources Ltd. and of 19.31% for CNCAF Minvest SA resulted from the initial contribution and the subsequent contributions of the shareholders to the company's share capital, in consideration also of Gabriel Resources Ltd. advancing all expenses and costs related to the development-exploitation and permitting of the Roşia Montană Mining Project.

The provisions of the Articles of Associations of Roșia Montană Gold Corporation SA on the necessary majority and quorum conditions for the decision-making process within the General Shareholders Meeting and the quotas to the benefits and losses of the company are taken from Law no. 31/1990, and no derogation exists in regard of this aspect.

This claim is not true; the Urbanism Plan has been prepared with public consultation.

S.C. Roşia Montană Gold Corporation S.A. has requested and obtained from Alba County Council the Urbanism Certificate no. 78 of 26.04.2006, for the entire Roşia Montană mining project, including the tailings management facility. The Urbanism Certificate also stipulated the preparation of a Zonal Urbanism Plan, to reflect all changes made to the Roşia Montană Project, following the public consultations and debates organized in relation to this project, and the consultations with the permitting authorities. This plan, entitled "Modification of the Zonal Urbanism Plan, Roşia Montană Industrial Area", was prepared and subject to public debate in June 2006 in accordance with the provisions of Order

Page of answer 14 of 18

no.176/N/2000 issued by the Ministry of Public Works and Territory Development for the approval of the technical regulations "Guidelines regarding the methodology applied for the preparation and framework content of the Zonal Urbanism Plan" and, at present, it is pending approval.

Concerning the Roșia Montană General Urbanism Plan approved in 2002, such plan was prepared in parallel with the Zonal Urbanism Plan of 2002, all the provisions of the General Urbanism Plan being also included in the Zonal Urbanism Plan. Also, the approval procedure related to the two urbanism plans was carried out in parallel.

Preventive archaeological researches within the Roșia Montană mining project area have been undertaken based on specific techniques, specifically trial trenches in all accessible areas that are suitable for human habitation, taking into account the bibliographical information and the observations recorded during the archaeological survey campaigns, the geophysical studies and the analyses of the photogrammetric flights. In addition, surface investigations were undertaken, where appropriate.

The archaeological researches at Roșia Montană covered a large surface and focused on the areas known to have archaeological potential. <u>THEREFORE, ALL AREAS THAT HAVE BEEN ARCHAEOLOGICALLY</u> <u>DISCHARGED HAD BEEN PREVIOUSLY INVESTIGATED.</u> All research programs, beginning with the 2004 campaign, have been undertaken in full compliance with the current legal requirements, i.e. Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs.

The proposed gold mining project at Roşia Montană has raised a series of issues related to the rescue of the historical-archaeological heritage within the area, as well as issues related to its scientific development and also the enhancement of heritage within a museum. Given the complex difficulties encountered in this respect, the Ministry of Culture and Religious Affairs decided to initiate the "Alburnus Maior" National Research Program.

The company's role was to provide the necessary financial resources for the assessment, research and enhancement of the archaeological remains, in full compliance with the Romanian current legislation. The development of the research and of the archaeological discharge works has been conducted through specific means and methodologies that have been adjusted to the realities of every site researched, in our case, Roșia Montană. They consisted in:

- Archives studies;
- Archaeological surveys; trial trenches;
- aerial reconnaissance/survey and aerial photo interpretation ; high resolution satellite images;
- mining archaeology studies; underground topography and 3D modeling;
- geophysical surveys;
- extensive archaeological investigations in the areas with an identified archaeological potentialthis implied carrying out archaeological excavations;
- Interdisciplinary studies- sedimentology, archaeo-zoology, comparative palynology, archaeometallurgy, geology, mineralogy;
- Radiocarbon dating and dendrochronology;
- This research and its results were included in an integrated database;
- traditional and digital archaeological topography and development of the GIS project; generate a photo archive- both traditional and digital;
- restoration of artifacts;
- an inventory and a digital catalogue of the artifacts;
- studies conducted by specialists in order to enhance the research results publication of monographs/scientific books and journals, exhibitions, websites, etc.

All the preventive archaeological researches undertaken at Roșia Montană since 2000 have been carried out as part of a complex research program; permits for preventive archaeological excavations being issued in compliance with the current legislation. These archaeological investigations have been undertaken by representatives of 21 specialized institutions from Romania and 3 others from abroad, under the scientific coordination of the Romanian National Museum of History. All archaeological researches have been

Page of answer 15 of 18

conducted in full compliance with the existing legislation. The investigations undertaken during each archaeological research campaign have been approved by the Ministry of Culture and Religious Affairs based on the Annual Archaeological Research Plan approved by the National Commission of Archaeology.

Under the current legislation (Ministerial Order no. 2392 of 6 September 2004 on the establishment of the Archaeological Standards and Procedures by the Ministry of Culture and Religious Affairs) the archaeologists who have conducted the research may ask that an archaeological discharge certificate be granted. Based on a complex research program, the archaeologists prepare comprehensive documentation with regard to the researched area. Upon consideration of the submitted documentation, the National Commission of Archaeology makes a decision as to whether to recommend or not the granting of the archaeological discharge certificate. In the case of the research conducted in the period 2001-2006, the archaeological discharge certificate was issued directly by the Ministry of Culture and Religious Affairs or by its local agencies.

Preventive archaeological researches at Roșia Montană have allowed the research of five Roman cremation necropolis (Tău Corna, Hop-Găuri, Țarina, Jig - Piciorag and Pârâul Porcului – Tăul Secuilor), two funerary areas (Carpeni, Nanului Valley), sacred areas (Hăbad, Nanului Valley), habitation areas (Hăbad, Carpeni, Tăul Țapului, Hop), the most significant being the Roman structures on the Carpeni Hill and the circular funerary monument at Tău Găuri. In addition, for the first time in Romania, surface investigations have been paralleled by underground investigations of Cetate, Cârnic, Jig and Orlea massifs, with important discoveries in the Piatra Corbului, area, Cătălina-Monulești gallery and the Păru Carpeni mining sector.

The research consisted of aerial photo interpretation, archaeological magnetometric studies, electrical resistivity, palynology, sedimentology, geology studies, radiocarbon and dendrochronology dating. For a better management of the research units and of the archaeological findings, data bases were used, including text and photographs-among which 4 satellite images (an archive satellite image type SPOT Panchromatic (10m) from 1997; 2 satellite images LANDSAT 7 MS (30 m), dating from 2000 and 2003; a satellite image with prioritary programming SPOT 5 SuperMode color (2,5 m resolution-19 July 2004); all data have been included in a comprehensive GIS program, a first in the Romanian archaeological research.

In the case of archaeological monuments that are located close to industrial facilities, plans have been redesigned to ensure that the archaeological remains in question will not be affected. Where appropriate, the archaeological monument was preserved in situ and restored, i.e. the circular funerary monument at Hop-Găuri (see The "Alburnus Maior" monograph series, volume II, Bucharest, 2004). Another example in this respect is the Carpeni Hill, designated an "archaeological " reserve, and the Piatra Corbului area. In 2004, after being thoroughly investigated, these areas have been included on the List of Historic Monuments. Add to this the areas where ancient mining remains will be preserved, such as the Cătălina Monulești gallery and the mining sector Păru Carpeni, as well as the protected area Roșia Montană Historic Center, including a number of heritage assets (35 historic monument houses).

We emphasise in this respect that the identified and researched structures have been published in preliminary form in the Archaeological Research Chronicle of Romania, after every archaeological research campaign, as well as in volume 1 of the Alburnus Maior monographic series. We mention here the areas where Roman habitation structures have been identified and researched, as well as the references to be consulted for further information: Hop-Găuri, Carpeni, Tăul Țapului (CCA 2001 (2002), p. 254-257, no. 182; 261-262, nr. 185; 264-265, no. 188; 265-266, no. 189. Alburnus Maior I, 2003, p. 45-80; 81-122; 123-148; CCA 2001 (2002), 257-261; CCA 2003 (2004) ,280-283; Alburnus Maior I, 2003, p. 387-431, 433-446, 447-467).

For further details related to the applicable legal framework, the responsibilities of the Project titleholder, or for a detailed description of the preventive archaeological researches undertaken to date and of the Cultural Heritage Management Plans, please see Annex called "Information on theCultural heritage of Roșia and Related Management Aspects". In addition, the annex includes supplementary information with regard to the result of the researches undertaken as part of the "Alburnus Maior" National Research Program between 2001 and 2006.

In conclusion, the area mentioned by the questioner has been researched in accordance with the Romanian legal requirements, as well as with European standards and practices in the field.

Page of answer 16 of 18

Note that the type of research undertaken at Roşia Montană, known as preventive/rescue archaeological research, as well as other related heritage studies, are done everywhere in the world in close connection with the economic development of certain areas. Both the costs for the research and for the enhancement and maintenance of the preserved areas are provided by investors, in a public-private partnership set up in order to protect the cultural heritage, as per the provisions of the European Convention on the Protection of the Archaeological Heritage (Malta-1992) [1].

References: [1]The text of the Convention is available at the following address: http://conventions.coe.int/Treaty/Commun/Que eVoule zVous.asp?NT=143&CM=8&DF=7/6/2006&CL=E NG

In 2000, in the context of the proposal of a new mining project in the Roşia Montană area, the Ministry of Culture and Religious Affairs approved a series of studies to be conducted in order to research the archaeological and architectural heritage of the area. And at the end of that year, the Design Centre for National Cultural Heritage (now the National Institute for Historical Monuments) presented the preliminary results of these researches to the National Commission for Historical Monuments and of the National Commission of Archaeology. Based on these results, in 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program (the Order no. 2504 / 07.03.2001 of the Minister of Culture and Religious Affairs) in compliance with the Law 378/2001 (as subsequently amended by Law 462/2003 and by Law 258/2006 and Law 259/2006). Thus, since 2000, the Ministry of Culture and Religious Affairs – directly or through its subordinate institutions – has fulfilled its duties with regard to the management of the issues related to Roşia Montană's heritage.

Thus, the preventive archaeological researches have been conducted by the representatives of 21 national institutions and 3 others from abroad under the scientific coordination of the National Museum of History of Romania. They have been carried out based on the annual approval of the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. In accordance with the legislation in force, this research program is carried out with the financial support provided by RMGC (the company that plans to expand and continue to mine the gold-silver deposit in Roşia Montană). Thus, large-scale preventive investigations have been conducted or are underway in the RMP impact area. A proposal will be made based on the results thereof either for the archaeological discharge of some researched perimeters from the project perimeter or the preservation in situ of certain representative structures and monuments, in compliance with the legislation in force. In the case of the areas proposed for conservation and the ones for which the archaeological discharge measure was applied, the decision was made based on the surveys conducted by specialists and on the analysis of the National Commission of Archaeology. In the period 2000-2005, the mining project underwent a series of modifications designed to promote the implementation of the decision regarding the conservation of the local heritage. Examples of these include: extending the duration of the field investigations on several years (e.g. Țarina, Pârâul Porcului, Orlea) and changing the location of some elements of infrastructure in order to allow the conservation of the archaeological remains found in the Carpeni, Tău Găuri and Piatra Corbului areas.

The architectural and town-planning surveys have been conducted, in accordance with the legislation in force, by companies certified by the Ministry of Culture and Religious Affairs, while the town-planning documentations drafted by these companies and the restoration and conservation works undertaken so far have been approved by the National Commission for Historical Monuments. Thus, the town-planning documentations have been approved and implemented in accordance with current legislation, and the company has agreed to these decisions and modified the mine development plans accordingly:

Extensive ethnographic research was conducted in the Roşia Montană-Abrud-Corna area in the period 2001-2004 coordinated by a team of specialists for the Romanian Village Museum "Dimitrie Gusti" (a National Museum directly under the coordination of the Ministry of Culture and Religious Affairs). Moreover, a broad series of oral history interviews was conducted in the period 2001-2002 by the Romanian Radio Broadcasting Company through the "Gheorghe Brătianu" Oral History Centre, Bucharest (SRR - CIO).

In compliance with the requirements of the Ministry of Environment and Waters Management and the

Page of answer 17 of 18

Ministry of Culture and Religious Affairs, specific management plans have been drawn up for the management and conservation of the heritage remains from the Roşia Montană area, in the context of the implementation of the mining project. These plans have been included in the documentation prepared for the Report on the Environmental Impact Assessment Study. (see EIA Report, volume 32-33, Plan M-*Cultural Heritage Management Plan*, part I –*Management Plan for the Archaeological Heritage from Roşia Montană Area*; part II-*Management Plan for the Historical Monuments and Protected Zone from Roşia Montană*; part III- *Cultural Heritage Management Plan*).

These management plans comprise detailed presentations of the obligations and responsibilities regarding the protection and conservation of the heritage remains from the Roşia Montană area, which the company has assumed in the context of the implementation of the mining project, according to the decision of the central government. These heritage remains include: archaeological remains above and under the ground, historic buildings, protected areas, intangible heritage assets, cultural landscape items, etc. In this context, it should be noted that besides the works for the protection and preservation of the archaeological heritage, works are being carried out for the rehabilitation and conservation of the protected area Historical Centre Roşia Montană (comprising 35 historic buildings, and projects for the restoration of 11 of these buildings are currently being drafted), Tăul Mare, Tăul Brazi and Tăul Anghel as well as remains of the surface mining works form the Vaidoaia area and the creation of a modern museum dedicated to the history of mining in the Apuseni Mountains area. This museum will be established in the coming years and it will include exhibitions of geology, archaeology, industrial and ethnographic heritage as well as an underground section organized around the Cătălina Monulești gallery.

Moreover, representatives of the Directorate for Culture, Religious Affairs and National Cultural Heritage of Alba County have visited Roşia Montană many times in order to collect information and to check the situation. The same administrative body was the intermediary for the specific stages of acquisitions of historic buildings made by RMGC. The Ministry of Culture and Religious Affairs expressed its pre-emption right regarding the acquisition of these buildings.

Note that apart from the obligations undertaken by RMGC as regards the protection and conservation of the archaeological remains and historical monuments, there are a whole series of obligations, which rest with the local public authorities from Roşia Montană and from Alba County and with the central public authorities, namely the Romanian Government.

These aspects are further detailed in the Cultural Heritage Management Plans included in the EIA Report (see EIA Report, volume 32, *Management Plan for the Archaeological Heritage from Roşia Montană* Area, pages 21-22, 47, 52-53, 66-67-Romanian version/ 22-24; 47; 55-56; 71-72 English version) and the EIA Report, volume 33- *Management Plan for the Historical Monuments and Protected Zone from Roşia Montană* pages 28-29, 48-50, 52-53, 64-65, page 98 – Annex 1- Romanian version/ 28-29; 47-50; 51-53; 65-66; 103- Annex 1- English version).