

**RESOLUTION**  
**ON ENVIRONMENTAL IMPACT ASSESSMENT**

**No. 18-8, 11/2011**

Pursuant to Art. 99, para. 2 of the Environment Protection Act, Art. 19, para. 1 of the *Regulation on the Terms and Procedures for Environmental Impact Assessment* and in connection to Art. 31, para. 4 of the Biodiversity Act, and Art.39, para.12 of the *Regulation on the Terms and Procedures for Assessment of the Compatibility of Plans, Programs, Projects and Investment Proposals with the Scope and Objectives of Protected Sites*, § 105, par. 3 of the Transitional and final provisions of the Underground Resources Act, I, hereby,

**A P P R O V E**

Investment Project Proposal for Mining and Processing of Auriferous Ores from the Ada Tepe Prospect of the Khan Krum Gold Deposit, Krumovgrad under the conditions of Option 1 - processing of ore to gold-silver concentrate as end product

**Investor:** Balkan Mineral and Mining EAD

**Seat:** Chelopech Village 2087, Chelopech Municipality, Sofia District

**Short description of the Investment Project Proposal:**

The main site onto which the proposed project will be implemented is located some 3 km south from the municipal center Krumovgrad and approximately 1 km west of the Krumovitsa River. The total area required for the implementation of the project as per Option 1 is approximately 85 ha, wherein the following sites are included:

- o An open pit mine (Ada Tepe) – 17 ha;
- o A ROM ore pad – 3 ha;
- o A facility for the production of gold-silver concentrate (Process Plant) – 6 ha;
- o An Integrated Mining Waste Facility including a low-grade ore stockpile – 41 ha;
- o A soil and sub-soil material stockpile – 2 ha;
- o A retention pond (close to the open pit) and two collecting sumps (at the toe of the Integrated Mine Waste Facility) – 4 ha;
- o Roads – 12 ha;
- o An abstraction well.

The entire area required for the implementation of the proposed development is state controlled forest fund land. This land is included in the future concession.

The Ada Tepe mine plan currently being considered is based on an 850,000 tpa operation extending over a 9 year period (excluding the overburden removal), which gives a process plant throughput rate of 106 tph at 8,000 operating hours per annum.

The main activities considered herein are:

- The auriferous ore at Ada Tepe will be open-pit mined. The mining method will be a conventional open cut drill, blast, load and haul operation. The mined ore will be loaded by two hydraulic back-pull shovels serving up to five 50t off-road dump trucks hauling the ore to the ore stockpile (ROM pad);
- Processing of ore at the process plant and production of gold-silver concentrate - the ore from the stockpile will be delivered by a front-end loader to a feed hopper, and

from there - into an outdoor jaw crusher. The crushed product will be discharged onto a fully enclosed inclined belt conveyor leading to the grinding section. The grinding section of the plant will be located inside the main plant building. The grinding of the crushed ore will be a wet process. Flotation will be the main process for recovery of the gold and silver values from the ore. The process will be performed in flotation banks, where the recovery of the payable components from the waste rock is achieved by conditioning the surfaces of mineral grains based on the different surface chemistry of the gold and rock particles. A direct selective flotation flowsheet consisting of one rougher stage, three cleaner stages and two scavenger stages is considered.

- Construction of an Integrated Mine Waste Facility; The mining and processing operations will generate mine rock (waste rock from mining) and flotation process tailings. The rock material with no economic gold and silver values is classified as waste rock, which is generated in the process of exposure/access to the ore body, and the expected quantity during Ada tepe mining activities is 14 950 thousand tons. The process (or flotation) tailings are the waste material rejected from the flotation plant after the recoverable valuable minerals have been extracted from the ore feed. About 7 235 Mt of tailings are expected to be generated by the end of the project life. The flotation tailings will be dewatered prior to their disposal at the integrated mine waste facility.
- A soil material stockpile - prior to construction, all areas planned for construction or mining will be stripped of topsoil, which will be stockpiled for further use at the closure and rehabilitation stage.
- Construction of project infrastructure - includes the construction of the main building of the process plant, administrative building, domestic wastewater treatment plant, plant for chemical treatment of process and contaminated storm waters, discharged in Krumovitsa river, two fuel stores, diesel fuel tanks, reagents store, car wash, roads, water/sewage and power services.

### **Ancillary Plants and Facilities**

The reagent preparation facilities will be located within an annex to the main process building, and these include: Xanthate Mixing Plant, Sodium Silicate (Liquid Glass) Delivery Plant, Copper Sulphate Mixing Plant; Dithiophosphate Mixing Plant; Frother Mixing Plant; Flocculant Mixing Plant.

The electric power for the project will be supplied by the NEC-EAD and the power source will be the Krumovgrad substation 110/20kV.

Two options are considered with respect to the water supply required for the project and the preferred one envisages the construction of a proprietary fresh water abstraction well in the Krumovitsa River gravels where sufficient water resources are available without any negative impact on the requirements of the near-by town - Krumovgrad. This Option will also require a one-off abstraction of 100 000m<sup>3</sup> of fresh water from the Krumovitsa river, where the abstraction of water from Krumovitsa river will take place in periods of low water-levels.

The project drinking water requirements of about 6500 m<sup>3</sup> /per year/ will be provided for by taking water from the drinking water supply system of Krumovgrad or a proprietary abstraction well, and in line with the requirements of the Waters Act.

The project proposal will be situated outside the territories of Sanitary Protection Zones around Water Sources and Drinking Water Supply Facilities and around Mineral Water Sources;

Ada Tepe Prospect of the Khan Krum Deposit, Krumovgrad municipality **falls** within the boundaries of Protected Site **Rhodopes-East**, Code **BG0001032**, designated for protection

of natural habitats and wild life and flora, as specified in art.6, par.1, item 1 and 2 of the Biodiversity Act, included in the List of Protected Sites approved by the CoM with Resolution 122/02.03.2007. The nearest site for protection of birds is the Krumovitsa Protected Site - PP Krumovitsa, Code BG0002012, which is 4 km away from the site of the proposed project.

The project **is not part** of a protected territory as per the meaning of the Protected Territories Act.

The investment project proposal is subject to compatibility assessment in line with the provisions of art. 2, par. 1, item 3, sub-item "a" and par. 2 of *the Regulation on the Terms and Procedures for Assessment of the Compatibility of Plans, Programs, Projects and Investment Proposals with the Scope and Objectives of Protected Sites* ("the CA Regulation", SG 73/2007).

After review of the submitted documentation, and based on art. 39, par. 3, and in relation to art. 39. par. 5 of the CA regulations, the estimation of the likely significance of adverse effect concludes that the proposed project **is likely** to have significant adverse effect onto the types of natural habitats, populations and habitats of the species that are subject to protection in the Rhodopes-East Protected Site, Code BG0001032, and Krumovitsa Protected Site, Code BG0002012. On the grounds of a judgment and the instructions given, a compatibility assessment report has been elaborated the results of which are given below.

The rationale to support this conclusion is as follows:

1. In the EIS submitted the existing situation regarding the environmental components and factors has been presented along with an analysis of the anticipated impact on the environment and human health which may result from the implementation of the project proposal. The risk factors have been identified. The conclusion of the EIA experts is that the project proposal is admissible and can be approved, because:

- the impact of the pollutants emitted into the environment over the project's operation stage can be classified as continuous, reversible, of local span, without cumulative effects, below the accepted national and EU standards, which does not indicate any significant negative impacts on human health and environment media and factors.
- A site wide water balance model has been developed to include the open pit, the process plant and the mine waste disposal facility, and the conclusion is that the implementation of the project proposal will not have significant impact onto the quality of the waters.
- Based on the analysis, measures have been proposed to prevent or mitigate any potential significant adverse impacts onto environment, which are included in a mitigation plan.

2. Attached to the EIS, on the grounds of an estimation made regarding the degree of possible adverse impact, a compatibility assessment has been made to evaluate the impact of the projects over the protected areas. This compatibility assessment of the investment project proposal with the scope and goals of protection of affected protected area allows for the making of a decision as provided for by Art. 39, para.12 of the CA Regulation, because:

2.1. The compatibility assessment performed concludes that the project proposal will not have significant adverse impact onto the scope and goals of protection of **PS BG0001032 Rhodopes-East**, designated under Art. 6, para. 1, item 1 and 2 of the Biodiversity Act for protection of natural habitats and wild life and flora, included in the list of protected sites adopted pursuant to a CoM Resolution 122/02.03.2007 and **PS BG0002012 „Krumovitsa”**, designated under Art. 6, para. 1, item 3 and 4 of the Biodiversity Act for protection of wild birds by virtue of Order No. ПД-765/28.10.2008 of the MOEW (SG 101/2008)

The implementation of the project proposal will not result in the disturbance of the integrity, structure and the functions of protected site BG0001032 Rhodopes-East, since a large part of the affected 85 ha or 0.04% of the area of the site and the proximity of the anthropogenic landscapes (many villages, fields, actively used meadows, forest plants), presupposes the averagely small number of habitats and species, which will be disturbed by the project proposal.

2.2. Out of two considered and evaluated options: Option 1 - mining of ore without processing and Option 2 - mining of ore with processing of the ore to produce gold, a conclusion has been drawn that impact will not be present only in the case of implementation of the project proposal as per Option 1, which has been accepted by the company.

2.3. The Compatibility Assessment performed for all habitats and species, which fall under the scope of PS BG0001032 Rhodopes-East, meets the requirements of Art. 32, para. 2 of the Biodiversity Act. The results from this CA allow for a conclusion to be made - that the investment project proposal is compatible with the goals of protection of PS BG0001032 Rhodopes-East, as the degree of impact onto environmental components is **insignificant**:

2.3.1. The implementation of the investment project proposal will have an insignificant adverse impact on to the natural habitat, which are subject to protection, as shown below:

- of 91M0 Pannonian-Balkan Turkey Oak and Sessile Oak Forests - 99 decares will be destroyed, where these represent 0.014% of the area of the habitat pertaining to site under protection;

- of 6220 \* Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea* class, during the operation of the mine and the infrastructure pertaining thereto, appr. 3 decares will be affected (0,005%);

- The implementation of the investment project proposal u5210, 6220, 6510, 91M0 и 92D0 under Option 1 will have an indirect insignificant impact onto habitats.

2.3.2. No impact is expected on the fish species Maritsa barbel (*Barbus cyclolepis*) and Ray-finned fish (*Sabanejewia balcanica*), which are protected within the site's territory;

2.3.3. The implementation of the investment project proposal will impact respectively 0,093% and 0,19% of the population of *Testudo hermani* and *Testudo graeca* within the territory of the protected site and 0,048%-0,063% of the territory on which their populations naturally span over within the protected site, which represent an insignificant impact and will not adversely turn the species into protected.

2.3.4. The implementation of the project proposal will not result in direct loss of habitats and significant indirect effects of **mammal** species covered by the protection zone. Habitats loss is below 1% for protected site BG0001032 "Eastern Rhodopes" and is insignificant compared to national populations of mammals covered within the network of protected site.

2.3.5. The implementation of the project proposal will have a significant negative impact on the species composition of **bat** species, both in protected area BG0001032 "Eastern Rhodopes" and in adjacent areas outside the NATURA 2000 network, as the existing day-shelters of bat will not be affected and no individual animals of the species will be destroyed, neither will their migration corridors be interrupted, and the impact on their food habitats is negligible, both in terms of intensity, and in terms of a relative area compared to the area they occupy within the protected site (0,037%).

2.3.6. The implementation of the project proposal shall have an insignificant negative impact onto the **invertebrate** species under protection:

- The impact on the specie *Callimorpha (Euplagia) quadripunctaria* at the site level will be below 1% (0.56% of the area of the entire population, calculated on the basis of the projects

outer contour - 134 ha) and will not lead to the species acquiring an unfavorable conservational status;

- It is expected that there will be very small negative impact on the parameters of the FCS of the species *Cerambyx cerdo* and *Lucanus cervus* - between 0.01% and 0.03% loss at habitat level.

2.4. The implementation of the project proposal in its proposed and evaluated **Option 1** will have a negligible impact on the numbers and populations of seven bird species subject to conservation within the protected site BG0002012 "Krumovitsa", and these consist of: deterioration of the quality of food habitats (black stork), minor damage to nesting and foraging habitats (short-toed eagle), negligible impact leading to anxiety and expulsion of single pairs (black kite, European roller and nightjar, barred warbler and red-backed shrike).

2.5. The conclusions of the analysis in the report about a likely **cumulative effect** demonstrate that the implementation of the project proposal will not have a cumulative effect that could, in its turn, have a significant negative impact on the scope and objectives of the affected protected sites.

2.6. Within the framework of the public hearings held under Art. 39, para. 9 of the *CA Regulation*, a number of statements from various NGOs and citizens have been filed, which do not require additional research and further elaboration of the CA, and do not change the conclusions about the extent of the impacts on different natural habitats and species, subject to conservation in protected areas affected.

3. Aquifer **BG3G000000Q010 - Interstitial groundwaters in the Quaternary deposits - Arda River**, as per Section III of RBMP, has been declared drinkable aquifer within the meaning under Art. 19, para 1, item 1 and para 4, item 1 of the Waters Act. It consists of alluvial deposits (sands, gravels, clays, boulders) deposited along the Krumovitsa River valley from the investment project area right until confluence of Krumovitsa River with the Arda River. These are pore waters that are in hydraulic continuity with the Krumovitsa waters and therefore the quality of the river water is of crucial importance for the quality of the **BG3G000000Q010** aquifer. In RBMP, the Krumovitsa River is classified as an intermittent stream. In this sense, the discharge of wastewaters into the Krumovitsa River means indirect discharge in the groundwaters. The drinking water abstraction systems serving the settlements located along the Krumovitsa River are as follows: Guliika Abstraction – a tube well and a shaft well; Krumovgrad Abstraction – 4 shaft wells – No. 1, 2, 3 and 4; Ovchari Abstraction – 2 shaft wells – No. 1 and 2; Gorna Kula-Zvezdel Abstraction – 1 shaft well; Zlatolist Abstraction – 3 shaft wells – No.1, 2 and 3; Gurgulitsa Abstraction – a shaft well and a horizontal drain with 6 inspection shafts; Moryantsi Abstraction – 1 shaft well; Potochnitsa Abstraction – 1 shaft well.

The presence of metals, including priority substances, in the wastewaters during envisaged discharge in Krumovitsa river, is possible. Pursuant to Art. 118a, item 3 of the Waters Act "*for protection of ground waters activities on the surface and in the ground water body that may lead to indirect removal of pollutants into ground waters are prohibited*".

4. In letter Ref. No. 04-09-361/21.12.2010, the Ministry of Health does not have comments and suggestions on the EIA Report and gave a positive assessment of the latter. In letter Ref. No. No. 04-09-316/18.10.2011 it is said that in the EIA Statement there are analyses, evaluations, estimation and modeling of anticipated territorial distribution and intensity of possible adverse impacts onto different environmental components and factors, hence - onto human health. On the grounds of there a justified conclusion has been drawn that the implementation of the project proposal will not lead to significant negative environmental

impact. It can be, therefore, assumed that if all recommendations, contained in the EIA Statement, and the conditions, herein stipulated, are observed, no health risk for the population should be expected.

5. During the preparation of EIA documentation various stakeholders and institutions were consulted. The EIA report and the CA Report thereto enclosed were made available to the public for a period of one month. Four public hearing meetings were held. Minutes of the meetings and statements of the assigning company with regard to the objections raised, opinions expressed and recommendations, have also been provided. In the course the public hearings carried out, both written statements in support of the project and written objections and comments from stakeholders and organizations were received recommending the disallowance of the project proposal. As main reasons for such recommendations for disallowance are listed the following: contamination of water in the region; threat to biodiversity; affected monuments; no possibilities to develop other activities in the region, such as agriculture and tourism after the commencement of mining and processing of ore, etc.

The objections raised against the implementation of the project proposal do not contain specific justification with respect to legality.

Some opinions suggested other possible ways of implementation of the project proposal (including processing the ore to produce end metal), where pursuant to Art. 17, para. 6 of the EIA Regulation, the contracting authority (the company) deemed it is not necessary to assign further elaboration to the EIA report.

6. As the Republic of Greece is an affected party with regard to this project proposal, it has been duly notified and has applied to participate in the procedure thereto. In this regard, a copy of the EIA documentation has been sent. In its official statement, the Greek Ministry of Environment, Spatial Planning and State Projects expressed its positive opinion on the activities envisaged under this project proposal, provided there should be strict compliance with the measures concerning the environment and the commitments of the company described in the document and

7. In its Resolution I-8/2011 of 19.09.2011 and Resolution I-11/2011 of 08.11.2011 the Supreme Environmental Expert Council proposes the approval of the implementation of the investment project proposal

under the following conditions:

***1. For the project design stage:***

1. During the construction and/or the operation of the sites under to the project proposal, certain measures should be considered and undertaken to reduce the emissions of fine particulate matter generated in the process of loading, unloading, storage, processing and transportation of solid powdery materials, in accordance with Art. 70 of *Regulation 1 on the limit values of harmful substances emissions (pollutants) released into the atmosphere by sites and in result of operation with stationary sources of emissions (SG. 64/2005)*.
2. To provide construction of sites for temporary storage of waste covered by the Waste Management Act (WMA), which will be generated resulting from the implementation of the project proposal, where such sites must comply with the requirements of Annex 2 of the *Regulation on the requirements for treatment and transportation of industrial and hazardous waste* (adopted with CoM Decree 53/1999 prom. SG 29 of 1999), and with the specific provisions of Art. 24, para. 2 of WMA.

3. To elaborate a plan for internal monitoring in accordance with the applicable legislation, where it should be coordinated with RIEW - Haskovo, the Executive Agency of Environment and Water and the Krumovgrad Municipality and will envisage monitoring of:
  - air (nitrogen oxides, dust, aerosols);
  - soils;
  - equivalent noise levels according to a Methodology for determination of the total sound power emitted into the environment from industrial sites and determination of the noise levels at the points of impact, approved by Order № ПД-199/19.03.2007 of the Minister of Environment and Water.
  - Regarding the water monitoring - surface, groundwaters and wastewater - a Internal Monitoring Plan shall be elaborated and agreed with East Aegean Sea River Basin Directorate and Krumovgrad Municipality, and regarding wastewaters - also with RIEW Haskovo.
4. 1. The pond must be of such capacity so as to ensure the water quantities needed for the production process and to provide additional retention capacity to fit the precipitation waters from the watershed. The exact capacity for additional retention must be defined following an investigation of precipitation amounts within the project site area over the last 30 years, and it must be designed so as to be able to fit the monthly precipitation amount of the wettest month during the investigated period.
- 4.2. For the emergency discharge of the waters from this pond into Krumovitsa river, the construction of a water treatment facility must be provided for, wherein process wastewater and/or contaminated precipitation water shall be treated chemically to potable quality as per Regulation 9/16.03.2001 *on the quality of drinking and household water* and observing the *Regulation on the Environmental Quality Standards (EQS) for priority substances and other pollutants*.
- 4.3. With view of protecting drinking water sources, discharge in the Krumovitsa river is only possible after the town of Krumovgrad, and while observing the requirements of Regulation 10/2001 on the Permitting Procedure for Disposal of Waste Water to Water Bodies and Determination of Individual Emission Restrictions for Point Sources of Pollution /SG 66/2001.
5. An Emergency Action Plan and measures for prevention of pollution of Krumovitsa river and ground waters must be prepared and agreed with the East Aegean Sea Basin Directorate. In case of emergency situation the East Aegean Sea Basin Directorate must be advised about the causes, period of occurrence, nature of anticipated pollution and measures undertaken to protect surface and ground waters.
6. A report must be prepared for assessment of the impact of drilling and blasting operations onto water sources not pertaining to the Krumovitsa river bench - captured springs providing the water of Zvanarka village (water intake 1 and water intake 2), which drain waters formed in the Paleogenic aquifer sediments (Aquifer **BG3G00PtPg2023**). If necessary, measures for protection of drinking water sources should be proposed. The report must be agreed with the East Aegean Sea Basin Directorate.
7. Regarding the abstraction of surface water from Krumovitsa river, the construction of a well, the abstraction of ground water, and the discharge of wastewater in the Krumovitsa river - all permission related provisions of the Waters Act must be observed.
8. To provide for chemical substances used alone or as components or substances classified as hazardous to be kept in accordance with the requirements of the Law on Protection from the Effects of Chemical Substances and the *Regulation on the terms and*

*procedures for storage of hazardous chemical substances and mixtures* (Adopted with CoM Decree 152 dated 30.05.2011, prom. SG 43 dated 7.06.2011).

## ***II. Before starting the construction and prior to commissioning:***

9. The operator shall give notice about the classification under art. 103 of the EPA and Art. 3 of the *Regulation on the prevention of major accidents involving dangerous substances and the limitation of their consequences* to the Minister of Environment and Water (with copy to the Regional Inspectorate - Haskovo) before construction begins and prior to commissioning of the site:
10. Prior to starting the construction of the IMWF and the other pieces of infrastructure, the respective projects, together with the compatibility expert statements, required pursuant to the applicable legal provisions (e.g. the Spatial Development Act), to be submitted to Krumovgrad Municipality.
11. To coordinate with the Mayor of Krumovgrad the route for transportation and the installation/facility for treatment of construction waste that will result from the construction of the site.
12. To organize the collection mine site waste and its subsequent submission to the appropriate disposal on municipal or regional landfill for non-hazardous waste.
13. To prepare a scheme for collection, temporary storage and transportation of industrial and hazardous waste generated during construction and operation of the facility, which meets the regulatory requirements for waste management.
14. To submit documents for classification of the waste which will be generated during construction and the operation of installations and facilities listed in the project proposal, under *Regulation 3/2004 on waste classification* (prom. SG 44 of 2004).
15. To elaborate a business program for waste management within the scope of the WMA.
16. Prior to commencing preparatory and overburden removal works and before the commissioning of new facilities and equipment, the operator should ensure to prepare their own assessment of possible cases of immediate threat of environmental damage and for caused environmental damages, with content in accordance with Annex 1 of Regulation 1 dated 29.10.2008 *on the type of preventive and remedial measures stipulated by the Law on the responsibility for prevention and remedying of environmental damages and on the minimum cost for implementation thereof*, prom. SG 96/07.11.2008 and to submit it to the RIEW - Haskovo.
17. Training to the personnel engaged in project construction and subsequently in project operation and maintenance of equipment and infrastructure to raise their awareness of the most appropriate impact mitigation measures and the most efficient way of application thereof.

## ***III. Project decommissioning and closure***

18. Waste generated on site shall be handed over based on a signed written contract, to persons holding the relevant permit for handling waste or a registration document under Art. 12 of WMA or a complex permit under Art. 117 of the EPA.
19. The data from the ongoing internal monitoring, including the description of the Internal Monitoring Plan (locations, parameters and frequency of measurements) and the findings thereof shall be uploaded onto the company website (in Bulgarian and English) and immediately after starting the measurements therein listed, the contracting authority shall inform the Greek Ministry of Environment, Energy and Climate Change as to which



website this information is published on, and it shall send a copy to the East Aegean Sea Basin Directorate.

20. Once a year - by 31st March each year, after the first year of project, the Company (contracting authority) shall send a report in English to the Greek Ministry of Environment, Energy and Climate Change, wherein the results of the Water Quality Monitoring Plan shall be presented. The report must include a full description of the points from which samples are taken (location, etc.), analyzed parameters, analytical methods and comparison of these data against the limit values of these emissions. This report in both English and Bulgarian must be submitted to the East Aegean Sea Basin Directorate.
21. During operation all vehicles and plant shall only maneuver and move along clearly defined and approved routes, which have been marked with unambiguous and permanent signage. No movement of vehicles and plant should be allowed off-road and aside from the entry routes to the constructions sites in the area, where this is to prevent further destruction of vegetation, reduce the anxiety of the animals and their mortality rate, prevent further deterioration and reduction of their trophic base.
22. Upon decommissioning of the site within the framework of the overall rehabilitation project, measures must be provided so as not to allow pollution from the facilities constructed during operation to spread into surface and ground waters in the project site area, and this rehabilitation project must be agreed with the East Aegean Sea Basin Directorate.

***IV. Attachment: Plan for Implementation of the Measures under Art. 96 Par. 1 Item 6 of the EPA***

<b>No. #</b>	<b>Measures</b>	<b>Time lines</b>	<b>Objective</b>
	<b>Ambient Air</b>		
1.	Control on the operation of heavy equipment: excavators, trucks, dozers, graders, front loaders, etc.	During construction and operation	Reduction of harmful emissions in exhaust gases
2.	Dust control in dry weather conditions by sprinkling the operational areas of the open pit, waste rock stockpile and roadways between them, where the roadways must be sprinkled on a regular basis, subject to co-ordination with Krumovgrad Municipality	During exploitation	Reduction of dust emissions in nearby settlement
	<b>Waters</b>		
1.	Strict compliance with the process design requirements for extracting reagents	Ongoing for the period of mining of the site	Maintained process flow parameters and facilitation of water management
2.	Availability of sufficient containment capacity to ensure containment of accidental spills from the installation	Ongoing for the period of mining of the site	Prevention of uncontrolled release of process solutions into the hydrosphere
3.	Personnel preparation and	Ongoing for	Enhancement of the

	training to improve their understanding of solution flows and their circulation across the site and the measures that must be implemented in unforeseen situations	the period of mining of the site	of the site water management control
4	Regular inspection and appropriate maintenance of the runoff diversion system that intercepts and diverts surface runoff away from the site and maintenance of the household effluent and process water treatment facilities	Ongoing for the period of mining of the site	Minimise runoff through the minesite and thus reduce the potential for water pollution
5.	Provision of enough retention capacity in the process water pond to collect water from the bank in case of intensive precipitation	During construction and operation	Protection of the quality of the water in Krumovitsa river and the groundwaters it feeds
6.	Regular implementation of the Internal Monitoring Plan of the surface, ground and waste water and subsequent submission of all data obtained to the EASBD	During the construction, operation, closure and post-closure periods	Protection of the quality of the water in Krumovitsa river and the groundwaters it feeds
7.	Elaboration of emergency measures and emergency action plan for the Process Wastewater Treatment Plant, the mine, the IMWF, the electrical power supply system and adherence thereto	during the construction and the operation of the Process Wastewater Treatment Plant, the mine, the IMWF, the electrical power supply system	Protection of the quality of the water in Krumovitsa river and the groundwaters it feeds
8.	Notification of the EASBD, RIEW Haskovo and the Regional Health Inspectorate - Kardzhali in case of emergency situation hazardous for the quality of the surface or ground waters and information about measures undertaken	During construction and operation	Protection of the quality of the water in Krumovitsa river and the groundwaters it feeds
9.	Elaboration of measures for protection of the surface water and groundwaters within the framework of the overall closure and rehabilitation project	Project Operation	Protection of the quality of the water in Krumovitsa river and the groundwaters it feeds
	<b>Soils</b>		
1.	Removal of topsoil where possible	During operation	Re-use for rehabilitation

	and placement of the soil material on a dedicated stockpile to enable its re-use for rehabilitation purposes.		purposes
	<b>Geological Setting</b>		
1.	Development of annual mining and processing projects and annual site rehabilitation projects after the ore has been fully extracted , in line with the conditions and the measures set in this EIA resolution.	Up to 6 months after concession rights have been obtained	Ensure efficient extraction of the resource and rehabilitation of the concession area to a condition similar to that before commencement of operations.
	<b>Biodiversity</b>		
1.	Construction works are limited to the respective design footprints.	During construction of the mine and the infrastructure	Ensure areas outside the approved construction site footprints are not disturbed;
2.	No aggregate materials are extracted from the Krumovitsa gravels for project construction Krumovitsa River.	During construction of the mine and the infrastructure thereto	Protection of an important food base of bats and source of abundant insect population.
3.	Technical rehabilitation of disturbed areas for re-vegetation (planting of grass and tree vegetation, organic fertilizer application and watering) and active aftercare over the first 5 years to ensure that s full vegetation cover develops	Upon decommissioning of the operation	Rehabilitation of disturbed terrains for vegetation
4.	Ensure suitable agricultural rehabilitation (ploughing, harrowing, seed-sowing, rolling, organic fertilizer application and watering) of disturbed areas designated for agricultural use (mostly roads) and active aftercare over a 3-year period to restore land productivity.	Upon decommissioning of the operation	Rehabilitation of disturbed terrains for agricultural use
5.	Reclamation of the mine to be made by representatives of local flora, which will reduce the risk of	Upon decommissioning of the operation	reclamation of the landscape and vegetation

	introduction of invasive or alien species in all habitats in the area and prevent possible damage to the food base and structure of the habitats of species subject to conservation.		
6.	In the reclamation project, which is subject to separate proceedings under the <i>CA Regulation</i> , gradual progressive rehabilitation should be envisaged	Upon decommissioning of the operation	reclamation of the landscape and the vegetation.
	<b>Noise</b>		
1.	Construction activity will be conducted only during daylight hours.	During construction phase	Reduction of noise impact onto nearby settlements
2.	Control the noise levels during mining and ore processing activities	Project operation	Reduction of noise impact onto nearby settlements
	<b>Cultural heritage</b>		
1.	The activities performed at Ada Tepe area to be realized together with the ongoing rescue field surveys in the area, where the areas surveyed shall be gradually released for implementation of the Company's investment activities.	During construction of the mine and its infrastructure and the operation thereof	Protection of Cultural heritage

**V. Mitigation measures to prevent, reduce and possibly eliminate adverse impacts resulting from the implementation of the project proposal over protected areas.**

No.	Measure	Anticipated environmental effects
1.	Do not use rivers as water source during the months of low water.	Avoid dry spells of habitats
2.	During construction, specifically - when additional infrastructure is put in place - removal of old deciduous, decaying and hollow-prone trees, their stumps and other fallen trunks.	Protection and conservation of suitable feeding substrates and development of larvae and <i>Cerambyx cerdo</i> and <i>Lucanus cervus</i> . Preserve the existing day-shelters of bats.
3.	No cutting of the oak woodlands on Ada Tepe north of the open pit and near the low-grade ore stockpile should be allowed. Reduction of the footprint of this stockpile in SE direction, where it borders on a	Avoid the direct impact on a protected habitat (91M0 Pannonian-Balkan Turkey Oak and Sessile Oak Forests) and, consequently, the impact on the feeding base of the larvae of <i>Cerambyx cerdo</i> and <i>Lucanus cervus</i> .

	protected habitat (91M0 Pannonian-Balkan Turkey Oak and Sessile Oak Forests)	
4.	The following impacts are minimized as much as practically possible: soil stripping and removal, removal of ecotonic communities (transition areas between forest and grassland, plane and hill), grass and brush clearing off the sites whereon technical infrastructure networks and facilities are placed.	Protect and not fragment the feeding habitats and shelters of invertebrates.
5.	Employment of efficient dust control measures across the project site, specifically with regard to transportation and construction activities and especially on the new courses (not having hard surfaces), and prevention of pollution on the roads from oils, fuel and hazardous chemicals.	Protect the trophic base of herbivorous insects (larvae, nymphs and imagoes). Prevent pollution of local soils and waters within the site and the protected area, which may potentially derogate the feeding base and habitats of species under protection. Preserve the abundance of insects.
6.	Rock blasting during the daytime hours only;	Limit the anxiety of invertebrates and bats active during the night.
7.	Avoid using lights with sodium-vapor lamps (light-emitting mainly red and yellow light of the spectrum), which is significantly less efficient attracting nocturnal insects compared to mercury-fluorescent lamps. The number of lamps must be in line with the requirements of Regulation 49 on the artificial indoor lighting (prom. SG 7/23.01.1976)	Limit the strong attraction effect of the lamps, emitting rays of short-wave part of the spectrum and leading to disorientation of nocturnal insects, hence their high mortality.
8.	To discharge minimum amounts of water in the river and Krumovitsa, where these amounts should meet the category of receiving water.	Limiting the contamination risks for Krumovitsa river with chemicals and toxicity of the fish fauna including species subject to conservation within the area (Maritsa barbel and the golden spiny loach).
9.	One year before the start of construction, after consultation with the Regional Inspectorate - start removing turtles and subsequent release back into the wild in suitable locations far enough away from the area of the project proposal. Build a wall, preventing the re-settlement of the turtles that should be maintained in good repair at all times during operation.	Prevent mortality of individual animals of species subject to conservation within the protected site "Eastern Rhodopes".

**This resolution refers only to the project proposal, which was subject of the EIA under the provisions of the Environment Protection Act. In case of extension or modification of this project proposal the Company must promptly notify MOEW or RIEW - Haskovo at the earliest possible stage.**

**Pursuant to Art. 99 par. 8 of the Environment Protection Act, an EIA Resolution will become legally void if the investment project is not commissioned within 5 years after the date of issuance of the Resolution.**

**When the Company is replaced by another company as assignor in line with the provisions of Art. 99, para. 7 of the Environment Protection Act, the new assignor must notify the MOEW.**

**In case of non-fulfillment of the conditions and measures instructed in the EIA Resolution, the responsible party shall be liable under Art. 166, item 2 of the Environment Protection Act.**

**Stakeholders may appeal the resolution as per the appeal procedures under the Administrative Procedure Code within 14 days following its announcement.**

On the grounds of art. 60 par. 1 of the Code of Administrative Procedure Code, the Investor BMM EAD has made a submission with incoming ref. OBOC - 2457 /07.09.2011 and provided additional information with incoming ref. OBOC - 2457 /21.09.2011 requesting preemptive enforcement of the Resolution on the EIS for the Project proposal for Mining and Processing of Gold Ore from the Ada Tepe Prospect, Khan Krum Deposit, Krumovgrad Municipality.

Having considered the request made by the Investor, which justifies in detail the protection of vital interests of the Investor, the State and the public, and taking into account the information provided to the MOEW in a letter with outgoing ref. E-04-20-53 /17.09.2011 signed by the Deputy Minister of Economy, Energy and Tourism, I hereby conclude that the arguments are valid and justified as follows:

**1. Protection of a vital interest of Balkan Mineral and Mining EAD ("BMM EAD" or "the Company")**

- BMM EAD has been conducting mineral resource exploration works in an area near the Town of Krumovgrad, District of Kardzhali, known as the "Krumovgrad License" on the basis of an Exploration Permit dated May 9, 2000 and an Exploration Agreement signed on the grounds of the Permit. The Company registered the discovery of a geological gold deposit first and later the discovery of a commercial gold deposit known as the Khsn Krum Gold Deposit. In this regard, it is in BMM EAD's interest to pursue timely implementation of the mining concession for gold ores from the Khan Krum deposit, Krumovgrad Municipality, District of Kardzhali, awarded with Resolution 87/11.02.2011 of the Council of Ministers. According to Section 8 of the abovementioned Resolution of the Council of Ministers, the concession shall be effective from the effective date of the resolution for approval of the EIA and the resolution for approval of the assessment of the compatibility of the proposed development with the conservation objectives of East Rhodopes Protected Site, Code BG0001032, designated for protection of natural habitats and wild life and flora. This means that the Concessionee will not be able to exercise its rights and meet its obligations under the concession unless the EIA Resolution is enforced.
- BMM EAD is currently in a position to carry out only mineral exploration works and any delay in the implementation of the project proposal would create the risk of not being able to achieve the expected positive results, and consequently the Company, the state as the Concessionor and the region where the Company operates would incur heavy losses.
- The implementation of the project proposal in due course will enable the Company to raise the necessary amount of capital for the project, which in turn will enable the state and the Municipality of Krumovgrad to benefit from the project.

**2. Protection of significant state or public interests**

- The implementation of the project proposal will increase the foreign investments in the country. The US\$130 M worth of investment proposed by BMM EAD (based on

the most advanced and modern mining methods and best available environmental practices) equals to 6.7% of the net direct investments in the country for 2010. In terms of the District of Kardzhali, the proposed investment is nearly 1/3 of the total investments in the district and nearly 100% of the foreign investments, which will boost the local economy and create conditions for more sustainable development of the region.

- The unemployment rate in the Krumovgrad Municipality is one of the highest in the country – about 20% higher than the national average for 2010. The project proposal considers creation of permanent job positions, which will be about 300 at the peak of the project construction and 230 during project operation.
- The due implementation of the project proposal will encourage the investment process and improve the revenue profile of the national and municipal budgets. In addition to the revenues from royalty payments, the payment of corporate taxes, social contributions and taxes on the income of the gold mine employees will also add to the positive financial effect.

**3. High probability that the execution of the EIA resolution be hampered or even sabotaged**

- The Company needs to timely realize all planned investments with view of financing its project intentions, provided the specificity and the dynamics of the metals market, the mining equipment and methods.
- The timely start of the project proposal implementation will allow BMM EAD to perform all necessary preparatory activities, ensure financing, and to sign contracts with consultants, specialist and suppliers of goods and services, thus creating the jobs needed for the development of the Ada Tepe deposit. Any delay thereof may seriously obstruct or even frustrate the implementation of the EIA Resolution.

Provided the above, finding the request of the assigning company justified, and with view of the presence of the preconditions under Art.60, para.1 of APC, I

**I N S T R U C T:**

Preemptive enforcement of the present resolution is allowed after BMM EAD deposits a guarantee amounting to BGN 100,000 (one hundred thousand levs) to the bank account of the Ministry of Environment and Water at the Bulgarian National Bank - Central Office - BG35 BNBG 9661 3000 1387 01, BIC: BNBG BGSD.

The guarantee will be released without any interest due after the EIA Resolution comes into full force.

**These instructions are subject to appeal before the Supreme Administrative Court within three days following announcement as per the procedure provided in the Administrative Procedure Code.**

**Signed:**

**Nona Karadzhova,  
Minister**

**Date:23 November 2011**