

# ENVIRONMENT AND SOCIAL MANAGEMENT PLAN

Subproject:

## **THE CULT OF WATER**

**– Interior design of Hotel Thermal Lux and Spa in Bansko –  
Strumica**

January 2019

## Introduction

The project for local and regional competitiveness is a four-year long investment operation supported by the European Union, and it uses IPA II funds which are intended for competition and innovation in Macedonia. The project is operated as a Hybrid Trust Fund consisting four components, while it is implemented by World Bank and the Government of Republic of Macedonia. The project will provide financial investment and build capacities mainly to support a sectoral growth and destination development.

This environmental and social management plan (ESMP) aspects is aligned with ESMF and prepared for the foreseen activities of the “The cult of water – Interior design of Hotel Thermal Lux and Spa in Bansko – Strumica” sub-project. The ESMP presents the environmental due diligence document comprised of project description, technical details, scope, setting and location based on which it assesses the environmental and social risks and the avoidance and mitigation measures addressing them. Implementation of mitigation measures addressing the identified risks and issues defined in the ESMP is mandatory.

### 1. The cult of water in Bansko, Strumica

Strumica bath or also known as Bansko Bath is located 12.5 km southeast of town of Strumica, on the east side of Bansko village. Thermo-mineral springs are situated in the foothill of the mountain Belasica, between river Derman on the west, mountain ridge Manastir on the east and the flat fields and the locality Kokoshinka on the north. The baths are built on the bank of river Derman, on 270m sea level. You can see a beautiful sight of the largest part of the surrounding Strumica valley on one side and Belasica mountain covered with steep dense forest on the other.

Thermo-mineral springs in Bansko are on a terrain made of ancient Paleozoic granite covered with proluvial deposits. Hyperthermal instances appear in a relatively small area in the shape of thermal springs.

The largest source is Parilo (40l/sec) with a temperature of 72 °C. According to the quantity of hot water, the spring Parilo takes the third place in Macedonia, after Kosovrasti and the spring Nova Kaptazha in Banjiste – Debar Baths. When it comes to temperature, Parilo has the highest water temperature in Macedonia. The chemical composition of the water is sodium-sulfate, with varying mineralization. The mineralization of Parilo is 1105mg/l. These waters contain the largest quantity of sulfate anions and hydro-carbonates, and cations-sodium and calcium. Furthermore, it contains dissolved manganese as oxides and silicon dioxide and aluminum oxide. The presence of dissolved gases is not big, and the density of free gases is weak, except nitrogen which is contained in large quantities and has a special value. Because of it, the bath is called nitrogen thermae.

The water in these springs also contains a large number of rare elements like fluoride, ribidyum, cesium, lithium and others.

For normal managing of the hotel in accordance to the needs for usage of geothermal hot water, a contract with authorized public enterpize for delivery of heat energy in form of thermal water was signed:

- in the period from 01-12-2018 to 30-04-2019, 2,5l/sec
- in the period from 01-05 -2019 to 30-09-2019, 1l/sec
- in the period from 01-10-2019 to 31-12-2019, 2,5l/sec

Scan of the agreement is given in Annex 2.

### Medicinal properties of water

Medicinal properties of thermomineral water in Bansko, are well known to the local people. Today it is known that the medicinal impact of the water comes from the complex chemical composition, presence of sodium, sulfate and rare minerals, dissolved gases (nitrogen and carbon dioxide), and radioactivity. According to research it is confirmed that the thermomineral water in Bansko, cures many diseases by drinking or bathing with it. Here are some:

- All types of degenerative rheumatism
- Stomach pain
- Disease of the duodenum (ulcer)
- Bowel disease

- Inflammation of the yellow sacht and biliary tract
- Heart and blood vessel disease (conditions especially after a stroke)
- Traumatic injuries to the dorsal system
- Hormonal disorders and allergies
- Essential hypertension - elevated blood pressure
- Deep blood flow
- Conditions of overlapping jaundice
- Inflammation of the ovaries and other gynecological diseases
- Hereditary blood disorders
- Condition after going through malaria

## 2. Short Description of Sub-Project Activities

The primary goal of the subproject “The cult of water” is renovation of the old hotel premise “Termica” in Bansko, Strumica, resulting in a modern hotel resort.

The subproject “The Cult of Water” has four components: (a) Interior design of old hotel building in village of Bansko, Strumica Municipality and turning it into a modern and competitive tourist facility; (b) Purchase and installation of proper equipment and increasing the functionality of the tourist premise; (c) Renovation and adaptation of existing cabin into a “bee cabin” for promotion of API tourism; (d) Designing, printing and publishing of printed and electronic promotional materials and online marketing for the destination.

### ***Renovation of Hotel “THERMAL LUX and SPA”- Bansko***

The subproject includes renovation and adaptation of the old hotel premises into a modern resort. In the tourist complex, visitors will have access to information on all natural beauties in the surroundings, they will have access to a public bathroom, free Wi-Fi, opportunities for relaxation and cultural sightseeing. Tourists will be able to fulfill most of their needs while being there. Thus, the hotel follows a holistic approach.

The building will keep its exterior form and look (there will be no upgrades to the premises and all dimensions will remain the same). New events and programs will be created in order to attract visitors by broadening the offer of activities. Even though, the old hotel was built in 1976, the premise is not declared as a protected monument of culture. This means that in the process of interior design, there is no need of special permit from the NI Institute for protection of monuments of culture and museum - Strumica.

The hotel is built in a modern style, which can be seen from the expressive form and use of materials on the façade and part of the interior. Most of the building is constructed with brute concrete, usual for the period of modern architecture.

The base is made of four lamellas which are mutually inclined at an angle of 45 degrees for maximum utilization of the surrounding vistas towards the valley.

The hotel is composed of basement, ground floor and two additional floors. On the basement floor there are a boiler room, utility rooms, a small restaurant and toilets. On the ground floor there is a reception desk at the center of the building, a large restaurant with kitchen on the western side, a conference room on the eastern side of the hotel, toilets and spacious lounge area spreading out to the both sides of the reception. Beside the mentioned, on the ground floor there is a pool area oriented on the northern side, with the appropriate facilities such as changing rooms, showers, and toilets. On the first and second floors there are 24 rooms and 4 suites with additional premises for room service.

The façade is made with a combination of brute concrete and façade brick. The structural system is built with reinforced concrete. Ferroconcrete external cloths are made with brute concrete, as well as the circular staircase and the halls. The building was in a bad condition, where visible traces of roof leaks, broken window glass and ruined floor were present. On the inside the interior and electrical installation were either destroyed or stolen. The constructive system had no visible damages.



Picture 1 – view towards the hotel (current state)

The premise will be converted into a multifunctional tourist resort and will have a serious contribution to the improvement of tourist attractions in Strumica and its surroundings. The investor envisages activities for renovation of the facility in terms of renovation of damaged walls, installation water supply pipeline that connects the building to the local water supply network, ceilings, replacement/adaptation of accommodation capacities (doors/windows, furniture, bathrooms, etc) and energy efficiency improvement.

The parts of the existing hotel object basement and part of the ground floor, will be remodeled/adapted into a spa center (basement) with pool area (part of the ground floor).

The renovation activities were started on 01.03.2018. During the summer 2018, all activities for removal and/or replacement, listed below have been finished:

- Removal of old furniture and sanitary elements from rooms, conference room, reception
- Removal of old carpentry and replacement with new PVC windows and doors
- Remediation of flat roof, removing old insulation layers and replacement with new insulation
- Replacement of old metal water and sewer pipes in the hotel building with new PVC pipes
- Replacement/remediation of existing electrical installation inside the hotel building

Installation of new masonry, plaster sealings and partition walls, stucco and paint works started in June, 2018, but are still ongoing. Even though some of these activities are not subject to this sub-project, possible negative impacts have been assessed and mitigation measures are identified and included in this ESMP. For works that already started or are completed, they will be a subject to an audit based on this ESMP.

Following renovation/preadaptation activities in existing accommodation facility are subject of “The cult of water – Interior design of Hotel Thermal Lux and Spa in Bansko – Strumica” sub-project:

- Ceramic works (purchase, transport and installation of floor synthetic tiles and wall ceramic tiles). Laying wall tiles occupying an area of 1280 m<sup>2</sup> and laying floor tiles occupying an area of 2126 m<sup>2</sup>
- Facade works (purchase and transport of insulation materials and painting with facade paint)
- The interior walls (rooms, halls), with a total area of 7.484 m<sup>2</sup> will be painted, and the exterior walls / the facade with a total area of 2.259m<sup>2</sup> will be painted

- Partitioning of segments of existing ground floor in order to get new space for a children's pool with an area of 20 m<sup>2</sup> (instead of several tubs with geothermal water).
- Concreting and tiling of the children's and adult pools with total area of 134m<sup>2</sup>.
- Installation of 8 m<sup>2</sup> Jacuzzi.
- Equipping three saunas (finnish, infrared, aroma) with total area of 28.1 m<sup>2</sup>.
- Equipping a cold room with an area of 9.9 m<sup>2</sup>.
- Equipping with a heated Lounge chairs with an area of 10.41 m<sup>2</sup>.
- Equipping with a steam room with an area of 9.75m<sup>2</sup>.
- Equipping with two massage rooms with total area of 20.54 m<sup>2</sup>.
- Existing changing rooms with sanitary space for visitors will be divided into women's changing room with an area of 20.18 m<sup>2</sup> and men's changing room with an area of 18.4 m<sup>2</sup>.
- Adding of new sanitary facilities on the basement floor as a part of the new spa center.
- Gypsum works (purchase and transport of material and making of dropped ceilings from gypsum). Making of gypsum board ceiling with a metal construction in all of the halls, conference room, toilets and baths in apartments and rooms.
- In the outer part of the premise, the yard will be supplemented with the following: 20 planters, 12 benches, 20 candelabras, 20 meters long fence, paths with paving bricks in an area of 300 m<sup>2</sup> by a selected company/tenderer (not part of this sub-project).
- Placement of an Inscription logo at the entrance of the resort.

Other activities in the rooms are also expected:

- Waterproofing (purchase, transport and installation of vertical waterproofing of walls in bathrooms and horizontal waterproofing of balconies and baths).
- All of the rooms will be equipped with new furniture (glass, chairs, mini bar, tv set etc.).
- Renovation of 28 toilets and 4 baths in the rooms and apartments (instalation of new tiles and complete sanitary equipment). Sanitary facilities (purchase, transport and installation of faience toilet, washbasin, wall shower battery for cold and hot water, electric water heater, toilet paper holder, soap dispenser, stand for toilet sets, towel rack and brush cup).
- On the first floor 12 rooms, 12 terraces and 2 rooms for staff in total are planned for renovation, as well as 2 suites. In the first-floor rooms/suites a total of 28 beds and 15 wardrobes will be purchased.
- On the second floor 12 rooms, 12 terraces and 2 rooms for staff in total are planned for renovation, as well as 2 suites. In the second-floor rooms/suites a total of 28 beds and 15 wardrobes will be purchased.
- Carpentry works (purchase, transport and installation of interior doors as well as entrance doors in fire-resistant rooms (30minutes) with metal frame wings field with fireproof material and special lock with attestation for adequate fire resistance and electronic card locking.
- Locksmith works (purchase and transport of materials and processing with painting with primer and color of balcony fences and purchase, transport and installation of circular rotating door at the main entrance of the hotel).
- Finishing works (purchase, transport of carpets, thresholds, curtains, installing of Jacuzzi, saunas, steam bath and installing of pool equipment, reception and lobby design with necessary equipment, equipping kitchen and restaurant, wall and interior painting.

The materials that are expected to be used in previously listed activities are the following:

- Gypsum boards, metal subconstruction, paint, bricks, thermal insulation, tiles, tiling adhesive, concrete, wood.

The premise is already connected to the local water and sewage system. No additional work for connection to the water or sewage network will be conducted. No actions and interventions of the public water and sewage network will be undertaken outside the boundaries of the premise as part of the project activities.

All work will be carried out in accordance with the construction norms, together with the purchase and placement of materials. There is no presence of asbestos materials on roof and walls; there are no lead colors used and no compact florescent lamps either. In the newly opened tourist facility a modern conference room will be adapted to provide space for holding seminars, workshops and other cultural events. For this purpose, the following equipment will be needed for completing the subproject:

- chairs;
- conference chairs;
- tables;
- projectors;
- flipchart boards;
- TVs;
- Planters;
- wall panels;
- frames for organizing exhibitions.

### ***API Tourism – Renovation of “bee cabin”***

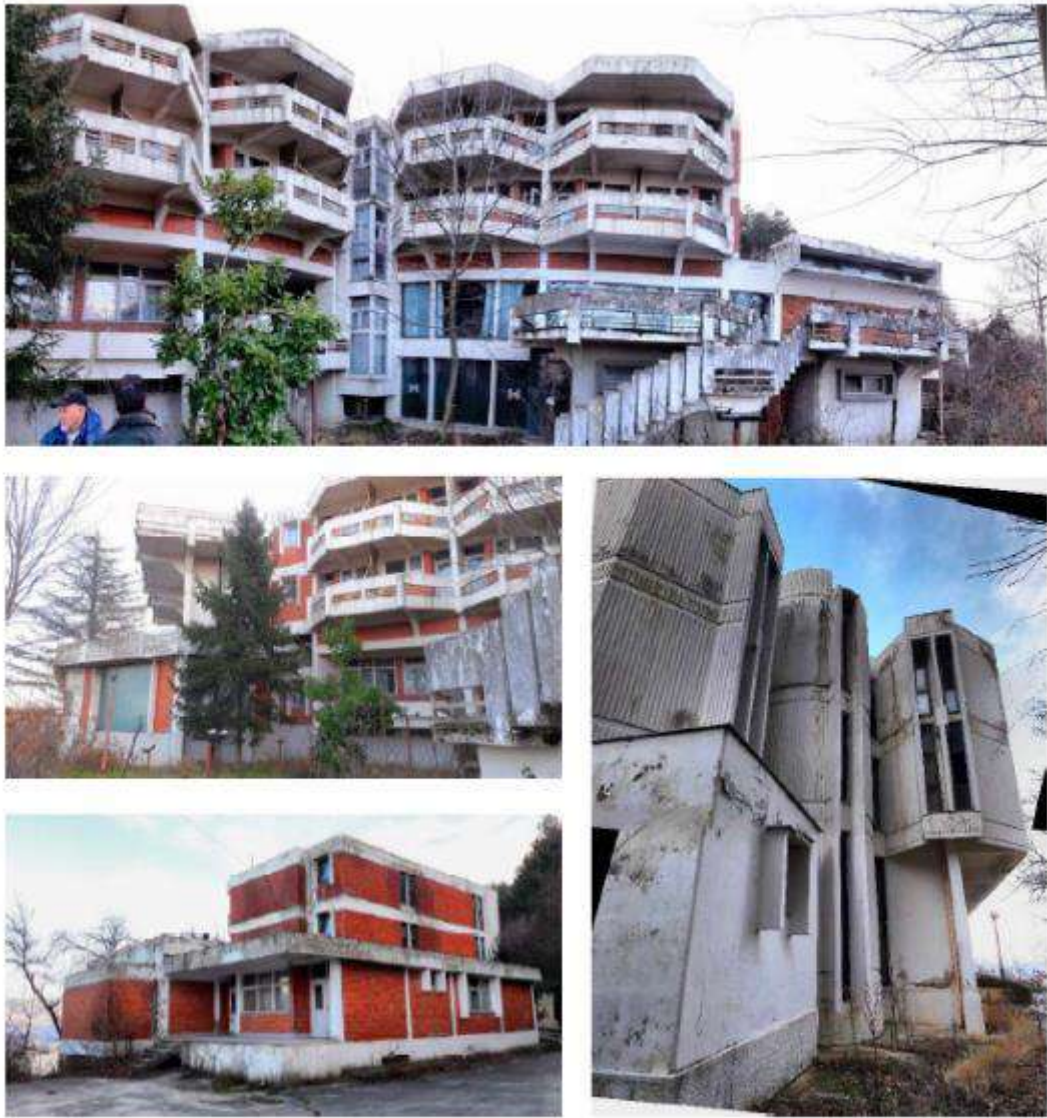
In addition to the above listed activities, which are planned to be executed under the subproject “The Cult of Water”, an existing API tourism cabin is planned to be reconstructed and appropriately converted in order to house this activity. With this activity, the variety of services offered to the visitors is broadened. They will be able to practically inform themselves better about the benefits and positive influence of the apitherapy. As a type of treatment used for thousands of years by ancient civilizations, the apitherapy exploits the natural remedies contained in the products created by bees, such as: honey, propolis, beeswax, bee venom etc. Many illnesses and health conditions can be treated with this type of therapy, so the idea is to give a general idea and information about it to the visitors, which in the future may grow into a fully equipped apitherapy capacity.

Onsite, it is a small lightweight constructed cabin (as shown on pic. 4) which needs to go through a phase of adaptation and renovation which includes:

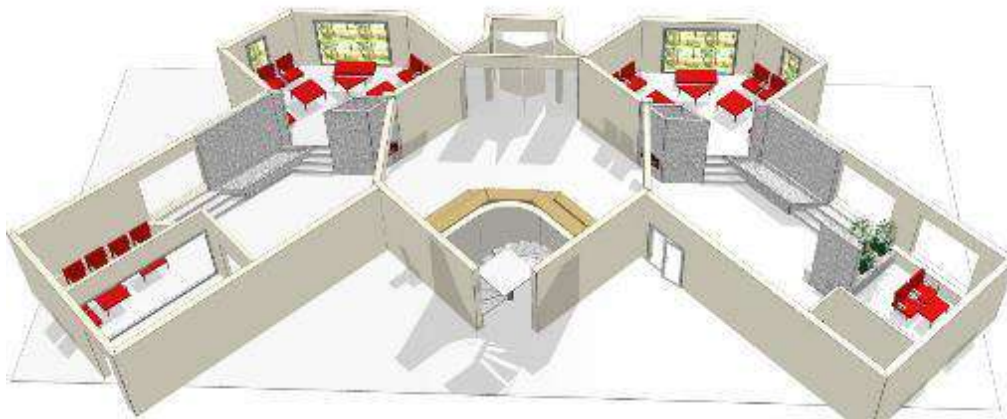
- Replacement of old door with a new door with mosquito curtain;
- Replacement of old windows with new windows with mosquito curtains;
- Retiling inside floor with acid proof floor tiles;
- Installation of wall tiles;
- Installation of ceramic tile socle;
- Installation of wainscot eaves with integrated thermal insulation.

The bee cabin is planned as shown on picture 4, containing one room with beds where visitors can relax while breathing the bee hive air, small kitchen, storage area and a semi opened space which also contains beds for outdoor relaxation.



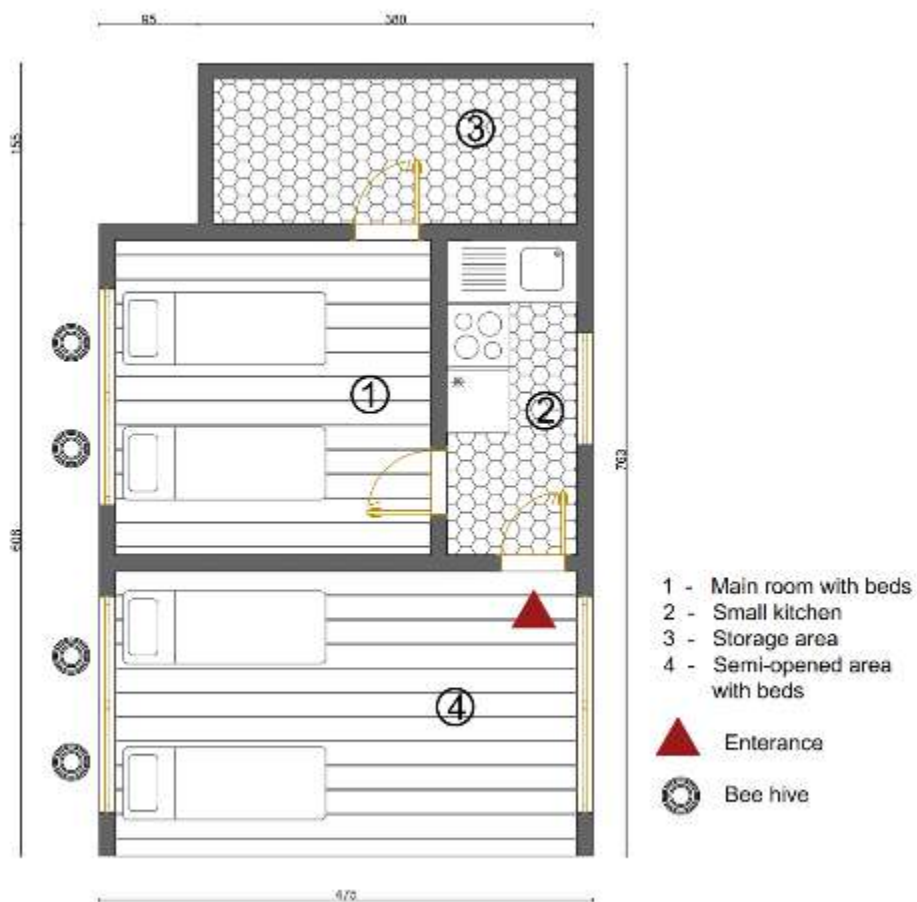


Picture 2: Current state of the hotel building





Picture 3 - Planned new look of some of the interior



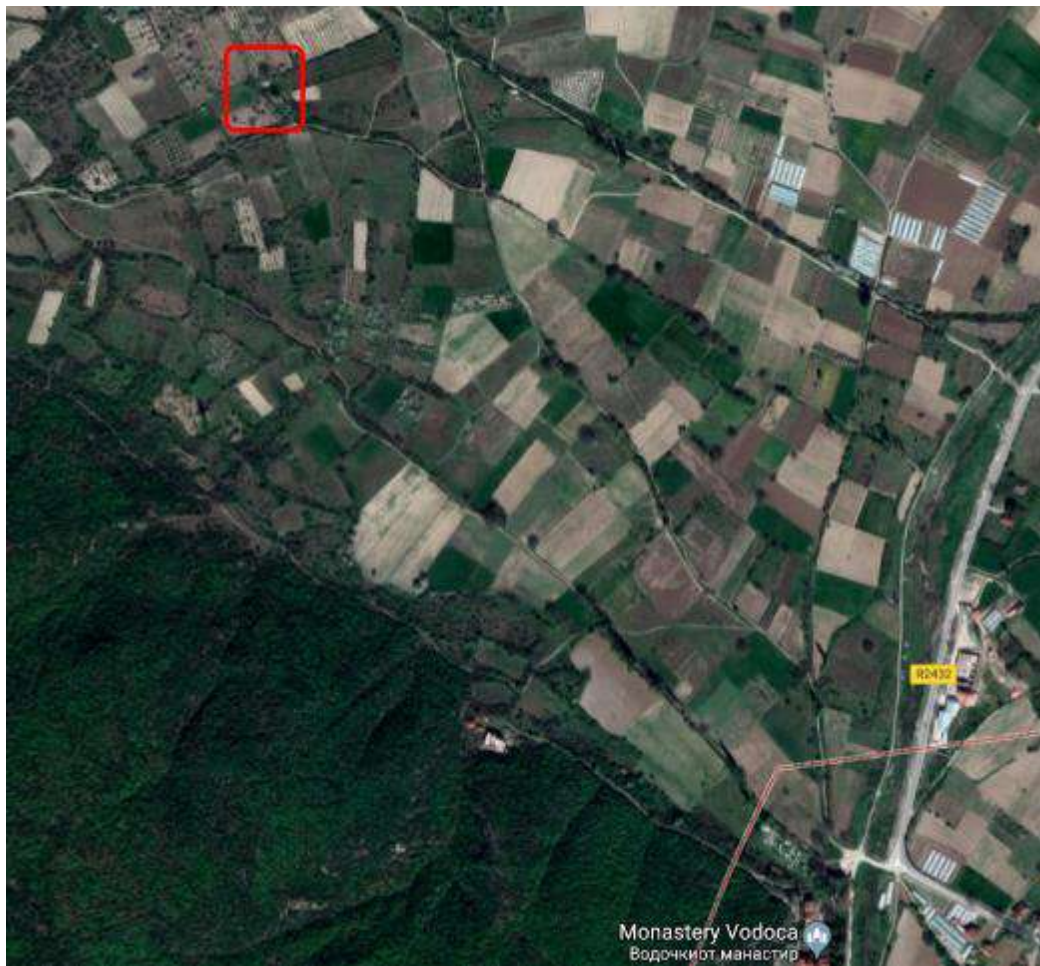
Picture 4 – Floor plan of the bee cabin





Picture 5 – Current state of the bee cabin for API tourism

The cabin itself is situated in the near surroundings of village Vodocha, Strumica, some 7km from Strumica and around 20km from the “Thermal Luxe and Spa” resort in Bansko.



Picture 6 – Location of the bee cabin near village Vodocha

The idea of this tourist resort is to create a space for tourists and visitors where they will be fully served with accommodation facilities, restaurant service, parking space, toilets, swimming pool and spa services, as well as providing access and information about cultural and natural rarities of the region: the

flora and fauna of mountain Belasica, the natural monuments “Smolare Falls”, “Koleshino Falls”, Strumica Carnival, Strumica Open Festival, Ajvarijada Event, Roman baths Bansko, Strumica’s Monastery of the Fifteen Holy Martyrs, Monastery “Forty Martyrs of Sebaste” in Bansko, Monastery “St. Bogorodica Eleusa” in Veljusa, Monastery “St. Leonthy” in Vodocha, the “Tzar’s Towers” fortress, the International Strumica Art Colony, ethnology etc. As for the art colony’s needs, special exhibition premises and museum settings will be provided in the building itself and the sacral architecture in Strumica from different time periods. Within the subproject "*Interior design of the hotel Thermal Lux and Spa – Bansko, Strumica*" no purchase of artifacts and other museum works is planned. With the realization of this subproject, several problems that municipality of Strumica faces at the moment will be resolved. These include: limited capacity of hotel accommodation and modern spa services, lack of information and facilities guiding tourists to the chosen destination, lack of online marketing and lack of marketing in general. Hotel or other premises included in the sub-project are not located in the protected area.

The "Cult of the Water" sub-project has three components; (a) Interior design of the abandoned building in the village of Bansko in Strumica in a modern and competitive tourist facility; (b) Procurement and installation of equipment and functional arrangement of the tourist facility; (c) Designing, printing and publishing of printed and electronic promotional materials and on-line marketing for the destination.

Taking into account the structure of these three components, only the first component can have a potentially negative impact on the environment while adverse impacts of (b) and (c) are very limited -and includemall quantities of some types of waste. No negative impacts are expected to occur as a result of the activities of component (d).

### **Location of the activities**

At about 12 km southeast of Strumica, under mountain Belasica, lies village of Bansko, and in its immediate vicinity are the thermomineral springs of Bansko bath. Bansko bath is connected with asphalt-made road at an altitude of 250 meters. Bansko bath is one of the most important destinations in the Municipality of Strumica and the whole region when it comes to bath and SPA tourism. The mild moderate-continental climate with an average annual temperature of +13 degrees Celsius, with about 230 sunny days per year, as well as the richness of the hyperthermal mineral springs with a water temperature from 47 to 72 degrees – all that allowed this natural healing place to be used since the Roman Time, i.e. since the third century. The healing power is confirmed by the existence of the Turkish bath which is still used by the local population.

The rich and versatile forests and the extraordinary clean air complete the conditions for treatment with natural factors, supported by modern medical technology and expert medical teams.

From the analyses of some climate elements, we can conclude that Strumica bath is on a location with quite favourable climate. Here winters are soft, and summers, especially in these parts are not too hot. The close presence of the mountain Belasica, causes constant air circulation, which has a calming effect on visitors and makes day walks nicer. And during nighttime, it helps for calm and deep sleep. Clean and fresh air makes this place more than just a bath, but a place where the air heals too.

The object of the former hotel Termica (Hotel “THERMAL LUX and SPA”- Bansko) is located in village of Bansko, Strumica. There is an access road for vehicles on the south side of the building. There are Turkish and Roman baths near the premise and the surroundings are rich in greenery. The building is oriented on one main axis in the north-south direction, and the other in the east-west direction. The slope of the terrain falls toward the northern side looking toward.

Although the tourism potential in our region is high, still the level of tourism is low. Also the offer potential is high and diverse, but the number of visitors is still small. One of the natural rarities which is not used enough in the tourist sector is the geothermal water in Bansko. Up until now, opportunities for its utilization is generated from four facilities: Hotel “Tsar Samuil”, Retirement Home “Spiro Zahov”, Hotel “Atlantis” and Hotel “Termica”. However, currently only Hotel “Tsar Samuil” use the water for medical



purposes. With the change of ownership of Hotel “Termica” to Hotel “THERMAL LUX and SPA”- Bansko, there is a possibility to expand (restart) use of the water capacities. The utilization of the potential will be made by Podgorski – AN, which can, with a long-term contract, manage the accommodation facilities and the thermal water both in the pool and the SPA Center. On the other hand, as time passes by this area has become a horrid site for the local citizens as well as potential tourists, due to the long time of negligence. The natural benefits that come from the thermomineral water were not used. Additionally, the possibilities for relaxation and recreational apitourism were not used by domestic and foreign tourists.

Having the offer of organic products will definitely attract the attention of local and international tourists. The visibility of the various tourist attractions that are available to visitors all year long will be presented in a brochure with the purpose of attracting local and international visitors.



Picture 7 – Macrolocation of Bansko, Strumica



Picture 8 – Location of the hotel

### **3. The scope and purpose of the Environmental and Social Management Plan/Institutional framework**

The Environmental and Social Management Plan is prepared for the upcoming activities mentioned in the project "The cult of Water" for promotional of the Wellness Spa – Tourism in Strumica. This plan contains a description of the project, technical details and location, on the bases of which a risk assessment to the living and social environment is made. The plan identifies sustainable and effective measures that can reduce potential negative impact to an acceptable level for the living and social environment. Implementation of mitigation measures is mandatory.

The Environmental and Social Management Plan consists of a collection of institutional mitigation and monitoring measures which are implemented during the realization of the activities in order to eliminate the negative impacts on the living and social environment, or to reduce them to an acceptable level. The plan also includes the necessary activities for implementation of these measures.

The plan for environment management and social care provides a description of the technical details of each mitigation measure, including the type of impact along with sketches, a description of the equipment and procedures for action, as well as potential impact, environmental assessments of these measures, and provides a link to other mitigation plans which are mandatory for the project.

#### ***National Environmental impact assessment procedure for project development***

The procedure for assessment of environmental impact included in the Law on Environment, Gazette number 53/05, 81/05 24/07, 159/08 и 83/09; 124/10, 51/11, 123/12, 93/13, 163/13, 42/14, 129/15 and 39/16 (chapter XI / Article 76-94) and where EU directives on assessments on environmental impact are mentioned (Directive 85/337 EEC, 97/11/EC, 2003/35/EC and 2009/31/EC).

Based on the Law on Environment, the project investor is guided by the Decree on Determination of projects and criteria on the bases of which the need for the implementation of the procedure for assessment of environmental impacts is determined. If a letter of intent is required the investor prepares it in accordance with the Law on Environment, i.e. in accordance with the Rulebook on Information that should contain the notification of the intention to carry out the project and the procedure for determining the need for an Environmental Impact Assessment.

The procedure begins when the investor (Proposer of the Project) who intends to realize the project, delivers a Letter of Intent in written and electronic version to Ministry of Environment and Physical Planning (MEPP – Department of Environment) – Responsible for a complete procedure. The Department of Environment is obliged to give an opinion on the matter whether it is necessary or not to prepare an Environmental Impact Assessment.

The checking procedure is a stage in which the MEPP decides whether an Elaborate for environmental protection or Environmental Assessment for a specific project is needed. For projects that are not in the list of projects that require Environmental Assessment (small projects) it is necessary to prepare an "Environmental Impact Assessment Report – Elaborate" (applicable for projects of category B under procedure for Environmental Assessment OP 4.0.1 from the World Bank).

#### ***National environmental assessment procedure for small projects***

During the stage for checking the Environmental Assessment Procedure, in the event that there is no need for the Environmental Assessment Procedure the investor should prepare an Environmental Assessment Report- Elaborate for environmental protection. The procedure is mandatory for small projects (eg. Reconstruction of local streets, installation of water supply systems, sewage systems, etc.) which cause short-term and minor negative impacts on the environment.

Attached at the end of this document in **Annex 1** is the Decision for approval of Environmental Assessment Report – Elaborate for environmental protection, signed and approved by Mayor of Municipality of Strumica.

There are two Rulebooks for preparation of an Elaborate for environmental protection / Environmental Assessment Report – an elaborate for small projects:

- Rulebook on the list of projects for which an Elaborate for environmental protection / Environmental Assessment Report should be prepared by the investor, and the Report should be accepted by the Ministry of Environment and Physical Planning (Gazette no. 36/12);
- Rulebook on the list of projects for which an Elaborate for environmental protection / Environmental Assessment Report should be prepared by the investor, and the Report should be accepted by Mayor of the Municipality or by the Mayor of the city of Skopje (Gazette no. 32/12)

The content of the Environmental Assessment Report – Elaborate for environmental protection should be in accordance with the Rulebook when it comes to form and content of the report and the procedures for accepting the Elaborate for environmental protection Environmental Assessment Report (Gazette no. 12/132).

The Environmental Assessment Report – Elaborate for environmental protection contains the main characteristics of the activities and the main negative and positive impacts on the environment. The simple Program for Environmental Protection consists of measurements for prevention, mitigation and compensation of the negative impacts on all environmental elements that need to be developed in accordance with the national legislation and international environmental practices. During the preparation and acceptance of the Environmental Assessment Report – Elaborate for environmental protection there is no need for a public debate.

#### ***List of regulations and documents for the proposed measures for environmental management***

1. Law on Environment (Gazette no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 187/13, 42/14, 44/15, 129/15 and 39/16);
2. Law on Waste Management (Gazette no. 68/04, 71/04, 107/07, 102/08, 134/08, 82/09, 124/10, 09/11, 47/11, 51/11, 163/11, 123/12, 147/13, 163/13, 51/15, 146/15, 156/15, 39/16 and 63/16);
3. Law on Protection from Noise Pollution in the Environment (Gazette no. 79/07, 124/10, 47/11 and 163/13);
4. Law on Ambient Air Quality (Gazette no. 67/04, 92/07, 35/10, 47/11, 59/12, 100/12, 4/13 and 10/15);
5. Law on Nature Protection (Gazette no. 67/04, 14/06, 84/07, 35/10, 47/11, 148/11, 59/12, 13/13, 163/13, 41/14, 146/15, 39/16 and 63/16);
6. Law on Packaging Management and Packaging Waste (Gazette no. 161/09, 17/11, 47/11, 136/11, 6/12, 39/12, 9/13 and 39/16);
7. Law on Health and Safety on Republic of Macedonia (Gazette no. 92/07, 136/11, 23/13, 25/13 137/13, 164/13, 158/14, 15/15, 129/15 and 192/15)
8. Law on Water Resources (Gazette no. 87/08, 6/09, 161/09, 83/10, 51/11, 44/12, 23/12, 23/13, 163/13, 180/14 and 146/15);
9. Construction Law (Gazette no. 59/11; 13/12; 144/12; 25/13; 70/13; 79/13; 137/13; 163/13; 28/14; 42/14; 115/14; 149/14; 187/14; 44/15; 129/15; 217/15; 30/16; 31/16 i 39/16 and more recent amendments)
10. Law on Protection and Safety at the Workplace (Gazette no. 92/07, 136/11, 23/13 and 25/13)
11. Law on Spatial and Urban Planning (Gazette no. 199/14, 44/15, 193/15, 31/16, 163/16, 142/17)
12. Law on Protection of Cultural Heritage (Gazette no. 20/04, 71/04, 115/07, 18/11, 148/11, 23/13, 137/13, 164/13, 38/14, 44/14, 199/14 and 154/15);

#### ***World Bank Policies – Environmental Category***

##### **OP. 4.01 Environmental Assessment**

Local and Regional Competitiveness Project (LRCP) is supported by the European Union and it is jointly implemented by the Cabinet of the Vice Prime Minister of the Government of the Republic of Macedonia for Economic Affairs, as an agency for implementation of funds and the World Bank. The LRCP is categorized as a category B project, assuming that a certain level of negative impact can be expected as a result of the implementation, none of which is meaningful and long lasting. As a result of this classification, the OP 4.01 Environmental Assessment has been activated. The Cabinet of the Vice Prime Minister for Economic Affairs



has prepared an Environmental and Social Management Framework as a guide for protection of the environment for subprojects supported by a grant scheme Component 3, define eligibility and procedures for screening and environmental assessment. All project (and sub-project) activities must be implemented adhering with the ESMF, WB operational policies and procedures and national regulation (the strictest one prevails).

The proposed subproject is classified as Category B because of its nature, size and location, as well as the characteristics, and because the potential negative environmental impacts are less damaging, than those of category A. These impacts are site-specific; several of these are irreversible; and in many cases mitigation measures can be designed to be more effective than those from subprojects of category A. The scope of the Environmental Assessment for subproject from category B can vary from one subproject to another. In this case the Environmental Assessment examines the negative and positive impacts of the subproject and recommends the necessary measures to prevent, minimize, mitigate or compensate, for negative impacts. The Environmental Assessment shows any potentially negative impacts related to the proposed subprojects and identifies potential environmental improvements and measures needed for prevention, minimizing and mitigation of negative impacts.

The scope and the format of the Environmental Assessment will vary depending on the subproject, but typically it will be lower than the Environmental Impact Assessment, usually in the form of Environmental and Social Management Plan. The capacity of this framework is defined in Annex D of the Environmental and Social Management Framework. For subprojects of category B+, the user / beneficiary is responsible for the preparation of a) complete environmental impact assessment (depending on the opinion received from the authoritative institution (local or national) with Environmental and Social Management Plan) a pre-EIA (simpler form EIA – screening report) with ESMP that includes, as necessary, a reduced scope EIA, or c) only ESMP which may simply require brief description of impacts specifying well-defined mitigating measures and adopting accepted operating practices and monitoring. Implementation of mitigation measures addressing the identified risks and issues defined in the ESMP is mandatory. The prepared document for environmental assessment according to national legislation, depending on the opinion of the authoritative institution, will include an annex of Environmental and Social Management Plan prepared according to OP 4.01 by the World Bank.

ESMP is a part of works bidding and contracting documentation.

### **Institutional arrangements**

The Law on Construction, specifically Article 73, defines who would not need a building permit:

1) A building permit is not required for the following constructions:

- When installing and replacing equipment in a construction that is in use for the purpose of expanding the building, and which does not change the purpose of the building and the room where the equipment is located neither the general conditions for protection and rescue planned in the basic design of the building.

- Advertising boards that are placed on premises for which a permit for use has been issued.

The mitigation measures described below are general, and the detailed mandatory mitigation measures are provided in a table in chapter on the Mitigation and Monitoring Plan. The contractor must accept all requirements in order to avoid possibilities for potential injuries to workers, locals and tourists. All renovation activities must be carried out by trained workers.

Parties responsible for the implementation of the Environmental Mitigation and Monitoring Plan of this ESMP and Elaborate for environmental protection:

1. Contactor (Company selected on a tender)
2. Engineer - Supervisor
3. Applicant (Beneficiary)

The contractors are well aware of the implications this legislative requires. All work which is planned under the subproject, will be carried out in accordance with The Law on Construction. The contractors have the

required experience and capacity to fulfill all the requirements stated in the above-mentioned law as well as in accordance to national environmental legislation (listed above) and this ESMP.

### ***Purpose of the Environmental and Social Management Plan / Public Announcement and Public Consultation***

The purpose of the Environmental and Social Management Plan for the project "The cult of Water" is to timely identify the environmental impacts that will arise from the realization of all planned activities for which mitigation measures and measures for minimization of the impacts are proposed and a time period for the implementation of the measures, done with authoritative persons for implementation of the plan and the estimated costs.

The prepared Environmental and Social Management Plan including the proposed subproject will be part of the contract with the contractor who is obliged to implement all planned measures in accordance with the mitigation plan. The supervising engineer is obliged to monitor and evaluate the implementation of the proposed measures in accordance with the monitoring plan and has to inform the investors and the Project Office (Strumica Municipality and the Local and Regional Competitiveness Project/ LRCP).

The public will be included in the process of environmental assessment by organizing a public debate in the premises of the Municipality of Strumica. The Environmental and Social Management Plan for the subproject will be available in hard copy in the premises of the Municipality of Strumica and the Local and Regional Competitiveness project and the project will be published on the websites of Local and Regional Competitiveness Project, the Agency for Promotion and Support of Tourism and on the website of the Municipality of Strumica, and it will be available to the public for a period of 14 days. For public consultation a hard copy of the plan will be available in the premises of the Municipality of Strumica. Together with the Environmental and Social Management Plan, a public call for participation in a public debate will be made (with time and place provided).

The public debate meeting will be organized at the end of the consultation period. Actively, the Applicant will inform and invite stakeholders including local Non-governmental Organizations, affected communities and will do that by using appropriate means. A contact person will be appointed to collect comments regarding the Environmental and Social Management Plan made during the public preview of the plan as well as comments made during the public debate and will include them in the report from the public debate which will also be part of the plan. This will make it possible to make the comments available to the applicants and it will be possible to take relevant comments into account, incorporating them in the final Environmental and Social Management Plan.

## **4. Environmental Impacts**

Taking into account the structure of three sub-project components, only the first component can have a potentially negative impact on the environment. A small amount of some types of waste can be produced as a result of the activities of component (b) and (c) with some occupational health and safety risks, while no negative impacts are expected to occur as a result of the activities of component (d).

Within the project "The cult of Water", potential risks and negative impacts include possible negative safety and health risks and impacts on the population, drivers and workers (local impacts limited to the location of renovation, short term, present only in implementation phase) due to:

- Lack of occupational health and safety (OHS) measures during the renovation/adaptation works,
- Injury occurred on or near the site of works (e.g. due to lack of protection clothes or equipment, or other safety shortcomings),
- Non-compliance with safety standards and work procedures,
- Inadequate traffic management and pedestrian safety.

These effects are local and limited by period provided for implementation of the activities.

### *Impacts on air quality*

Possible impact on air quality and air emissions from vehicles transporting materials and equipment on sub-project location and transporting waste outside of the site (local impact, limited to the location of renovation/adaptation, occurring only in implementation phase) due to:

- Instalation of room, restorant, Spa and pool equipment, setting tiles and gypsum and locksmith works;
- emissions of dust from transport of materials, materials management and renovation works;
- exhaust fumes from vehicles and traffic, as well as causing changes in the existing traffic circulation nearby.

During the decoration of the interior, as well as the exterior (instalation of doors, façade painting) it is possible to generate a certain **amount of dust**. These effects are local and limited by the location for interior décor and sanitation of the building and are limited with the sanitation period without the possibility of long-lasting effect and repetition.

### *Impacts to soil and water*

Possible negative impacts to soil and water from accidental leaks, spills from improper construction and hazardous waste management. However, the envisaged activities are expected to produce only temporary, local, short term and limited to the period of renovation/reconstruction/ adverse environmental impacts. Expected amounts of hazardous solids and liquids used or generated as waste in the course of sub-project implementation are small.

### *Noise and vibration impacts*

Some nuisance is expected to appear from the increase of the noise level and vibration emissions due to the location and the nature of the sanitation activities such as:

- Instalation of room, restorant, Spa and pool equipment, setting tiles and gypsum and locksmith works;
- Transport of materials and equipment;
- Transport of bulky waste from the location.

These impacts will affect the local environment, local population and the workers involved in the process only during the implementation phase. However, given the timeframe of the activities and the quantity of material and equipment that needs to be transported to and from the site of the resort, these impacts can be generally insignificant. Also, the position of the premissis, which is on the furthest point of village Bansko, right on the base of mountain Belasica, reduces the noise and vibration effects generated by the equipment used in the implementation phase.

### *Waste management related impacts*

Inadequate waste management and untimely collection and transport of waste. Possible side effects/impacts on the environment and adverse health effects may arise as a result of generation and management of different types of waste (primarily construction waste such as waste plywood, carpet, cloth, sponge, leftovers of gypsum boards as well as wood, metals, glass plastic, furniture, mattresses, hazardous waste, e.g. lighting fixtures, paint and glues residues and packaging. Packaging waste (cardboard and nylon) will also be created. These impacts are local. If proper waste management is not envisaged in operation phase, there is a possibility negative impacts to be long term with repetitive occurrence but limited to inadequate waste management and untimely collection and transport the communal waste.

The classification/list of types of wastes in Republic of Macedonia contains the types of waste which are classified according to the source of creation and characteristics of the waste produced. The following table shows all types of waste that are included in the waste list and the measures mentioned in the Law on Waste Management which must be undertaken by the legal entity/the investor.

No.	Type of waste	Number on the List of waste types	Quantity of waste annually expressed in tones or litres	Manner or treatment of waste (processing, storage, handover, removal, etc.)	Name of the legal entity that handles waste and location where the waste is removed (landfill site)
Group 2 – Horticulture					
1	Waste from plant tissue	02 01 03	small	Temporary storage in container	Public Utility Company “Komunalec”/ Beneficiary
Group 8 – Paint, Varnishes and Adhesives					
1	Waste paints and varnishes containing organic solvents or other hazardous substances	08 01 11	very small	Temporary storage in container	Appropriate company licenced to collect, treatment and disposal of such waste
Group 12 – Mechanical metal processing (scraping and varnishing of fences)					
1	Waste from scraping and gliding of non-ferrous metals	12 01 01	/	/	/
Group 15 – Packaging waste					
1	Waste from paper, cardboard, plastic, wood, metal, glass packaging	15 01	Very Small	Temporary storage in container	Public Utility Company “Komunalec”/ Beneficiary
Group 17 – Waste from Construction and Demolition					
1	Waste from wood, glass and plastic	17 02	/		
2	Spoil soil waste (including waste from excavations from contaminated sites), stones, and excavated soil	17 05	Few m³	Temporary storage in container	Public Utility Company “Komunalec”/ Beneficiary
3	Waste from gypsum construction materials	17 08	small		
Group 20 – Municipal waste including fractions of selected waste					
1	Waste from paper, cardboard, glass, clothing, textiles	20 01	Small	Temporary storage in container	Public Utility Company “Komunalec”/ Beneficiary

## **Social Impacts**

The project will enable tourism development as well as community development. The interior design and sanitation of the existing hotel will increase the number of domestic and foreign tourists in the region and will enable the exchange of different cultural traditions and experiences among the people who work and live in the surroundings of Banské Bystrice and tourists.

For realization of the activities of the project no land will be bought and there will be no transformation of the current use of land or premises.

## **5. Measures for avoiding, mitigating and reducing environmental impacts**

The mitigation measures described in this section are general measures, and the detailed mandatory mitigation measures are provided in the chapter for Mitigation and Monitoring Plan.

The implementation of the following measures is mandatory in order to achieve adequate waste management and temporary collection and transport of waste.

- The surrounding area needs to be clean, without deployment of waste. The waste should be collected and immediately transported outside the premises which are being sanitized;
- The frequency of cleaning of the locations of activities, should be increased due to additional waste from working activities;
- Most of the waste (not in quantity) will be classified according to the chapter 17 (the chapter for waste) "Construction and demolition" with the waste code 17 01-concrete waste, brick, 17 09 04-mixed waste from a construction site including spare tiles, gypsum and insulation materials and management according to the National Law on inert waste (separation is made on location, collection and temporary storage, transportation to the final destination – waste for which authorized legal entity / Public communal enterprise is authoritative institution or other concessionaries of disposal sites for solid waste);
- A small amount of remains from glue, paint, together with waste from packaging glue and paint, wood, screws and other building material can be created during the project activities and each should be managed according to the National Law for handling with hazardous waste (collection of hazardous materials in separate containers for that purpose, and the containers should be labeled as hazardous waste and they should be handed over to an authorized company);
- During transportation the material should be covered in order to avoid displacement of waste and dust emissions;
- The contractor, according to the signed contract will collect and deliver and / or transport the waste / old wooden windows and doors; Approval and working in accordance with the project documentation from all relevant institutions (Ministry of Environment, Municipality of Strumica, etc);
- Creation of favorable conditions for survival and maintaining the integrity of the existing building.
- Alignment of the look, color, and other parameters of the premise with the existing authentic documentation;

Concerning the safety and health at the workplace (including the general safety of the community and visitors), the proposed mitigation measures are as follows:

- Adequate warning tapes and information boards around the premise during construction works;
- Information that an ongoing replacement of wooden windows and doors is in progress, put on at the entrance of the building;
- For the workers – to employ all legal safety and health measures, such as: a) use of personal protective equipment and clothing; b) purchase and possession of health care products – first aid kit at the location;
- Planned activities for interior design and sanitation are preferred to be carried out after work hours or to avoid the time of day when there is high frequency of tourists and clients;
- To restrict the traffic between the building site and the busy places of the building;



- To limit the delivery path of new windows and the carrying out of the old ones outside the location;

For noise reduction the following mitigation measures will be implemented:

- Noise level should not exceed 55 dB during the day and 45 dB during the night;
- Construction activities during the night are prohibited, construction activities in a location should be limited from 7:00 AM to 7:00 PM;
- Usage of appropriate material, equipment and tools that reduce noise levels;

The implementation of the Environmental and Social Management Plan will ensure timely undertaking of the proposed measures, and all that will enable the realization of the project activities not to have significant environmental impacts.

## **6. Monitoring of the implementation of measures for avoiding, mitigating and reducing the impacts on environment and on the cultural heritage**

The monitoring on the environment during the project implementation provides information on key aspects of the environment, especially the effects of the project on the environment and the effectiveness of the mitigation measures. These informations provide the World Bank with an evaluation of the success of the mitigation as part of the monitoring and allow for the undertaking of proper action. For this reason, the Environmental and Social Management Plan identifies the monitoring objectives and determines the type of monitoring by linking the assessed effects in the Environmental Report with the mitigation measures described in the Mitigation Plan. In particular, the monitoring part of the Environmental and Social Management Plan provides

- a) a specific description and technical details of the monitoring measures, including measurement parameters, methods which will be used, the frequency of the measurements, the detection limits (where appropriate), and a definition of the limit which will signal the need for repairs; and
- b) monitoring and reporting procedures for
  - (i) providing early detection of conditions which require specific additional mitigation measures and
  - (ii) providing information on the effectiveness, progress and results of the mitigation measures.

The implementation of the Environmental and Social Management Plan will ensure timely implementation of the proposed measures which will enable the realization of the project activities to have no significant environmental impacts. The applicant is obliged to submit quarterly reports on the implementation and monitoring of the mitigation measures for protection of the environment and cultural heritage in the form of a tabular overview (tables for mitigation plan and plan for monitoring of measures) with an additional column in which is given the status of the measure and the monitoring of the measure (implemented / not implemented, when, by which entity, etc.).

## Plan for implementation of Mitigation Measures

Activity	Expected impacts on the environment	Mitigation measures	Responsibility for the implementation of the mitigation measure	Period for implementation of the mitigation measure	Cost related to the implementation of the mitigation measure
<b>STAGE BEFORE THE DESIGN / DESIGN STAGE</b>					
Components: a. Interior design;	Possible negative impacts on the health of workers and residents due to and protection of the environment	<ul style="list-style-type: none"> <li>• Collecting full documentation, including all required permits, opinions and similar.</li> <li>• Property list, Syllabus with GUP / DUP, Cadastre parcel, Contract for business cooperation - partnership with other persons</li> <li>• Contract for preparation of technical documentation with the project company</li> <li>• Contract for supervision of an object</li> <li>• Contract with a firm for procurement of equipment</li> <li>• Contract with a firm or institution for disposal of waste from the site,</li> <li>• Interior design project,</li> <li>• Preparation of specification of works</li> <li>• Preparation of a project for electrical installations</li> </ul>	Municipality Investor Other firms - contractors	Supervisory Authority Before the start of the activities	Included in the project cost
<b>IMPLEMENTATION PHASE</b>					
All works	<p>Possible negative impacts on the health of workers and residents due to:</p> <ul style="list-style-type: none"> <li>• Deviations from the measures for protection and safety at work</li> <li>• Deviations from the environmental protection and safety measures</li> </ul>	<ul style="list-style-type: none"> <li>• Provide information on the local population for the time of commencement and the duration of the construction work with the preparation of a Notice that will be posted on the municipal bulletin board and the municipal website.</li> <li>• Mandatory use of personal protective equipment.</li> <li>• Control of the safety of vehicles and removal of defective vehicles from the location.</li> <li>• The renovation site is fenced and marked. The entrance of unauthorized persons to the renovation construction site is prohibited. Signs and boards to inform the local population are placed on the construction site.</li> </ul>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost

	<ul style="list-style-type: none"> <li>• Deviations from health protection measures</li> </ul>	<ul style="list-style-type: none"> <li>• The local construction inspectors and environmental inspectors are informed about the renovation work prior to their commencement;</li> <li>• All necessary permits are provided before starting the works including renovation permits (if needed) and others;</li> <li>• All things will be done in a safe and disciplined manner;</li> <li>• Protective suits and equipment for personal protection of workers are available in sufficient quantities and are worn / used at all times;</li> <li>• Open pits are covered and clearly marked when not working;</li> <li>• Providing adequate designations and information boards on the site;</li> <li>• Marking of the place for temporary storage of renovation materials in the immediate vicinity of the renovation site;</li> <li>• Provision of warning tape, fences and appropriate informational signs of danger, rules of conduct and procedures to be followed;</li> <li>• No entry for unemployed persons within the warning tape and fences</li> <li>• The surrounding area will be kept clean;</li> <li>• Machines and/or equipment must be handled only by experienced and appropriately trained personnel in order to reduce the risk of injury;</li> <li>• All workers will be familiar with the dangers of fire and fire safety measures and must be trained to deal with fire extinguishers, hydrants and other devices used to extinguish a fire;</li> <li>• Devices, equipment and fire extinguishers must always be functional, in case they need to be used quickly and efficiently. First aid equipment will be available at the site and be used by trained personnel.</li> <li>• Procedures for emergencies (including spills, accidents, etc.) are available at the site;</li> <li>• Mobile toilets will be placed in the renovation site and maintained by an authorized company;</li> <li>• The equipment purchased will be installed and used in compliance with all safety measures prescribed by the manufacturer of the equipment and best practices.</li> </ul>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost
	Protection against accidents due to	<ul style="list-style-type: none"> <li>• For workers - to apply the legally prescribed safety and health measures, such as:</li> <li>a) use of personal protective equipment and clothing,</li> </ul>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost

	employee negligence	<p>b) to maintain a good level of hygiene;  c) Procurement and possession of health care accessories  - first aid at the location of performance;  • Restrict movement between the renovation site and the busy places of the building  • Workers will be trained in appropriate work  • Emergency procedures will be available  • The site clearing schedule will be increased due to additional waste from working activities.  • The contractor will collect and deliver and / or transport the waste  • The material will be covered during transportation to avoid wastage of waste and dust emissions  • Using appropriate equipment to reduce noise levels  • Hazardous waste will be separately collected, transported and processed by all types of waste and from a licensed company  • Keep the building material in a suitable place and covered with dust reduction  • Limiting the speed of vehicles for transport in the construction site  • Streets will be cleaned regularly  • All transport vehicles use fuels from official sources (licensed gas stations)  • Use of appropriate noise reduction equipment  • It is forbidden construction activities during the night, construction activities in a location will be limited from 7.00 to 19.00</p>	<p>Contractor Bidder Supervised Authority</p> <p>Contractor Bidder Supervised Authority</p> <p>Waste company disposal</p>	During the implementation of the activity	
	Hazardous waste and materials management	<p>• During the temporary storage of hazardous toxic substances, they will be stored in safe containers that contain labels with detailed content, characteristics and storage information. These dishes are resistant to leakage to prevent leakage. Containers will be equipped with secondary systems such as double walls and the like. Secondary system to be cracks resistant and fast to empty.  • Containers with hazardous waste will be closed except when the material is placed or removed. They must not be managed in a way that causes leakage.  • Colors with toxic contents must not be used  • The application of anti-corrosive agents will not be carried out in a building site but at a workshop. In case of application in the construction site, measures against leakage, spraying and spraying will be carried out</p>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost

		<ul style="list-style-type: none"> <li>• Regularly controlling vessels with hazardous and toxic material</li> <li>• Hazardous waste management will be carried out in accordance with the Material Safety Information Charts</li> </ul>			
	Waste management	<ul style="list-style-type: none"> <li>• - Identification and classification, separate collection of waste according the national List of Waste (Official Gazette no.100/05),</li> <li>• Storage on places designated for that purpose;</li> <li>• Landfills for temporarily and final disposal must be licensed, and approved by the Municipality;</li> <li>• Containers for each identified waste category are provided in sufficient quantities and positioned conveniently.</li> <li>• Waste collection and disposal pathways and licensed landfills/processing plants will be identified for all major waste types expected from demolition and construction activities. For management of hazardous wastes, instructions/guidelines from Ministry of Environmental Protection and Physical - Planning will be sought and followed.</li> <li>• Mineral (natural) construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and temporarily stored in appropriate containers. Depending of its origin and content, mineral (soil stone, etc.) waste will be reapplied to its original location or reused and with approval from the Municipality.</li> <li>• The records of waste disposal will be regularly updated and kept as proof for proper management, as designed.</li> <li>• Whenever feasible the contractor will reuse and recycle appropriate and viable materials. Discarding any kind of waste (including organic waste) or waste water to the surrounding nature or water-bodies is strictly forbidden.</li> <li>• Collect, transport and final disposal/processing of the communal waste by a licensed company</li> <li>• If the waste has one or more hazardous characteristics, the creator and / or owner is obliged to classify the category of hazardous waste and handle it as hazardous waste</li> </ul>			Included in the project cost



		<ul style="list-style-type: none"> <li>• It is forbidden to burn waste at the construction site</li> <li>• Most of the waste will be classified according to the waste chapter 17 "Construction and demolition" with the waste code 17 01 - Concrete waste, brick, 17 09 04 - Mixed waste from a renovation site is managed according to the National Law on waste management (separation, collection and temporary storage, transportation to the final destination - licensed waste landfill). Small amount of residues of glue, paint, together with waste from packing glue and paint, wooden profiles, screws and other building material can be created in the course of the project and it will be managed according to the National Legislation for Hazardous Waste Management (collection of hazardous materials in separate vessels for that purpose, labeled as hazardous waste and surrendered to an authorized company) ;</li> <li>• - A waste that is generated during the stay and work of the Contractor employees, applying the best management practices, should be collected, transported and deposited in a legal landfill that meets the basic standards in accordance with the legal acts.</li> </ul>			
	Air emissions	<ul style="list-style-type: none"> <li>• Spraying with water on windy and dry days to reduce the amount of fugitive dust;</li> <li>• Prevent dusting during upload and unload;</li> <li>• Use of proper construction mechanization;</li> <li>• Avoiding work mechanization in the so-called "idle";</li> <li>• Determining the duration of machine operation;</li> <li>• Vehicles loads likely to emit dust must be covered;</li> <li>• Locate stockpiles away from drainage lines, natural waterways and places susceptible to land erosion;</li> <li>• Ensure all transportation vehicles and machinery have been equipped with appropriate emission</li> </ul>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost

		<p>control equipment, regularly maintained and attested;</p> <ul style="list-style-type: none"> <li>• Ensure all vehicles and machinery use petrol from official sources (licensed gas stations) and on fuel determined by the machinery and vehicles producer.</li> </ul>			
	Cultural Heritage (chance findings)	In the case of chance findings, the works must be stopped immediately and competent authorities, (Ministry of Culture, Directorate for Protection of Cultural Heritage), informed within 24 hours following the national procedures. Works will recommence upon approval of competent authorities.	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost
	Prevention of accidents when transporting materials and equipment in the main and auxiliary roads	<ul style="list-style-type: none"> <li>• Proper installation of traffic signalization (vertical and horizontal);</li> <li>• Adequate lighting in the night</li> <li>• Coordination with the traffic police for appropriate regulation of traffic. <ul style="list-style-type: none"> <li>• Ensuring safety passages for pedestrians where needed</li> </ul> </li> </ul>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost
	The safety of pedestrians	<ul style="list-style-type: none"> <li>• Fencing and placement of construction signs, visible to all pedestrians</li> <li>• No access for unauthorized people in the construction site</li> <li>• Covering and recording holes and canals in a construction site for water and electrical installations</li> </ul>	Contractor Bidder Supervised Authority	During the implementation of the activity	Included in the project cost
	Soil and water management	<ul style="list-style-type: none"> <li>• Prevention of spillage of hazardous material from vessels (mandatory secondary system of vessels), equipment for construction and transport vehicles (regular maintenance and controlling is obligatory), Equipment and vehicles can be parked only on surfaces of asphalt or concrete.</li> <li>• In case of spillage, contaminated ground or water will be collected and treated as hazardous waste.</li> <li>• Installation of adequate sanitary equipment for workers is mandatory</li> <li>• Water used for construction works and for other purposes (sanitation) will be removed from water supply sources. Other additional water sources will not be used. <ul style="list-style-type: none"> <li>• The washing, maintenance and repairs to vehicles and construction machinery are forbidden to be carried out at the construction site.</li> </ul> </li> </ul>	Contractor Bidder Supervised Municipal Personnel (Communal Inspector)	During the implementation of the activity	Included in the project cost

		<ul style="list-style-type: none"> <li>Reducing the size of the site due to the minimization of the land that will suffer a negative impact;</li> <li>All hazardous materials, such as fuel, lubricants, adhesives, and packaging waste are non-inert waste and must be placed in special appropriate containers located at the construction site, protected from extreme weather conditions;</li> <li>Materials piling, transport and other activities will be carried out in a manner that will avoid soil erosion risk.</li> </ul>			
	Nature protection	<ul style="list-style-type: none"> <li>Open fires are prohibited;</li> <li>Disturbance of animals and collection of herbs, timber and other nature products in the surrounding area by workers is not allowed.</li> <li>No logging is allowed. If replanting or greening the site, only native plants will be used;</li> </ul>			
	Prevention of injuries	<ul style="list-style-type: none"> <li>Manage equipment and machinery and movement clearly</li> <li>If the construction work prevents regular traffic, the contractor will set up temporary security traffic with proper signaling.</li> <li>All accidents are registered</li> <li>Procedures in case of accidents will be carried out in the construction site</li> </ul>	Contractor Bidder Supervised Municipal Personnel (Communal Inspector)	During the implementation of the activity	Included in the project cost
	Prevention of accidents due to sudden defects of heavy machinery, scaffolding, and so on.	<ul style="list-style-type: none"> <li>Scaffolding by an authorized company</li> <li>The contractor must be respected as a whole safety and security manuals</li> <li>Emergency medical care will be available at any time at the site.</li> </ul>	Supervision Engineer, Local Authority	During the implementation of the activity	Included in the project cost
	Materials management	<ul style="list-style-type: none"> <li>No new materials containing asbestos or lead-based paint will be used.</li> <li>Mineral resources (aggregate, sand, gravel, etc.) are procured only from licensed companies with valid concessions for extraction/exploitation. The companies can prove H&amp;S measures and environmental management is in place.</li> </ul>			Included in the project cost

		<ul style="list-style-type: none"> <li>All materials have to be approved by the site engineer.</li> </ul>			
Components: b. Purchase & Installation of proper equipment; c. Renovation & adaptation of existing cabin for API tourism	<ul style="list-style-type: none"> <li>Noise nuisance at Api kabin and Hotel Thermal Spa</li> </ul>	<ul style="list-style-type: none"> <li>Noise level will not exceed 55 dB during the day and 45 dB during the night;</li> <li>Construction activities during the night are prohibited, construction activities in a location will be limited from 7:00 AM to 7:00 PM;</li> <li>Usage of appropriate material, equipment and tools that reduce noise levels;</li> </ul>	Supervision Authority	During the implementation of the activity	Included in the project cost
<b>OPERATING PHASE</b> <ul style="list-style-type: none"> <li>No environmental impacts and risks are expected</li> <li>Positive impact is expected (energy efficiency and energy saving) with better thermal insulation of buildings by changing windows and doors</li> <li>Setting up greenery and landscaping in front of the building</li> </ul>					

## 1. 1. Monitoring plan - Municipality of Strumica

PERFORMANCE PHASE					
Which <i>Parameter should be monitored?</i>	Where <i>Should that parameter be monitored?</i>	How <i>You need to monitor this parameter (which should be measured and how)?</i>	When <i>Should this parameter be monitored (time and frequency)?</i>	From who <i>Should this parameter be monitored (responsibility)?</i>	How much <i>is the cost associated with the implementation of monitoring</i>
All necessary permits, opinions and decisions are to be procured before starting construction work Relevant inspectors and responsible institutions to be informed before the start of construction work	On the adaptation sites	- Visual inspection of the documentation	At the beginning of the construction work (the first day)	Contractor Bidder Supervised Municipal Personnel (Communal Inspector)	Included in the budget for performance

Implementation of safety and security regulations and measures	On the adaptation sites	<ul style="list-style-type: none"> <li>- Visual inspection The building site is marked and secured</li> <li>- Information board is placed in the construction site</li> <li>- A speed reduction sign is set</li> </ul>	Every working day during the project activities	Contractor Bidder Supervised Authority	
Measures for health and safety at work that refer to construction workers at the site	On the adaptation sites	<ul style="list-style-type: none"> <li>- Visual inspection</li> <li>- wear protective equipment such as helmet, gloves, footwear, etc.</li> <li>- Equipment for first aid protection to be present during all activities</li> <li>- Applying good working practice</li> </ul>	Every working day during the project activities	Contractor-Supplier / Supervisory / Municipal Inspectorate (Communal Inspector and Environmental Protection)	
Initial selection and classification of generated waste (communal waste, inert waste - construction shot, hazardous waste) in the construction site	On the adaptation sites	<ul style="list-style-type: none"> <li>- Verification of the documentation - identification of the type of waste according to the List of waste of the Republic of Macedonia</li> <li>- Disposal of waste into the environment</li> <li>- Occasional storage of waste or its delivery to a landfill</li> </ul>	Regularly (at the beginning and at least once a month during the construction works)	Contractor-Supplier / Supervisory / Municipal Inspectorate (Communal Inspector and Environmental Protection)	
Collect, transport and manage of waste	On the adaptation sites and around	<ul style="list-style-type: none"> <li>- Visual monitoring and verification of the locations of performance and transport</li> <li>- (The waste is collected from licensed companies)</li> <li>- The registry for waste storage should be regularly updated and kept as evidence</li> </ul>	After collecting and transporting waste from wooden doors and windows by JKP "Communal Hygiene"	Contractor-Supplier / Supervisory / Municipal Inspectorate (Communal Inspector and Environmental Protection)	
<p>The construction site, transport routes and materials should be sprayed on dry days and in the wind</p> <p>The building material should be stored in suitable and covered areas to reduce dust</p> <p>Lorry trucks create dust to cover</p> <p>Speed limitation for vehicles in the construction site</p> <p>Streets are regularly cleaned in critical areas</p> <p>Ensure that all transport vehicles are equipped with appropriate emission control equipment, regularly held and attested</p> <p>Ensure that all transport vehicles use fuel from official sources (licensed gas stations)</p>	On the adaptation site and around the construction site	<ul style="list-style-type: none"> <li>- Visual tracking and checking of transport</li> </ul>	Every working day during the project activities	Contractor-Supplier / Supervisory / Municipal Inspectorate (Communal Inspector and Environmental Protection)	

Maintenance and restoration of greenery	Around the adaptation site	<ul style="list-style-type: none"> <li>• Visual monitoring</li> <li>• Respecting the prohibition of parking vehicles on a green surface</li> <li>• Every waste is occasionally delayed to be removed from the green areas</li> </ul>	Every working day during the project activities	Contractor-Bidder	
Annual report on transportation and storage of waste	On the adaptation site	Review of Documentation / Identification of the Waste List	After fulfilling the task of collection, transport, temporary storage and final storage of various types of waste	Contractor-Bidder A postponement firm Project Implementation Unit LRCC	
Because of the sensitivity of the surroundings (village Bansko in Strumica), the noise level should not exceed 55 dB during the day and 45 dB at night; It is forbidden construction activities during the evening hours, construction activities in a location should be limited from 7.00 to 19.00, Mechanical equipment should be efficiently maintained	On the adaptation site and around the construction site	Visual tracking and checking of transport	Every working day during the project activities	Contractor-Supplier / Supervisory / Municipal Inspectorate (Communal Inspector and Environmental Protection)	



## Decision for approval of Environmental Assessment Report- Elaborate for environmental protection

РЕПУБЛИКА МАКЕДОНИЈА  
ОПШТИНА СТРУМИЦА  
3 ГРАДОНАЧАЛНИК  
Бр. Уп.1 24-03  
01.02. 201 9 год.  
СТРУМИЦА

Врз основа на член 24 став 7 од Законот за животна средина (Сл.в на РМ бр:53/2005 , 81/2005 ,24/2007 , 159/08 , 83/2009 , 48/2010 , 124/10 ,51/11, 123/12, 93/13, 187/13, 42/14 44/15 , 129/15, 192/15, 39/16 и 99/18), Градоначалникот на Општина Струмица постапувајќи по барањето на ДПТУТ Подгорски Ан увоз извоз ДООЕЛ с.Габрово, за проектот Реконструкција на "Хотел Терма Лукс и Спа Банско" (стар хотел Термица) – Бања Банско во Општина Струмица за издавање на одобрение на елаборатот за заштита на животната средина, поднесено под Уп.1 бр. 24-03 од 29.01.2019 година, донесе:

**РЕШЕНИЕ**

За одобрение на елаборат за заштита на животна средина за спроведување на проект за Реконструкција на "Хотел Терма Лукс и Спа Банско" (стар хотел Термица) – Бања Банско - Општина Струмица

**СЕ ОДОБРУВА** Елаборатот за заштита на животната средина Уп.1 бр. 24-03 од 29.01.2019 година за спроведување на проект според Уредбата за дејностите и активностите за кои задолжително се изработува елаборат, а за чие одобрување е надлежен Градоначалникот на општината (Сл.в. на РМ бр.32/2012г) Прилог I, Поглавје XI- Објекти за сместување и сервисни дејности со храна, Точка I Хотели и лични објекти за сместување(хотелски населби, апартмански хотели и мотели) со предвидени помалку од 100 легла надвор од урбана средина на ДПТУТ Подгорски Ан увоз извоз ДООЕЛ с.Габрово, за проектот Реконструкција на "Хотел Терма Лукс и Спа Банско" (стар хотел Термица) – Бања Банско со условите предложени во програмата за заштита на животната средина.

**Образложение**

Од ДПТУТ Подгорски Ан увоз извоз ДООЕЛ с.Габрово до Општина Струмица беше поднесено барање под Уп.1 бр. 24-03 од 29.01.2019 година за одобрување на Елаборат за заштита на животната средина за спроведување на проектот, за Реконструкција на "Хотел Терма Лукс и Спа Банско" (стар хотел Термица) – Бања Банско. Елаборатот е поднесен според Уредбата за дејностите и активностите за кои задолжително се изработува елаборат, а за чие одобрување е надлежен Градоначалникот на општината(Сл.в. на РМ бр.32/2012г Прилог I, Поглавје XI- Објекти за сместување и сервисни дејности со храна, Точка I Хотели и лични објекти за сместување(хотелски населби, апартмански хотели и мотели) со предвидени помалку од 100 легла надвор од урбана средина .

Со барањето беше приложена следната документација: Елаборат за заштита на животната средина (во три примерока, во електронска и печатена форма), Тековна состојба, Имотен лист, Договор за закуп, Макролокација, графички приказ на КП бр.3247 и Договор за закуп на топлински енергија (топла вода).

Градоначалникот на Општина Струмица по разгледувањето на елаборатот за заштита на животната средина за вршење на дејноста или активноста според Уредбата за дејностите и активностите за кои задолжително се изработува елаборат, а за чие одобрување е надлежен



Градоначалникот на општината(Сл.в. на РМ бр.32/2012г) Прилог I, Поглавје XI- Објекти за сместување и сервисни дејности со храна, Точка I Хотели и лични објекти за сместување(хотелски населби, апартмански хотели и мотели) со предвидени помалку од 100 легла надвор од урбана средина и приложената документација кон истиот, констатира дека во предметниот елаборат Уп.1 бр. 24-03 од 29.01.2019 година, составен од текстуален дел и графички прилози е изработен според барањата дефинирани со Правилникот за формата и содржината на елаборатот за заштита на животната средина, постапката за нивно одобрување, како и начинот за водење на регистарот за одобрени елаборати ( Службен весник на РМ број 44/2013 и бр.111/2014 ). Се анализирани сите извори и видови на можни влијанија врз животната средина и се земени во предвид сите неопходни компоненти во функционирањето на активноста за која се однесува елаборатот и врз основа на што се димензионирани и дефинирани мерките за заштита на медиумите и областите на животната средина.

Проектираните мерки за заштита содржани во Програмата за заштита на животната средина која е составен дел на елаборатот се применливи и во целост ги исполнуват условите од член 24 од Законот за животна средина (Сл.в на РМ бр:53/2005 , 81/2005 , 24/2007 , 159/08 , 83/2009 , 48/2010 , 124/10 ,51/11, 123/12, 93/13, 187/13, 42/14 44/15 , 129/15, 192/15, 39/16 и 99/18) и обезбедуваат оптимална заштита на животната средина.

Во врска со напред наведеното го издаваме Решението како во диспозитивот, а сопственикот на инсталацијата се задолжува целосно и без исклучоци да се придржува кон пропишаниот режим и мерки за заштита предвидени во Елаборатот за заштита на животната средина, како и кон дополнителни решенија во колку низ работата на објектот се покаже потреба од зголемен обем и вид на превенција.

**Упатство за правно средство:** Против оваа решение имате право за жалба во рок од 15 (петнаесет) дена до Министерот кој раководи со органот на Државната управа надлежен за работите од областа на животната средина.

ГРАДОНАЧАЛНИК  
на ОПШТИНА СТРУМИЦА

Коста Јаневски

Датум : 01.02.2019

Струмица





05-2180  
06-12-18

## ДОГОВОР

За испорака на топлинска енергија склучен на ден 12. 2018 год.

### Договорни странки :

1. АД Оранжерии с.Хамзали-Босилово , застапувано од Преседателот на Управен одбор Васе Митев од Струмица како испорачател на топлинска енергија од геотермална вода( во понатамошниот текст испорачател) и
2. Друштво за производство,трговија,услуги и транспорт ПОДГОРСКИ АН увоз-извоз ДООЕЛ с.Габрово – Струмица,ЕДБ 4027006150217 и ЕМБС 6134238, застапувано преку управителот Лоран Димановски од с.Колешино со ЕМБС 0901974464001, како корисник на топлинска енергија од геотермална вода (во понатамошниот текст-корисник)

### I. НАЧИН И УСЛОВИ НА ИСПОРАКА НА ГТВ

#### Член 1

Испорачателот врз основа на Дозвола за експлоатација под број 24-1515/3 од 18.07.2013 год и Договор за концесија за експлоатација на минерална сировина геотермална вода на локалитетот с.Банско Босилово под број 24-4027/1 од 24.04.2012 год склучен помеѓу РМакедонија Министерство за економија и АД Оранжерии, с.Хамзали-Босилово, АД Оранжерии с.Хамзали-Босилово е корисник на минерална сировина -геотермална вода на локалитетот Банско Општина Струмица .

Испорачателот е согласен да го снабдува со топлинска енергија од геотермална вода корисникот Здравствена установа ДПГУТ ПОДГОРСКИ АН ДООЕЛ с.Габрово – Струмица и тоа :

- Период на обезбедување: од 01.12.2018 год. до 31.12.2019 год.
- Режим на користење: од 01.12.2018 год.до30.04.2019 год.2.5 литри/сек.  
од 01.05.2019 год.до 30.09.2019 год.1 литро/сек. и  
од 01.10.2019 год.до 31.12.2019 год. 2.5 литри/сек
- Начин на испорака: преку цевковод на корисникот.
- Приклучно место: пумпна станица Банско бушотина Б1
- Почеток на користење: со денот на потпишување на договорот.

### II. НАЧИН И УСЛОВИ НА ПРИКЛУЧУВАЊЕ И ПРЕКИНУВАЊЕ НА ИСПОРАКАТА НА ТОПЛИНСКА ЕНЕРГИЈА

#### Член 2

1. Испорачателот се обврзува да ги обезбеди сите потребни услови за перманентно снабдување со цитираните количини ГТВ во член 1 од овој договор од денот на почнување на користење се до денот на завршување на користење на водата.



2. Испорачателот се ослободува од претходните обврски во поглед на перманентно снабдување со топла вода само за времетраењето на евентуална виша сила.

#### Член 3

1. Испорачателот не сноси никакви последици за надокнада на штета ако прекилот на испорачување на геотермалната вода е настанат поради оштетување на цевководот и инсталациите на цевководот надвор од пумпната станица лоцирана во с.Банско. Испорачателот превзема одговорност за надокнада на евентуална штета на корисникот ако прекилот на испораката е како резултат на субјективни фактори на испорачателот.
2. Штетите настанати од објективни причини во системот за испорака на ГТВ, а на кои не се во можност субјективните фактори од АД Оранжерији с.Хамзали-Босилово да влијаат, не се на товар на испорачателот.

#### Член 4

Прекин на испораката на топлинска енергија ќе се врши :

1. По издаден писмен налог на овластен претставник од корисникот во секое време на грејна сезона, кога се смета дека геотермалната вода не може рационално да се користи или кога може дури и да причини одредени штети .
2. Корисникот има на знаење и е согласен да се изврши прекин на испораката на топлинска енергија а штетите настанати по тој основ да бидат на негов терет за ненавремено обезбедување на плаќање на обврските по основ на испорачана топлинска енергија во согласност со член 6.

### III. НАЧИН НА ПРЕСМЕТУВАЊЕ И НАПЛАТУВАЊЕ НА ИСПОРАЧАНАТА ГТВ

#### Член 5

Странките се согласни контролата на топлотна енергија што се испорачува и количината на испорачаната геотермална вода да се врши преку вградена мерна опрема на пумпна станица во с. Банско.

Количината на потрошената геотермална вода во тековниот месец се утврдува на последниот ден од месецот во присуство на претставници на договорните страни и записнички се констатира состојбата на мерната опрема на денот на читање.

На денот на отпочнување на користење на геотермална вода во присуство на претставници на договорните страни се сочинува записник за почетната состојба на мерната опрема за сезона 2019.

Отпочнувањето на грејната сезона и извршување на проба е по писмено барање на корисникот само доколку се платени сите претходни фактури од претходната грејна сезона.

#### Член 6

1. Пресметување и наплатување на ГТВ за корисникот ќе биде месечно со испоставување на Ф-ра сочинета на основа записникот од извршеното читање на мерниот инструмент согласно член 5 од овој договор.
2. Плаќањето на фактурите е вирмански најкасно во рок од 15(петнаесет) дена во тековниот месец за испорачаната вода во претходниот месец-валутен рок на фактурата.
3. Доколку корисникот не ги редовно измирува последните две достасани обврски по основ на испорачаната геотермална вода во согласност со условите од овој член точка 2 и 3 од договорот испорачателот ќе изврши прекин на испораката на геотермална вода а настанатите штети ќе паднат на терет на корисникот.

#### Член 7

Единечна цена по м3 геотермална вода е 20 ден + ДДВ.

### IV. ОПШТИ ОДРЕДБИ

#### Член 8

Корисникот е должен во услови на зголемување на потрошувачката над 10% од дозволената максимална потрошувачка да бара енергетска согласност од испорачателот согласно Законот за енергетика.

Корисникот е должен во услови на врвни потреби од топлина (над максималните одобрени со издадена енергетска согласност) истите да ги покрива од сопствен извор на топлина. Сопствениот извор на топлина е должен да го користи и во услови на надворешни температури на околината од  $-4^{\circ}\text{C}$ .

#### Член 9

1. Овој договор стапува во сила со денот на потпишувањето на истиот депонирањето-уплатата на депозитот од член 6 точка 3 на овој Договор. Доколку не се исполнат условите од член 6 точка 3 на овој Договор ќе се смета ништовен и ќе се прскине испораката на геотермална вода а настанатите штети ќе бидат на товар на корисникот.
2. Дополнувања и измени можат да се извршуваат само во писмена форма со Анекси кон договорот ако со тоа се согласуваат двете договорни странки.



3. За се останато што не е регулирано со овој договор ќе се применуваат одредбите од Законот за енергетика и другите позитивни законски прописи.

**Член 10**

Во случај на спор надлежен е да решава Основниот суд во Струмица.

**Член 11**

Овој договор е сочинет во 6 (шест) примероци од кои по три за секоја странка.

**ИСПОРАЧАТЕЛ**  
  


**АД Оранжерии с.Хамзали-Босилово**  
застапувано од Преседателот на  
Управен одбор Васе Митев од Струмица

**КОРИСНИК**  
  


**ДПТУГ ПОДГОРСКИ АН ДООЕЛ с.Габрово**  
застапувано преку Управител  
Лоран Димановски од с.Колешино