

## NOTIFICATION OF A PROPOSED ACTIVITY

### “EXTRACTION OF SAND AND GRAVEL FROM ALLUVIAL DEPOSITS FROM THE BED OF THE DANUBE RIVER, “MISHKA” SITE (KM 462.0 – KM 459.4) IN THE AREA OF BABOVO VILLAGE, SLIVO POLE MUNICIPALITY, ROUSSE DISTRICT”

#### TO AN AFFECTED PARTY UNDER ARTICLE 3 OF CONVENTION FOR ENVIRONMENTAL IMPACT ASSESSMENT IN TRANSBOUNDARY CONTEXT

*(ratified with act of 16.03.1995, State Gazette.issue 28/1995, prom. State Gazette issue 86/1999, active from 10.09.1997, amended State Gazette issue 89/1999)*

<b>1. INFORMATION ON THE PROPOSED ACTIVITY</b>	
<b>(i) Information on the nature of the proposed activity</b>	
Type of activity proposed	The investment proposal refers to extraction, transportation and discharge of alluvial materials (sand and gravel) from the bed of the Danube river in “Mishka” site (km 462.0 – km 459.4) and has been concurred with the Executive Agency on the Exploration and Maintenance of the Danube River in the town of Rousse.
Is the proposed activity listed in Appendix I to the Convention?	<b>NO</b>
Scope of proposed activity (e.g. main activity and any/all peripheral activities requiring assessment)	<p><u>Main activity:</u> Extraction of alluvial materials (sand and gravel) from Danube river with floating multi-bucket dredger, transfer through dewatering sieve and a rubber belt conveyor (RBC) into self-propelled barges for transportation to port wall for discharging.</p> <p><u>Auxiliary activity:</u> Discharge of the extracted material to port site owned by the company with an area of 4558 m<sup>2</sup>, located in the East industrial zone of Rousse town and loading to trucks with front loader for expedition.</p>
Scale of proposed activity (e.g. size, production capacity, etc.)	The site for sand and gravel excavation in Danube river (0.433 km <sup>2</sup> ) is 2.6 km long and 300 m wide in the south-west part and up to 100 m wide in the north-east part, whereas the reserves (222) are 2 475 047 m <sup>3</sup> and the extractable reserves (222) are 1 812 869 m <sup>3</sup> . The extraction site will be split during work in 10 separate blocks for inert materials. The capacity of extracted material will reach 345 000 m <sup>3</sup> p.a. Daily extraction will be 1 500 m <sup>3</sup> with working regime of 230 working days p.a. (9 months, 6 days per week).
Description of proposed activity (e.g. technology used)	<p>The technology for alluvial materials extraction from Danube river is based on the use of floating multi-bucket dredger type KS – 250 with capacity of one bucket - 250 l. It has no alternative with the given conditions – presence of gravel of 150 mm.</p> <p>The extraction works in each separate block will be carried from east to west (against the current). Extraction will be carried simultaneously in the whole depth of the layer.</p> <p>During excavation of material in depth, swaths (angles) will be formed in ratio 1:2.75, which is the angle of the stable swath and which will lead to stability of the river bed (in the area) during extraction works. The formation of swaths (angles) with increase of depth will decrease the area for extraction works where the area of the extractable reserves is 317 613 m<sup>2</sup>. The latter shall be executed in various blocks of the extracted area depending on the water level and on the nesting period of the birds. The distance from the area for the excavation of inert materials to the northern coasts of the islands “Goliam Mishka-1”, “Malak Mishka-2” (“Mishka” island) and “Mishka-3” is 100 m. The distance to the Bulgarian coastline is respectively 200 and 300 m from the nearest locations in the southern area of the investment proposal.</p>

Description of purpose of proposed activity	The investment proposal refers to extraction, transportation and discharge of alluvial materials (sand and gravel) from Danube river. The extraction of alluvial materials from Danube river bed is directly related to the company's main activity – production of aggregates and ready mix concrete.
Rationale for proposed activity (e.g. socio-economic, physical geographic basis)	Main activity of “Gravel and sand pits – Bulgaria” EAD is production of aggregates – sand and gravel. In relation to the investment proposal, geophysical exploration works are performed in “Mishka” site and preliminary reserves of alluvial materials (sand and gravel) are calculated. Subject of the investment proposal are sand and gravel (alluvial materials) in Danube river bed from km 462.0 to 459.4 in the area of Babovo and Ryahovo village, Slivo Pole Municipality, Rousse District.
Additional information/comments	The investment proposal does not plan to change the existing road infrastructure in the area of port site, nor the construction of new. Water and electricity supply to the port site will be provided from existing technical infrastructure.
<b>(ii) Information on the spatial and temporal boundaries of the proposed activity</b>	
Location	The site for extraction of sand and gravel from Danube river is from km 462.00 to 459.40, located to the north of Babovo and Ryahovo village, to the north and north-west of “Mishka” island (“Goliam Mishka-1” and “Malak Mishka-2”) and to the south of “Mishka-3”. The area of the site (0.433 km <sup>2</sup> ) is 2.6 km long and 300 m wide in the south-west part and up to 100 m wide in the north-east part. The area of the site is located in the Bulgarian part of the river and is within the compulsory distance (from 327 m in the southwestern part to 194 m at the northeastern part) from the river boat traffic. The excavation site is situated 418 m from the Rumanian border and respectively 836 m from the Rumanian coastline in the southwestern and 50 m and 310 m in the northeastern parts.
Description of the location (e.g. physical-geographic, socio-economic characteristics)	A non-operational quay wall is located on the right shore of the river close to Ryahovo village. Distance to the shore (regulation of the villages) is: <ul style="list-style-type: none"> <li>• Ryahovo village – 1 km south-west</li> <li>• Babovo village – 2 km south-east</li> </ul> The distance against the current to the Danube bridge in Rousse town is 29.5 km.
Rationale for location of proposed activity (e.g. socio-economic, physical-geographic basis)	The area approved for the investment proposal is compliant with the following conditions: <ul style="list-style-type: none"> <li>▪ site area shall be in the Bulgarian part of the river;</li> <li>▪ site area shall be within the necessary distance from the river boat traffic;</li> <li>▪ excavation area shall be within the necessary distance from the Bulgarian shore and “Mishka” islands (“Mishka-1”, “Mishka-2”) and “Mishka-3” to avoid their under digging and erosion as a result from excavation works.</li> </ul>
Time-frame for proposed activity (e.g. start and duration of construction and operation)	<u>Construction</u> : Port site – up to 12 calendar months <u>Exploitation</u> : Possible working schedule of the extraction and transport equipment is: <ul style="list-style-type: none"> <li>▪ anual working days – 230;</li> <li>▪ working days per week – 7, including 6 days for extraction and 1 day for maintenance;</li> <li>▪ working months – 9;</li> <li>▪ working time per day – 12 hours;</li> </ul>

<p>Maps and other pictorial documents connected with the information on the proposed activity</p>	<p><u>Map</u> with distance to the Bulgarian shore (regulation of the village) (Appendix № 1)  <u>Diagram</u> of the section with actual excavation (Appendix № 2)  <u>Map</u> with distance to the Danube bridge in Rousse town (Appendix № 3)  <u>Plan of port</u> (Appendix № 4)  <u>Expert statement</u> on transboundary pollution (Appendix № 5)  <u>Diagram</u> of the actual excavation area and protected area ROSPA0090 Ostrovu Lung-Gostinu (Appendix № 6)  <u>Protocol</u> of noise measurements № 03-0663/15.08.2013 (Appendix № 7)</p>
<p>Additional information / comments</p>	<p>--</p>
<p><b>(iii) Information on expected environmental impacts and proposed mitigation measures</b></p>	
<p>Scope of assessment (e.g. consideration of: cumulative impacts, evaluation of alternatives, sustainable development issues, impact of peripheral activities, etc.)</p>	<p>The scope of assessment coincides with the site for proposed activity – site for sand and gravel extraction from km 462.0 to km 459.4, to the north of Ryahovo and Babovo villages, north and north-west of “Mishka” island (“Goliam Mishka-1 and “Malak Mishka-2”) and to the south of “Mishka-3” as well as port site in the East industrial zone of Rousse town, where the extracted material will be temporary stored.</p> <p>Cumulative effect from realization of the activity is not expected. Alluvial materials from Danube river are not extracted near the area of the investment proposal. The nearest inert material excavation site on the Danube river is situated to the south-west of the investment proposal approximately 17 km (before the front of “Aleko” island) in the area of Sandrovo village. The other two sites are also located to the south-west of the investment proposal at a distance of 40 km close to “Lyulyaka” island and 55-60 km to “Batin” island.</p> <p>Alternatives of the investment proposal for extraction of ballast are supply of raw materials from gravel and sand deposits under the provisions of the Underground Resources Act or from other water objects in the area under the provisions of the Waters Act. For the area of Rousse town, the investment proposal has no other alternative.</p>
<p>Expected environmental impacts of proposed activity (e.g. types, locations, magnitudes)</p>	<p>All supposed impacts from the proposed activity on the environment are of local character and with insignificant volume and scale.</p> <p>The selected technology for aggregates extraction does not have considerable impact on the quality of atmospheric air (QAA). The extraction of gravel and sand from the river bed will not lead to emissions of dust particles (EDP) in the atmosphere. Transportation, discharging, temporary storage and loading will not generate dust particles emissions, as the extracted material is wet. Considering the total power of equipment to be used and the distance from the site to the villages (1 km south-west of Ryahovo village and 2 km south-east of Babovo village), the site is not expected to have considerable impact on the quality of atmospheric air in local or in larger scale. The implementation of the investment proposal for the excavation of sand and gravel in the “Mishka” section (from km 462.0 to km 459.4) in the area of Babovo village, Slivo Pole Municipality, Rousse District cannot lead to pollution of the atmospheric air and EDP-10 to levels that will significantly affect the quality of atmospheric air (QAA) both in the excavation area (locally) and on the site for unloading the dredged material. Secondary pollution of the air with dust may occur due to the transportation of the sands and gravel by dumpers to the crushing-washing-sorting installation (CWSI) for processing the deposits from the Danube river. This secondary pollution can be evaluated as insignificant mostly due to the low intensity of the</p>

dumpers (averagely 6 runs per two working shifts). This secondary pollution can be limited by regularly spraying water on the elevated roads.

The pollution of atmospheric air from the internal combustion engines of the dredger and the barges is within the range normal for the navigation on the Danube river. This cannot lead to excessive air pollution.

In both cases (dust and harmful gases) the pollution is expected to be minimal locally and will not have a transboundary effect taking into consideration the distances to the Rumanian border and coastline.

The technology for ballast extraction does not foresee quantity or quality changes in the parameters of river waters. Changes will occur only in the parameter "unsolved substances", whose values will be increased due to the excavation of the deposits from the bed of the Danube river with slow movement of the bucket chain (32 buckets) of the multi-bucket dredger. Such turbidity of the water and the creation of a water flow that will increase the sands and unsolved substances are not expected since the speed of the bucket chain is 26 buckets per minute. The impact will be locally, as well as with possibility for fast recovery of the water physical indicator through self-purification (settling). Taking into account the fact that the ballast material is somewhat densified and that the excavation is from the east to the west, i.e. against the flow of the river, the possible transfer of unsolved substances will be somewhere between 100 and 150 m along the river due to the high average perennial values of the river flow speed and the current capacity. It must be noted that this pollution within the 100-meter limit along the river will be rather local than transboundary.

Considering the used equipment (multi-bucker dredger KS-250, self-propelled barges, as well as the loading of the dumpers by front loaders) the noise emissions will be insignificant, whereas 100-150 m from the site the noise will be within the permissible limits and will be reduced by 50 dB(A) according to Appendix № 3, item 4 to Art. 6 of Ordinance № 6/2006 of the Ministry of Health and the Ministry of Environment and Waters. Therefore, noise within the 36.5 dB(A) range will reach the coastline of "Mishka" island ("Goliam Mishka-1 and "Malak Mishka-2") and "Mishka-3". This range is lower than the thresholds stipulated by Ordinance № 6/2006 of the Ministry of Health and the Ministry of Environment and Waters of 40 dB(A) for the quiet zones outside the urban agglomeration (although the islands are located in a water transport corridor with sometimes intensive traffic and should not be considered quiet zones outside the urban agglomeration). The noise pollution from the production activities during the implementation of the investment proposal will not affect the acoustic environment of the adjoining territories both on the Bulgarian and on the Rumanian side. Therefore, no transboundary noise pollution should be considered possible.

Realization of the investment proposal does not require usage of sources for drinking water. If needed, river water will be used for irrigation of the material. Waste water will not be generated during excavation of alluvial materials.

No negative impact on underground water is expected and also no negative impact whatsoever is expected on the transboundary water basin Karst Waters in the Malm-Valanginian Basin (BG1G0000J3K051).

The excavation works are within permissible limits and do not deviate from the forecasts of the River Basin Management Plan for the water basin.

Through the excavation of the riverbed sediments (sands and gravel) the hydraulic conditions will be enhanced – increased conductivity, volume and speed of the river current, which will improve the navigation conditions in the region.

The investment proposal is not related to negative changes in the geological conditions. The gravel and sand to be extracted from the Danube river bed are contemporary accumulation of alluvial materials.

Realization of the investment proposal does not foresee faults in the adjacent land parcels and soil and does not destroy the island formations.

Extraction of river materials will be executed only in the river bed without having impact on the vegetation along the shore of the island formations, as well as on right shore of the river.

Realization of the investment proposal will have an inconsiderable local impact mainly on the river bottom fauna (zoobenthos), which is insignificant in terms of quantity and quality constituting of 7-8 invasive types and will not have any impact in comparatively long period of time. With respect to the ichthyofauna, the possible impacts from the activity will be mainly in the migration periods of some fish species and will have insignificant and local impact.

The territory of the investment proposal is not a part of any protected areas pursuant to the Law on Protected Territories prom. State Gazette issue 133 of 11 November 1998, amended by State Gazette issue 98 of 12 November 1999, amended by State Gazette issue 28 of 4 April 2000, amended by State Gazette issue 48 of 13 June 2000, amended by State Gazette issue 78 of 26 September 2000, amended by State Gazette issue 23 of 1 March 2002, amended by State Gazette issue 77 of 9 August 2002, amended by State Gazette issue 91 of 25 September 2002, amended by State Gazette issue 28 of 1 April 2005, amended by State Gazette issue 94 of 25 November 2005, amended by State Gazette issue 30 of 11 April 2006, amended by State Gazette issue 65 of 11 August 2006, amended by State Gazette issue 24 of 20 March 2007, amended by State Gazette issue 62 of 31 July 2007, amended by State Gazette issue 36 of 4 April 2008, amended by State Gazette issue 43 of 29 April 2008, amended by State Gazette issue 19 of 13 March 2009, amended by State Gazette issue 80 of 9 October 2009, amended by State Gazette issue 103 of 29 December 2009, amended by State Gazette issue 19 of 8 March 2011, amended by State Gazette issue 38 of 18 May 2012, amended by State Gazette issue 27 of 15 March 2013, amended by State Gazette issue 66 of 26 July 2013, but is close to the protected area “Kalimok – Brashlen”, which is a protected area in compliance with Order RD-451 of the Minister of Environment and Water. The excavation area is part of protected area BG 00002030 “Complex Kalimok” under Directive 79/409/EEC for preservation of wild birds and protected area 0000377 “Kalimok – Brashlen” – under Directive 92/43 for preservation of nature habitats and wild flora and fauna under NATURA 2000 and the provisions of Biodiversity Act. The realization of the investment proposal in the “Mishka” section is permissible according to the prohibition regime of the “Complex Kalimok” protected area enforced by declaration order – Order RD-831/17.11.2008 of the Minister of Environment and Waters (prom. State Gazette issue 108/2008). The realization of the investment proposal does not have impact on natural habitats.

The proposal does not affect historical and archeological sites.

The impact of wastes generated during realization and exploitation of the

	<p>investment proposal on the components of the environment can be classified as insignificant, temporary (during construction), permanent (during exploitation), recoverable with small local size. Separate collection of wastes generated during construction and exploitation of the investment proposal, their transportation, temporary storage and submission for activities including collection, transportation, temporary storage, utilization and/or making harmless does not have negative impact on the environment and people health.</p> <p>The investment proposal plans application of current good production practices in this area, which means inclusion in the production process of equipment and installations with good technical and environmental parameters, including acoustic ones. The activity in the site is not expected to be source of noise above the limits in acoustically sensitive territories in the region (living areas).</p> <p>During civil works and exploitation of the port site there will be no sources of vibrations in the environment. During construction and exploitation, the site will not be source of other physical factors – thermal and non-ionizing radiations.</p> <p>As a result of the foreseen extraction activity, insignificant changes will be present in the visual aspect of the river due to the presence of equipment in the natural river bed. The impacts are classified as physical, local and medium-term for the extraction period.</p> <p>There are no risk factors for people health in the neighboring residential areas (Ryahovo village 1 km to the south-west and Babovo village 2 km to the south-east of the investment proposal) caused by its implementation. There are also two residential areas on the territory of Romania – Pueni at a distance of approximately 10 km and Prundu at a distance of approximately 9.7 km from the boundaries of the excavation works. Taking into account the fact that the realization of the investment proposal will not lead to any health hazards for the residents of the Ryahovo and Babovo villages this can also be applied for the two Rumanian residential areas thus eliminating any possibilities for transboundary pollution.</p>
<p>Inputs (e.g. raw material, power sources, etc.)</p>	<p>The natural resource – sand and gravel, planned for extraction is with regenerative ability in the medium-term, as a result of the river natural accumulation processes.</p> <p>Water and electricity supply to the site will be provided from existing technical infrastructure.</p>
<p>Outputs (e.g. amounts and types of: emissions into the atmosphere, discharges into the water system, solid waste)</p>	<p>The activity of sand and gravel extraction from the river bed is not related to formation of dust emissions (EDP) in the environment. Dust emissions will not be generated during transportation, discharge and temporary storage of sand and gravel, as the material is wet. Emissions of hazardous substances will be generated from the burned exhaust pipe gases from the extraction and transportation equipment to be used.</p> <p>Waste water will not be generated during excavation of alluvial materials.</p> <p>Some acoustic discomfort in the environment will be created by the noise from the extraction and transport vehicles. The change of acoustic environment will have some negative impact on potential habitats of birds located in the nearby island, in close proximity to the excavation works, expressed as disturbance mainly in the birds nesting period. The activity in the site is not expected to be source of noise above limits for acoustically sensitive territories in the region (living areas).</p> <p>Single generation of the following wastes types is expected during</p>

	<p>construction: mixed construction wastes, metal wastes, solid household wastes, hazardous wastes (some of which will be generated in insignificant volumes only during breakdown change of transport and construction machines) – hydraulic oils, motor oils, gear oils, brake and anti-freeze liquids, oil filters and accumulator batteries with electrolyte.</p> <p>During exploitation, generation is expected of the following wastes types: insignificant quantities of hazardous wastes, such as non-chlorinated motor, lubrication and gear oils, waste hydraulic oils, accumulator batteries, fluorescent pipes and other mercury containing wastes; small quantities of production wastes, such as mixed metal wastes from repairs or dismantling of equipment (scrap), out of use electronic and electrical appliances, solid household wastes. This type and quantity of the generated wastes resulting from the construction and exploitation of the site and from the excavation of the alluvial deposits (sand and gravel) do not have a transboundary nature. No mining wastes will be formed.</p>
<p>Transboundary impacts (e.g. types, locations, magnitudes)</p>	<p>If the technology for extraction of alluvial materials in the approved area and for discharge to port site is followed no transboundary impacts are expected in terms of noise pollution, emissions of dust, pollution with unsolved substances, health risks and other impacts as well as no impact is expected on the habitats within the Rumanian protected area ROSPA0090 Ostrovu Lung-Gostinu, which is located opposite the town of Marten and the village of Ryahovo and covers two islands, water territory and coastline with a length of 19 km and an area of 2488.5 hectares situated around 500 m to the north-west of the investment proposal. There will be no transboundary affect on the types of natural habitats since in the protected area form no habitats are identified as subject to preservation. The preservation in this protected area covers 199 bird species. The most significant role in their preservation is played by the wetlands along both banks of the Danube river where in the past there were vast marshes. The impact of the investment proposal on the birds will be in the closest proximity to the installations and will cover a water territory of approximately 150 m. The protected Rumanian area ROSPA0090 Ostrovu Lung-Gostinu is beyond this territory. The investment proposal complies with the preservation objectives and goals of the protected area ROSPA0090 Ostrovu Lung-Gostinu.</p> <p>No transboundary impact is also expected in the nearest wetland of international importance (Ramsar wetlands) ROSPA 0022 (Comana Natural Park) according to the Birds Directive, which has an area of 24 963 hectares and is situated some 10 km from the investment proposal. The same applies to the other protected area ROSCI 0043 (Comana) according to the Habitat Directive with an area of 26 481 hectares also situated approximately 10 km from the excavation works.</p>
<p>Proposed mitigation measures (e.g. if known, mitigation measures to prevent, eliminate, minimize, compensate for environmental effects)</p>	<p>The measures that should be taken in order to decrease the negative impacts on the components and factors of environment during realization of the investment proposal are:</p> <p><u>Atmospheric air</u></p> <p>➤ During construction:</p> <ul style="list-style-type: none"> <li>▪ The provisions of Regulation № 1 for norms of accepted emissions of hazardous substances (pollutants) released in the atmosphere from sites and activities with non-mobile sources of emissions (State Gazette issue 64/2005) shall be followed and in particular art. 70 of the regulation – in cases when during demolition of old buildings and construction of new ones materials are loaded and</li> </ul>

unloaded, which are sources of dust substances;

- Construction machines and motor vehicles with damaged internal combustion engines shall not be allowed to work;
  - The locations for temporary storage of bulk materials and construction wastes shall be irrigated during dry and windy weather in order to decrease dust emissions from being spread in atmosphere;
  - The machines used during demolition of old buildings and construction works shall use only fuels that comply with the provisions of the Regulation for the requirements for the quality of liquid fuels, the conditions, order and method for their control (State Gazette issue 66/2003);
- During exploitation:
- The provisions of Regulation № 1 for norms of accepted emissions of hazardous substances (pollutants) released in the atmosphere from sites and activities with non-mobile sources of emissions (State Gazette issue 64/2005) shall be followed and in particular art. 70, where this is applicable/necessary, especially during storage of bulk material on the port site;
  - The temporary storage area for extracted bulk materials shall be irrigated during dry and windy weather in order to decrease the non-organized dust emissions;
  - The equipment for aggregates extraction and transport shall use only fuels that meet the provisions of Regulation for the requirements for the quality of liquid fuels, the conditions, order and method for their control (State Gazette issue 66/2003);
  - Loading of transport vehicles with extracted bulk materials in excess of their dimensions shall not be allowed;
  - Idle work of transport vehicles used for expedition of extracted aggregates shall not be allowed.

#### Noise

- During construction:
- Construction works shall be performed only during the day;
  - Idle work of construction machines shall not be allowed;
- During exploitation:
- The transport corridor of dump trucks from the port site through the industrial zone shall be defined.

#### Wastes

- During construction:
- Generated wastes shall be collected separately and stored in temporary depots;
  - Transportation of construction wastes to a depot assigned by the municipality;
  - Collection of solid household wastes in metal containers and their transportation to an organized depot for solid household waste or consecutive treatment;
  - Emergency generated hazardous wastes shall be duly transported to the site of the company executing construction works and be transferred to physical or juridical persons having permit for the activity under art. 37 of Wastes Management Act.
- During exploitation:
- Generated wastes shall be separately collected and stored in covered



	<p>places or in temporary sites until transportation for consecutive treatment for making harmless following the provisions of Chapter two, Section I of Regulation for the requirements for treatment and transportation of production and hazardous wastes adopted with Decree of Council of Ministers № 53/19.03.1999 on the places assigned for this;</p> <ul style="list-style-type: none"> <li>▪ Fluorescent pipes and other wastes containing mercury shall be temporary stored separated from other wastes and in the presence of sulfur;</li> <li>▪ Wastes subject to treatment for making harmless shall be submitted only to persons having permit under art. 37 of Wastes Management Act or IPPC permit for execution of this activity on the grounds of signed contract.</li> </ul> <p><u>Specific measures:</u></p> <ul style="list-style-type: none"> <li>▪ Extraction of alluvial materials shall be done only within the limits of the approved site;</li> <li>▪ Operation of extraction and transportation equipment that is not in proper condition shall not be allowed;</li> <li>▪ Damages from occurred failures shall be immediately removed;</li> <li>▪ Provision of the necessary personal protection items and control for their use;</li> <li>▪ Labeling of all possible places exposing human life to risk.</li> <li>▪ Drafting a Plan for its own monitoring of the avifauna in a radius of 2 km (approximately) during the breeding season for a period of three seasons from the beginning of the exploitation and excavation of the inert materials.</li> <li>▪ The schedule of the excavation works must take into consideration the breeding season of the birds (from 1 March to 30 June) with an option to change the blocks.</li> <li>▪ Conducting a hydrobiological monitoring at least once a year of the condition of the zoobenthos within the excavation area.</li> <li>▪ Conducting monitoring of the surface running waters in terms of the following indices: pH, unsolved substances, petroleum products – twice a year from the surface and at 1-meter depth from two locations (close to the excavation works and at 150 m along the river after the excavation of the material).</li> </ul>
Additional information/comments	--
<b>(iv) Proponent/developer</b>	
Name, address, telephone and fax numbers	<p>“Gravel and sand pits - Bulgaria” EAD  Sofia city 1528, District Iskyr, № 6 Poruchik Nedelcho Bonchev Str.  tel: +359 2 976 00 70  fax: +359 2 976 00 72  Executive director: Alexander Nakov Chakmakov</p>
<b>(v) EIA documentation</b>	
Is the EIA documentation (e.g. EIA report or EIS) included in the notification?	NO
If no/partial, description of additional documentation to be forwarded and (approximate) date(s) when documentation will be available	Pursuant to the requirements of art. 4, par. 1 and art. 2 of Regulation for the conditions and order for conducting Environmental impact assessment, the Ministry of Environment and Waters, the Regional Inspectorate of Environment and Waters in Rousse, mayors of respective municipalities as well as the impacted population are notified. Information is presented to the

	<p>competent authority of the Ministry of Environment and Waters for assessment of the necessity for Environment impact assessment in compliance with the requirements of Appendix № 2 to art. 6 of Regulation for the conditions and order for conducting Environmental impact assessment. Information is presented to the competent authority of the Ministry of Environment and Waters pursuant to art. 10 of Regulation for the conditions and order for assessment of the conformity of plans, programs, projects and investment proposals with the subject and objectives for preservation of the protected areas.</p> <p>Consultations with interested parties and affected population will be conducted in case conducting of Environment impact assessment is necessary.</p> <p>Preparation of assignment for the scope and content of the Report for Environmental impact assessment.</p> <p>Development of Report for Environmental impact assessment.</p>
Additional information / comments	--
<b>2. POINTS OF CONTACT</b>	
<b>(i) Points of contact for the possible affected Party or Parties</b>	
Authority responsible for coordinating activities relating to the EIA (refer to decision I/9, annex) - Name, address, telephone and fax numbers	
List of affected Parties to which notification is being sent	
<b>(ii) Points of contact for the Party of origin</b>	
Authority responsible for coordinating activities relating to the EIA (refer to decision I/9, annex) - Name, address, telephone and fax numbers	
Decision-making authority if different than authority responsible for coordinating activities relating to the EIA - Name, address, telephone and fax numbers	
<b>3. INFORMATION ON THE EIA PROCESS IN THE COUNTRY WHERE THE PROPOSED ACTIVITY IS LOCATED</b>	
<b>(i) Information on the EIA process that will be applied to the proposed activity</b>	
Time schedule	
Opportunities for the affected Party or Parties to be involved in the EIA process	
Opportunities for the affected Party or Parties to review and comment on the notification and the EIA documentation	

Nature and timing of the possible decision	
Process for approval of the proposed activity	
Additional information / comments	
<b>4. INFORMATION ON THE PUBLIC PARTICIPATION PROCESS IN THE COUNTRY OF ORIGIN</b>	
Public participation procedures	
Expected start and duration of public consultation	
Additional information / comments	
<b>5. DEADLINE FOR RESPONSE</b>	
Date	



GEOGRAPHICAL COORDINATES WAS-84 OF QUARRY BORDERS

Географски координати WGS-84 на граничните точки на кариерата	
от км 462.0 до км 459.4	
№	Дължина-L
1	44°00'13.1"
2	44°00'23.5"
3	44°00'50.4"
4	44°01'14.1"
5	44°01'10.2"
6	44°01'05.8"
7	44°00'17.4"

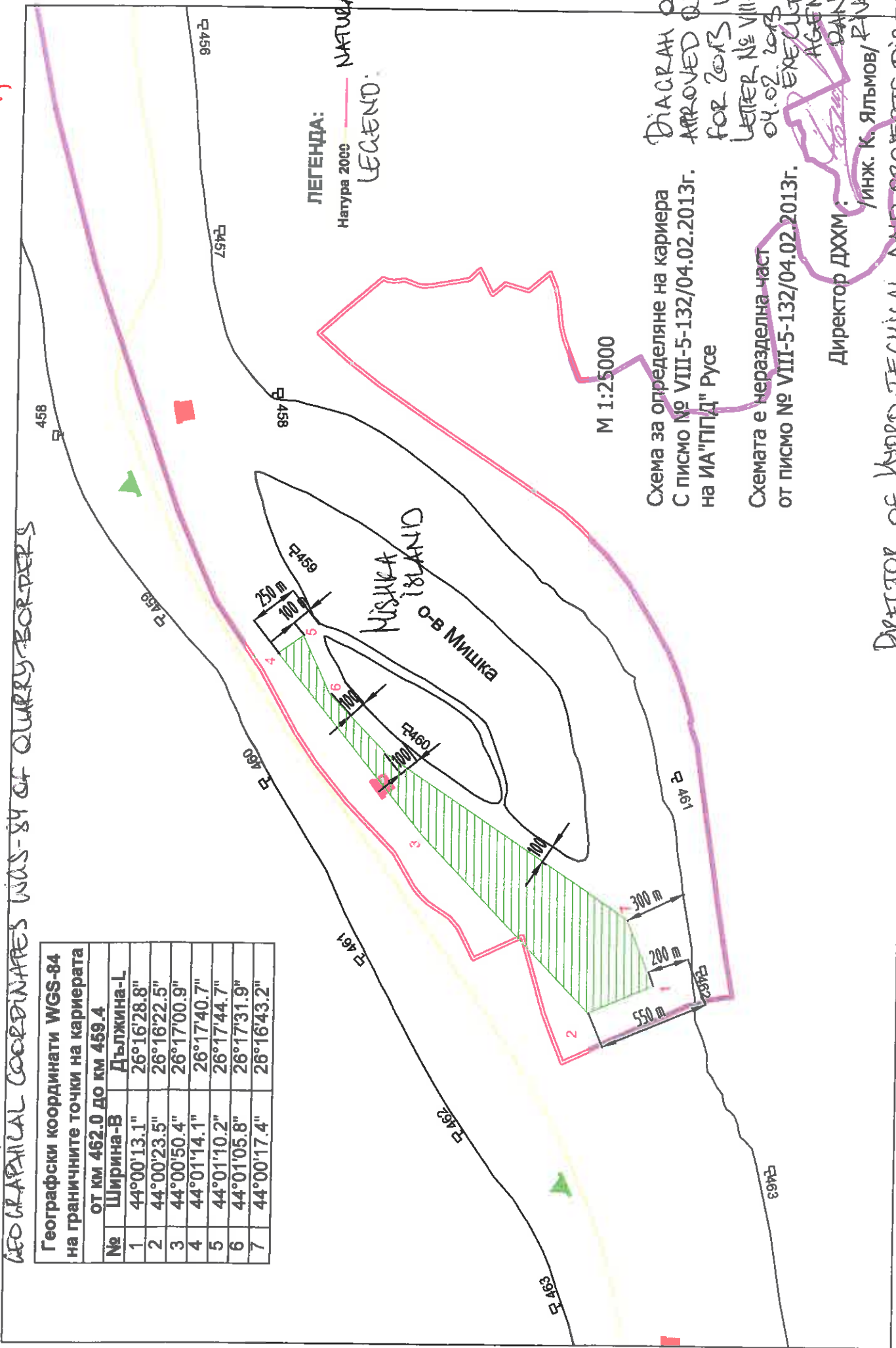
ЛЕГЕНДА:  
 Natura 2000  
 LEGEND:

Схема за определяне на кариера  
 С ПИСМО № VIII-5-132/04.02.2013г.  
 на ИА "ПГД" Русе

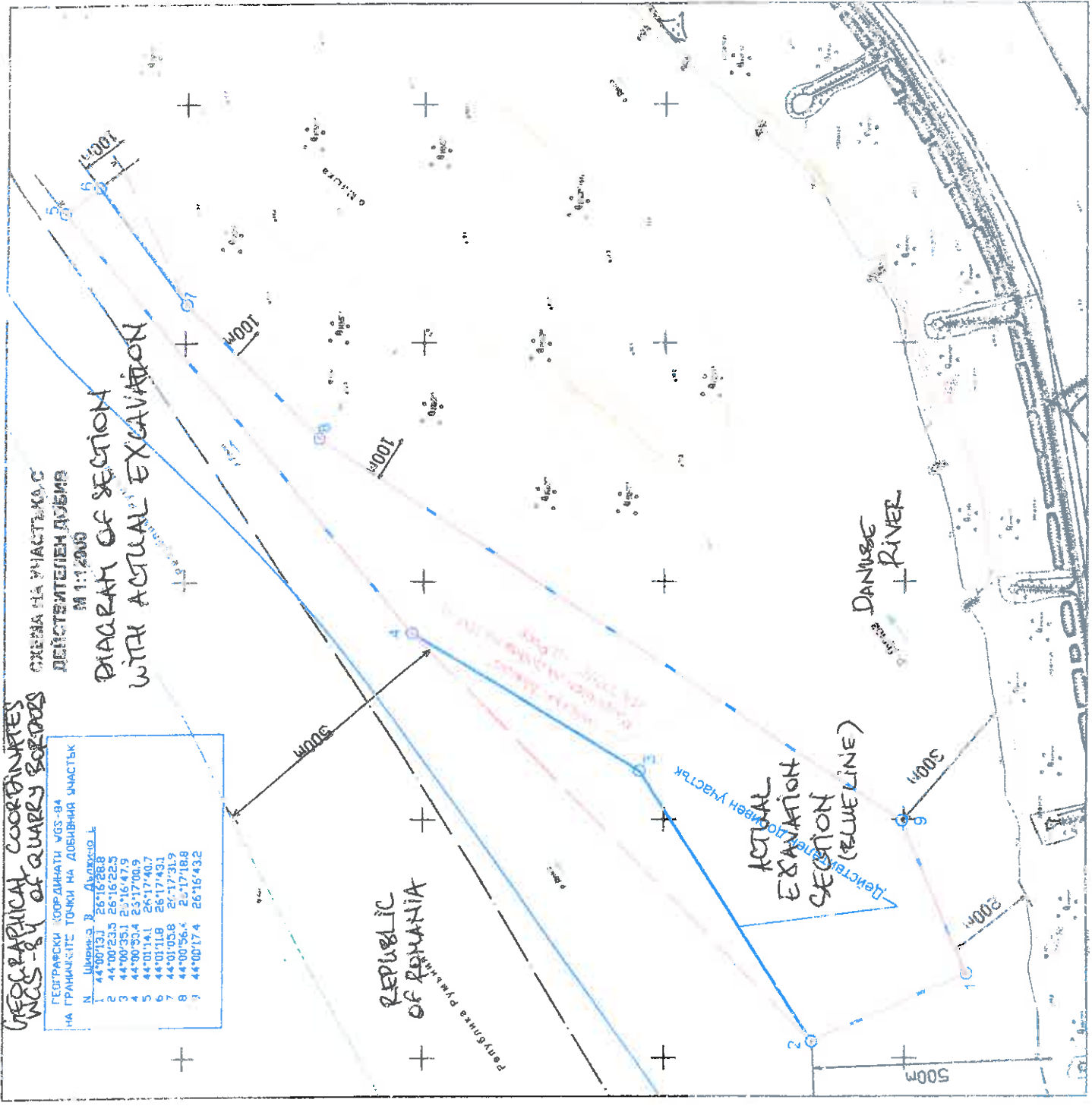
Схемата е неразделна част  
 от ПИСМО № VIII-5-132/04.02.2013г.

DIAGRAM OF APPROVED QUARRY FOR ZORS WITH LETTER № VIII-5-132/04.02.2013 BY EXECUTIVE AGENCY FOR DANUBE RIVER ROUS /ИНЖ. К. ЯЛЪМОВ/ RIVER ROUS (ENCL. K. YAMON)

Директор ДХМ:  
 ДИРЕКТОР НА ИДРО-ТЕХНИКАЛНИ И ПРОЕКТИ ДИРЕКТОРАТ







GEOGRAPHICAL COORDINATES  
WGS 84 OF QUARRY BORDERS

ФЕДЕРАЛСКИ КООРДИНАТИ WGS-84  
НА ГРАНИЦИТЕ ТОЧКИ НА ДОБИВНАЯ УЧАСТЪК

№	ИМЕНЕ	X	Y
1	44°00'13.1"	26°16'28.8"	
2	44°00'23.5"	26°16'22.5"	
3	44°00'35.1"	26°16'47.9"	
4	44°00'50.4"	26°17'00.9"	
5	44°01'14.1"	26°17'40.7"	
6	44°01'11.8"	26°17'43.1"	
7	44°01'03.8"	26°17'31.9"	
8	44°00'56.4"	26°17'18.8"	
9	44°00'17.4"	26°16'43.2"	

СХЕМА НА УЧАСТЪКА С  
ДЕТАЛИТЕЛЕН ДЮБЪР  
М 1:12000

DIAGRAM OF SECTION  
WITH ACTUAL EXCAVATION

REPUBLIC  
OF ROMANIA

ACTUAL  
EXCAVATION  
SECTION  
(BLUE LINE)

DANUBE  
RIVER

500M

500M

200M

300M

300M

100M

100M

100M

100M

100M

100M

100M

100M

100M

100M

100M

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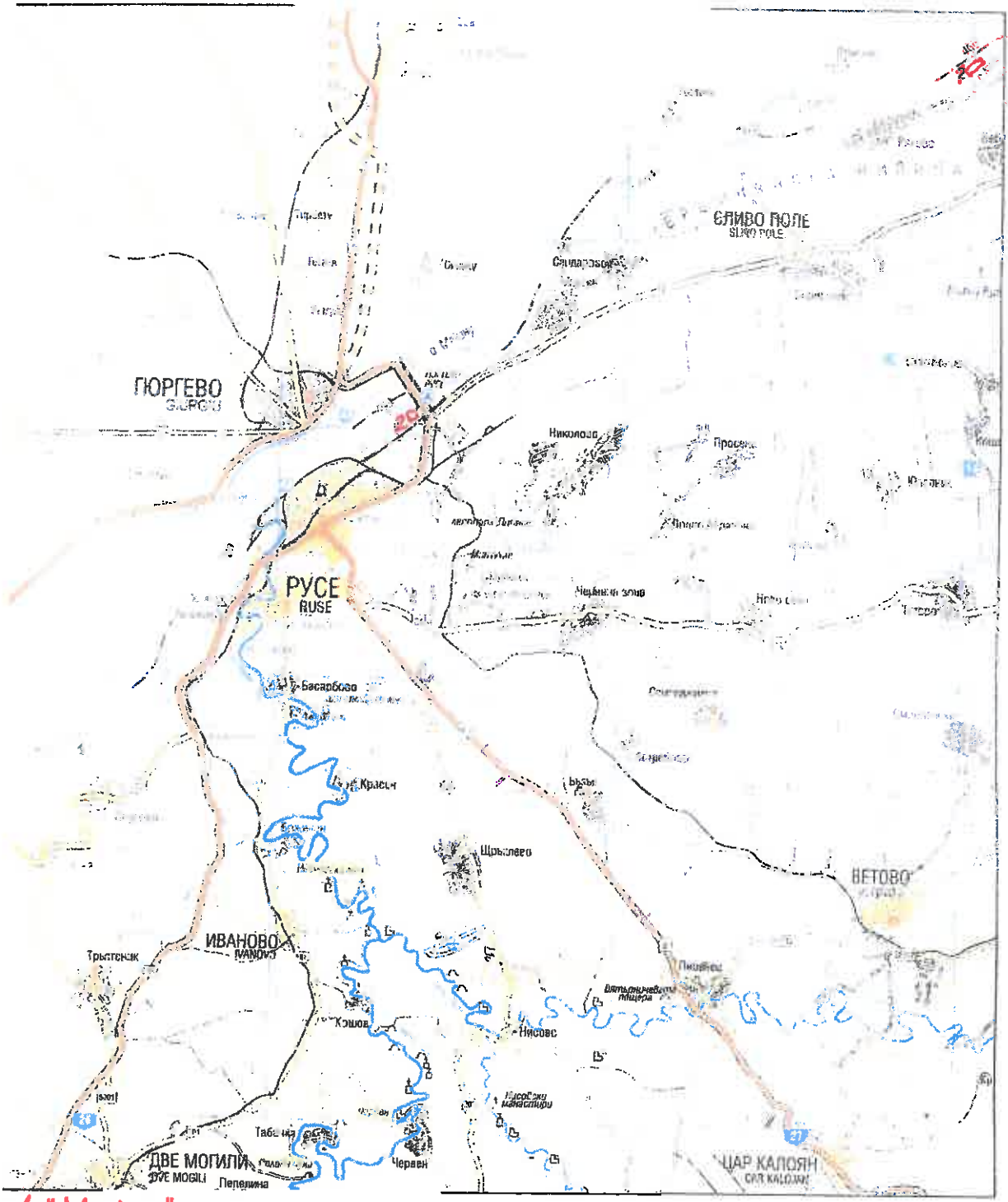
100M

100M





MAP  
M 1:200000



- 1. "Mishka" site
- 2. Post site



ROUSSE MUNICIPALITY  
 DIRECTORATE "TERRITORY ORGANIZATION"  
 DEPARTMENT "CADASTRE AND REGULATIONS"  
 ОБЩИНА РУСЕ  
 ДИРЕКЦИЯ "УСТРОЙСТВО НА ТЕРИТОРИЯТА"  
 ОТДЕЛ "КАДАСТЪР И РЕГУЛАЦИИ"

СКИЦА № КР1-5250  
 М 1: 6000  
 PLAN № КР1 – 5250  
 M 1 : 1000

НА УПИ/ПОБЕЖЕНТ-ИМОТ/..... УПИ IV - 102 кв..... КВ.....  
 ПО РЕГУЛАЦИОНЕН ПЛАН НА Г-р. РАСЕ..... Д-р. РАСЕ.....  
 ОДОБРЕН СЪС ЗАПОВЕД ..... Д-р. РАСЕ..... Д-р. РАСЕ.....  
 УПИ/ПОБЕЖЕНТ-ИМОТ/ИМА КВАДРАТУРА..... 4538 м<sup>2</sup>.....  
 УРЕГУЛИРАН/НЕУРЕГУЛИРАН/ И Е СОВЕСТНОСТ НА:

1. ... ДУБРА. ВЕ. КО. ООД.....
2. ....

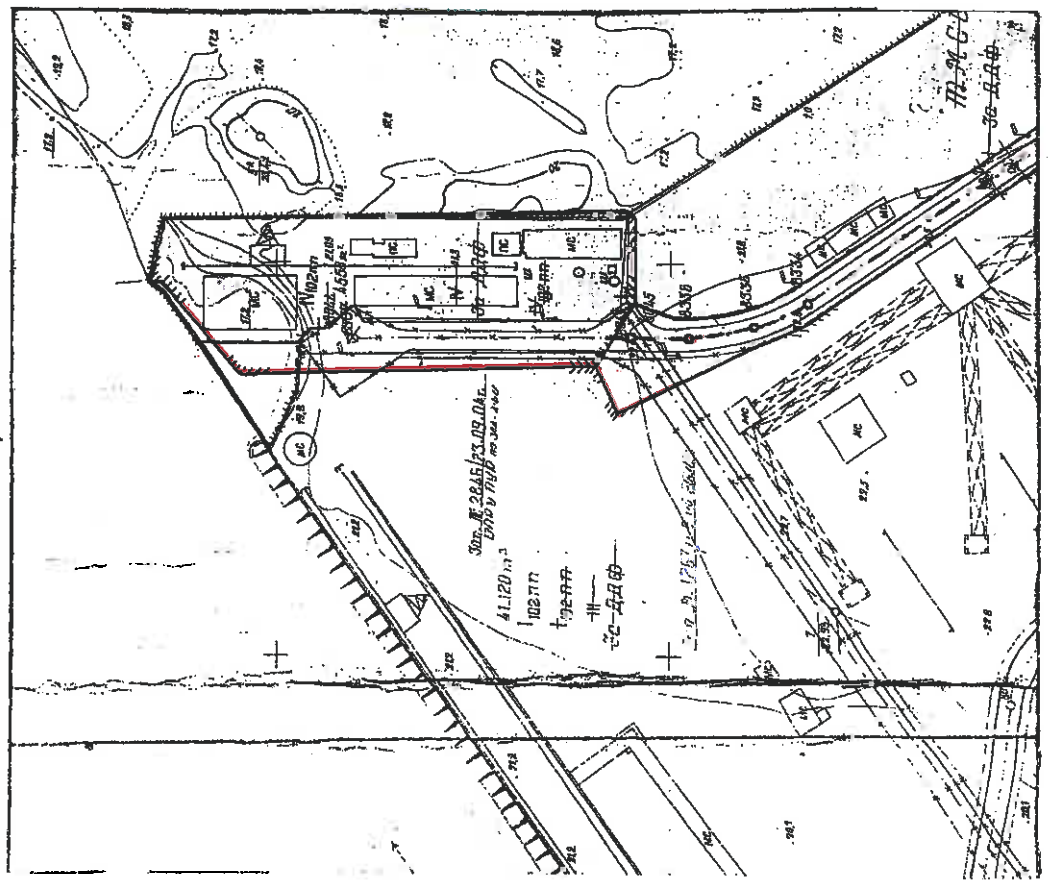
OF Regulated land property (RLP):..... RLP IV – 102 III  
 BY REGULATION PLAN OF ROUSSE, EAST INDUSTRIAL ZONE  
 APPROVED WITH ORDER 2846/23.09.04 ИИР, ПУР  
 RLP AREA 4538 м<sup>2</sup>  
 REGULATED AND OWNED BY: Double W Co – OOD  
 a notary deed 119/10.11.2004, т 43, р 15904, д 9846

СКИЦАТА СЕ ИЗДАВА ПО МОЛБА ВЪ № КР1-5250 ..... ОТ 13.12.2006.  
 И ШЕ СЛУЖИ ЗА КАДАСТЪР И РЕГУЛАЦИИ.  
 ТАКА ОТ СЪСТАВЪ НА СЪБРАНА С КРЕДИТАЦИЯ:  
 ИЗГОТВИЛ..... ДАТА..... 13.12.2006.  
 Н-Р ОТДЕЛ.....



THE PLAN IS ISSUED AFTER REQUEST REF. № КР1 – 5250 OF  
 13.12.2006 AND WILL SERVE BEFORE NOTARY  
 FEE OF 30 BGN IS COLLECTED WITH RECEIPT  
 PREPARED BY..... DATE: 13.12..2006

HEAD OF DEPARTMENT.....





Translation from Bulgarian

## EXPERT REPORT On TRANSBOUNDARY POLLUTION

Based on the goals and objectives of Investment Plan for Extraction of Sand and Gravel from Alluvial Deposits in the Bed of the Mishka Area (from 462.0 to 459.4 km ) of the Danube, near the village of Babovo, Slivo pole Municipality, Rousse Region, possible transboundary pollution when performing dredging operations in the extraction of material can be expected in the form of noise pollution, suspended solids, PM, health risk assessment, and may affect the protected areas in the region , especially the protected area ROSPA0090 Ostrovu Lung-Gostinu, which is located 500 m from the IP, as well as the other remote protected areas ROSPA 0022 (Comana Natural Park), which is an international wetland and a Ramsar site and ROSCI 0043 (Comana) in the Republic of Romania. In this context, “Gravel and Sand Pits – Bulgaria” EAD, Sofia, commissioned studies on possible transboundary pollution.

### 1. NOISE POLLUTION

#### Noise Map

In order to assess the noise impact on the environment based on the stated investment plan of “Gravel and Sand Pits – Bulgaria” EAD for extraction of sand and gravel from alluvial deposits in the Bed of the Mishka Area (from 462.0 to 459.4 km) of the Danube, near the village of Babovo, Slivo pole Municipality, Rousse Region, EEA Bourgas Regional Laboratory accredited for testing of noise conducted measurements of noise levels and mapped the results.

The table below summarizes the results of own measurements of equivalent noise levels LAeq [dB (A)] in measuring points (MP) in the area of the Mishka island:

Consecutive No	MP as per PI No 03-0663/15.08.2013	Description	measured LAeq, dB(A)
1	MP 1	Bulk berth Eastern Industrial Area of Rousse	67,7
2	MP 3	Barge passing about 350 meters from the Mishka Island	79,5
3	MP 7	Dredge (Bucket-type Dredge) near the island of Aleko	86,5
4	MP 8	Sieve facility near the town of Marten	68,6
5	MP 2	Across the Mishka Island – the future site, background noise level	31,2
6	MP 4	The village of Ryahovo – residential area	42,1
7	MP 5	The village of Babovo – residential area	39,5
8	MP 6	The village of Sandrovo – pier (next to residential area)	40,5

The results of measurements from 1 to 4 characterize the noise emitted by objects similar to the sources of noise in the Investment Plan.

According to layouts of sections for exploitation of alluvial deposits prepared by the Executive Agency for Exploration and Maintenance of the Danube and after specifying the mining sector the permitted mining area with floating structures will be situated at a distance from the northern coast of the Mishka Island ("Golyam Mishka - 1" and "Malak Mishka -2") and from the south of the coast of "Mishka - 3" at a distance of 200-300 m from the Bulgarian coast, and at the mandatory distance (327 meters to the southwest and up to 194 m to the north-east) of the river's mainstream for the purpose of protection of island formations.

The mining area is 418 meters away from the Romanian border and 836 meters away from the Romanian coast in the southwest and 50 m and 310 m in the northeast respectively.

### **Interpretation of results**

The measured noise level emitted from a floating bucket dredge (No 3 in the table) at a distance of 100 meters will be reduced by about 50dB (A) in accordance with Appendix No 3 item 4 to Art. 6 of Ordinance No 6/2006 of the Ministry of Health and the Ministry of Environment and Waters, ie at the shore of the Mishka Island the noise level will be 36,5 dB (A). This level is below the limit of 40 dB (A) specified by Ordinance No 6/2006 of the Ministry of Health and the Ministry of Environment and Waters for quiet zones outside agglomerations (although Mishka Island is located in a water transportation corridor with heavy traffic at times and should not be classified as a quiet area outside agglomerations).

Dredged material will be transported from the bucket dredge with a self-propelled barge according to the investment plan. Assuming that a barge similar to that from the table (No 2), sets off loaded from the dredge, at a distance of 100 to 110 m (10 m is the width of the dredge) the noise level will reach 29,5 dB (A). Upon simultaneous operation of the two sources of noise the total noise level reaching Mishka Island would be 37,3 dB (A), again lower than the aforementioned limit of 40 dB (A). This aggregate level will drop below 30dB (A) (the lower level of instrumental measurement) within the first meters of Mishka Island overgrown with bushes and trees and grass and will not affect the acoustic environment inside the island territory. The noise emitted by the simultaneous operation of the dredge and barge (or a passing vessel, which will be far enough from the dredge) will in no way affect the acoustic environment in the nearby residential areas of the village of Ryahovo and Babovo which, according to the notification of investment plan of the investor are situated at 1 km to the west and 2 km to the southeast respectively of the future site.

Other activities provided by the investment plan will be carried out on the territory of a private production site situated in the Eastern Industrial Zone of Rousse, near the very busy transport corridor Danube Bridge 1. Noise emissions will be typical of port operations (as shown by measurements at item 1 and item 4 of the table), and usually do not exceed the limit of 70 dB (A) set by Ordinance No 6/2006 of the Ministry of Health and the Ministry of Environment and Waters along the borders of the site. Distance along the river to the bridge over the Danube in Rousse, which is situated next to the site of the Investor, is 29.5 km. Activities carried out on that site will not affect the acoustic environment of the Mishka Island or the adjacent residential areas of Ryahovo and Babovo.

According to the notification of the project developer the investment plan for the extraction of river sediments (sand and gravel) has no direct connection to other approved plans. So at this stage the influence of the project will not combine with other existing or designed projects.

**Based on the above data the noise pollution by production activities in the implementation of the IP will have no impact on the acoustic environment of the surrounding areas from the Republic of Bulgaria or from the Republic of Romania. Therefore transboundary noise pollution cannot be viewed as possible.**

## 2. SUSPENDED SOLIDS POLLUTION

In relation to gravel and sand extraction from alluvium in the bed of the Danube in the region of the Mishka Island (“Golyam Mishka-1” and “Malak Mishka-2”) and “Mishka 3” only local pollution can be expected in the form of increased amount of suspended solids. This may be caused by bucket dredge operation and drainage of water through the drainage system on the barge due to generation of substantial amount of sand particles.

### Discussion of data

According to some experts (hydrobiologists) TSS levels in the Danube River range from 7.7 to 19 mg/l. According to data of other authors, especially from the University of Rouse (2011), TSS varies widely from 39.7 mg/l to 3739 mg/l in different sections along the Danube between km 505 – 376, with maximum value of 100 mg/l. High levels of suspended solids, according to the authors, are registered because of collection of samples during rough weather conditions leading to the presence of sand and SS.

Trace amounts of SS were found during analyzes made by the accredited laboratory of "ViK" Varna on 29 May 2013 at the request of “Gravel and Sand Pits – Bulgaria” EAD, Sofia, in the Mishka area in various sampling points from the surface and at a 1 m depth. The analyses showed very minor deviations within the range of 8.0 – 15.0 mg/l.

The movement of the buckets on the bucket chain (32 buckets) of the dredge during mining works in the bed of the Danube is not expected to cause high water turbidity or create a flow that would increase TSS and sand as the bucket speed is 26 buckets per minute.

In the event of adverse conditions, such as strong waves caused by gusty winds and simultaneous operation of the bucket dredge the values of TSS may rise significantly above the limit referred to in Ordinance No 7 (SG 96/1986) on Indicators and Standards for Determining the Quality of Surface Waters. However, given the hydrological studies in relation to the IP that are averaged over this stretch of the Danube, transboundary pollution is unlikely to occur, taking into account the distance to the border with Romania and the Romanian coast.

This is confirmed by the following data on average perennial water levels and flow rates:

$$Q_{\max} - 10\,956 \text{ m}^3/\text{sec}$$

$$Q_{\text{av}} - 6\,041 \text{ m}^3/\text{sec}$$

$$Q_{\min} - 3\,446 \text{ m}^3/\text{sec}$$

$$V_{\max} - 0.6 - 0.9 \text{ m/sec}$$

$$V_{\text{av}} - 0.5 - 0.7 \text{ m/sec}$$

$$V_{\min} - 0.4 - 1.05 \text{ m/sec}$$

Daily capacity (for 12 h) of the bucket dredge in daylight averages 3 self-propelled barges per day, 1000 tons each. This is the result of the nine-hour travel time of the barges to the quay area in Rouse and as the dredge is expected to have some downtime waiting for the arrival of the each barge the suspended solids will be allowed to settle.

Given that ballasted material is compacted to some extent and the extraction of material is from east to west, i.e. upstream, the possible transportation of suspended solids will be somewhere in the region of 100-150 m along the river as a consequence of the precipitation and self-purification.

It should be noted that contamination within 100 m along the river will be primarily local and not transboundary.

### 3. AIR POLLUTION

#### **Particle emissions**

The technology for extraction of sediment material from the Danube River near the Mishka Island (“Golyam Mishka-1” and “Malak Mishka-2”) and “Mishka 3” is based on the use of floating multi bucket dredger type KS 250. The dredger is equipped with endless multi bucket chain of buckets with capacity of 250 liters. The specific extraction process is carried out via scraping up of sediment material from the bottom of the river by 250-liter buckets. Unloading of alluvial materials extracted by the buckets will be done directly on the drying sieve of the dredger. Drained water will be returned in the river and dried alluvial materials will be transferred to the self-propelled barges via rubber belt conveyor. In the process of unloading of extracted ballast in the barge the solid phase is precipitated at the bottom of the barge and the water remains above it. When the amount of useful material increases, the water level rises and reaches the holes in the barge walls from where excess water flows back into the river. There are drainage pipes at the bottom of the barge that drain the remaining water for maximum drying-out of the material. Drainage water will be pumped back into the river by pumps with maximum flow rate of 260 m<sup>3</sup>/h.

From the above described technology it becomes clear that the primary material is an aqueous suspension of sediments, which is poured onto the barge. After draining of the excess water on the barge remain deposits with maximum moisture content. This high humidity of the extracted materials precludes creating conditions for generating solids during dredging, loading and transportation to the unloading site in Rousse.

The ballast is unloaded at the bulk site by a clamshell crane and directly loaded onto tipper trucks. The high moisture content of the material precludes the emission of dust. In rare cases, only in the absence of regular supply of tipper trucks, the crane will unload the bulk material along the crane path. River sediments from the longitudinal embankment will be loaded on four 27-ton dump trucks by a front loader. Loaded river deposits will be transported by the vehicles. Even in these cases, the possibility of considerable dust emissions is very small. It is important to note that during drainage water washes away mainly the finer particles which are returned in the river with the drainage water. Thus, even after moisture reduction during prolonged stay of the bulk cargo on site, partial drying will occur only in the surface layer of the pile. During loading the ballast is compounded by the front loader thus creating homogenized layers in terms of humidity. Probability of emission of particles is very small, but if such emission occurs, it will contain fine particles of less than 10 μm (PM -10).

Emission of particles will lastly occur by the movement of trucks on the transport distance to the crushing, washing and sorting installation (CWSI) for the treatment of river sediment deposits from the Danube and to the concrete plant located on plot of land with identifier 63427.8.1076 of neighborhood 1 as per the plan of the city of Rousse, Eastern industrial Zone. In this case the result will be suspended particles from the road lanes (road debris) as a result of the movement of trucks. This process of the generation of particles, however, depends mainly on the amount of road debris on the road lanes, vehicle speed, vehicle weight and traffic intensity. At maximum output (1500 m<sup>3</sup>/h or 2400 t/h) dump trucks will make about 90 courses in 16 hours (two-shift operation) or about 6 courses per hour. This is a low intensity, which cannot yield high daily average values. This secondary emission of dust can be reduced by improving the condition of the pavement along transport corridors and systematic irrigation (watering) of road debris.

#### **Greenhouse Gases**

Emissions of greenhouse gases will inevitably occur due to the operation of equipment powered by diesel engines. The engines of the dredge and barges are fuelled by diesel. The



engines of the front loader and four dump trucks at the unloading site are also fuelled by diesel. The mining (dredging) site is situated at a distance of more than 30 km. from the unloading site (Rousse) thus preventing deposition of engine emissions.

The emission levels of the dredge and barge are within the normal range for commercial vessels on the Danube. Although such emissions will be generated they will not cause a significant deterioration of the air quality in the region of extraction, or in more distant areas.

**Implementation of the investment plan for the extraction of sand and gravel in the Mishka Area (from 462.0 km to 459.4 km) near the village of Babovo, Slivo pole Municipality, Sliven area, Rousse region cannot lead to air pollution with particles and PM - 10 to levels that would significantly deteriorate air quality in the mining area or at the unloading site. Secondary air pollution by dust may occur as a result of transport by trucks of sand and gravel to the crushing, washing and sorting installation (CWSI) for treatment of river sediment deposits from the Danube. Secondary contamination can be assessed as low mainly due to the weak intensity of dump trucks (an average of 6 courses for two work shifts). This secondary pollution can be limited by systematic spraying of transport routes with larger amount of road debris.**

**Air pollution from the internal combustion engines of the dredge and barges falls within the norm for the Danube. It cannot result in excessive air pollution.**

**In both cases (dust and greenhouse gases) pollution is expected to be minimal and localized, and not transboundary.**

#### **4. DESCRIPTION OF INVESTMENT PLAN ITEMS WHICH, ALONE OR IN COMBINATION WITH OTHER PLANS, PROGRAMS OR PROJECTS/INVESTMENT PLANS COULD HAVE TRANSBOUNDARY IMPACT ON PROTECTED AREAS**

Object and purpose of the investment proposal is extraction of sand and gravel (alluvium) from the bed of the Danube in the Mishka area for extraction of sediment deposits in the Bulgarian part of the Danube River (from 462.0 km to 459.4 km) to the north of the village of Ryahovo and the village of Babovo and to the north and northwest of the Mishka Island ("Golyam Mishka-1" and "Malak Mishka-2"). Fairway and the main waterway passes to the north of the islands along the much deeper arm.

The territory of the Mishka mining area falls within the boundaries of protected areas - Natura 2000 under the Biodiversity Act - in a protected area BG0000377 "Kalimok-Brushlen" for conservation of natural habitats and of wild flora and fauna, as well as within the protected area BG0002030 "Kalimok Complex" for conservation of wild birds.

The only protected area located in Romania across the Bulgarian coast between the city of Marten and the village of Ryahovo, Rousse Region, is ROSPA0090 Ostrovu Lung-Gostinu, with an area of 2,489 ha encompassing two Danubian islands, harbor area of the Danube to the fairway and coastline. The protected area is situated along the Romanian bank with total length of about 19 km at about 500 m northwest of the border of the investment proposal site within Bulgarian territory.

Subject to protection in this protected area are 119 bird species. The wetlands on both banks of the Danube, covered by large marshes in the past play the most important role in preservation of said species.

##### **Area of intervention**

Practical implementation of IP within the territory of the Republic of Bulgaria will not have transboundary negative impact on the structure, function and conservation objectives of

the ROSPA0090 Ostrovu Lung-Gostinu protected area designated for the conservation of natural habitats and wild fauna and flora due to the following considerations:

### **Structure**

In the implementation of IP related to extraction of sand and gravel from alluvial deposits in the bed of the Danube bed, Mishka area (km 462.0 - km 459.4) near the village of Babovo, Slivo pole Municipality there will be no cross-border negative impact that could adversely affect the structure of PA ROSPA0090 Ostrovu Lung-Gostinu, for the following reasons:

1. The area for extraction of aggregates in the present IP is located in the bed of the Danube and exploited below the water surface. Extracted materials will be transported by water. For these reasons, the structure of the protected area ROSPA0090 Ostrovu Lung-Gostinu along the Romanian coast is unlikely to be affected either directly or indirectly by the elements of IP.
2. Reduction in the size of any protected habitat in the area is not expected.
3. IP does not extend beyond the territorial waters of the Danube and does not affect any target plant species or their habitats in the Romanian protected area ROSPA0090 Ostrovu Lung-Gostinu.
4. In terms of the structure of animal species subject to conservation the protected area will not suffer any direct or indirect negative effects due to:
  - The extraction of aggregates in the river bed is at a distance of 300-500 m from the Romanian coast line where the protected area is located.
  - There is no scientific evidence of the negative impact of this activity on the biodiversity of Hydrofauna or protected species.
  - The area of IP for the extraction of aggregates is negligible compared to the total area of the river and is close to the fairway where the strong current and high water level make the existence of most species impossible.
  - The structure of benthic hydrocenosis along the Romanian bank will not be affected because of its distance from the borders of the IP site.

### **Functions and environmental goals**

Functional implementation of IP for extraction of aggregates will have no impact on PA ROSPA0090 Ostrovu Lung-Gostinu under the Habitats Directive, for the following reasons:

- IP extraction of aggregates from the Danube does not extend beyond the Bulgarian territorial waters and does not affect the protected area ROSPA0090 Ostrovu Lung-Gostinu, or disrupt protected habitats.
- IP does not provide for negative impact on the density, size or functional structure of populations of species beyond the IP borders in ROSPA0090 Ostrovu Lung-Gostinu subject to conservation.

### **Loss of habitats**

Assignor of the IP for the extraction of aggregates from the Danube bed has coordinated the investment proposal with the Executive Agency for Exploration and Maintenance of the Danube Mishka area for carrying out mining operations. IP provides for compliance with the required distance between the extraction areas and the Bulgarian coast and fairway of the Danube, where there is traffic of commercial vessels.

The following habitat classes exist within the ROSPA0090 Ostrovu Lung-Gostinu protected area:

Habitat Classes	% Cover
Coastal sand dunes, Sand beaches, Machair	4.00
Inland water bodies (Standing water, Running water)	39.00
Extensive cereal cultures (including Rotation cultures with regular fallowing)	10.00
Improved grassland	4.00
Broad-leaved deciduous woodland	43.00
<b>TOTAL HABITAT COVER</b>	<b>100 %</b>

Practical implementation of the IP will take place away from the ROSPA0090 Ostrovu Lung-Gostinu protected area located along the Romanian coast. Given that, the implementation of IP for the extraction of aggregates is not expected to lead to transboundary direct or indirect loss of habitats in the protected area.

The territory of the IP excludes habitat types under the protection of ROSPA0090 Ostrovu Lung-Gostinu, which is why IP will not lead to the reduction in size or negative impact on natural habitats, subject to conservation or the adjacent protected area.

The territory of the IP for the extraction of aggregates does not harbor plant species subject to protection in the ROSPA0090 Ostrovu Lung-Gostinu protected area, and therefore cross negative impact on these species and their habitats is not expected.

The investment proposal for extraction of inert materials does not involve habitat loss or negative impact on populations of species subject to conservation within the ROSPA0090 Ostrovu Lung-Gostinu protected area.

Hydrofauna in the Romanian territorial waters is not expected to suffer habitat loss, given the current status of the middle current where transport vessels are passing. The Investment Proposal is outside the Romanian territorial waters and far from the coastline (at about 500 m), along which the ROSPA0090 Ostrovu Lung-Gostinu protected area is located.

#### **Fragmentation**

The location and size of the area for extraction of inert materials does not imply fragmentation of PA ROSPA0090 Ostrovu Lung-Gostinu or any of its components subject to protection within this area. The Romanian protected area is outside the scope of the practical implementation of the IP.

#### **Disruption of species composition**

Such effects are not expected for any of the target species subject to protection within PA ROSPA0090 Ostrovu Lung-Gostinu. The area is outside the scope of the project and the extraction of aggregates cannot have any impact on the species composition of protected species - mammals, invertebrates, reptiles or amphibians.

Transboundary impacts are not expected on nearby wetland of international importance (Ramsar sites) ROSPA 0022 (Comana Natural Park) under the Birds Directive, which has a total area of 24 963 ha and is located 10 km from the IP. The same applies to

another protected area, ROSCI 0043 (Comana) under the Habitats Directive with a total area of 26 481 ha, which also stands at about 10 km from the mining activities.

**Practical implementation of IP for extraction of aggregates within the Mishka area is not expected to have a negative transboundary impact on the ROSPA0090 Ostrovu Lung-Gostinu protected area, located along the bank 500 m away from the area for extraction of aggregates in Bulgarian territorial waters or on ROSPA 0022 (Comana Natural Park) or ROSCI 0043 (Comana).**

All presumed environmental impacts of the proposed activity are of local nature and negligible in volume and scale. Technology for extraction does not imply quantitative or qualitative changes in river water either in the Bulgarian or in the Romanian sector of the Danube. Some changes are expected in the TSS rate, which, however, will remain on a local scale and the physical indicator of river water will be quickly restored by self-purification (precipitation) without affecting river water on the Romanian coast.

The Investment Proposal foresees the implementation of good industrial practices in this area and inclusion of technical facilities with good technical and environmental characteristics.

Subject to the technology for the extraction of alluvial material from the bed of the Danube, transboundary negative impact is not expected within the designated area.

## 5. HEALTH RISK ASSESSMENT

Health risk assessment is an indelible part of environmental impact considerations. The health risk is the likelihood of occurrence of adverse changes in health status caused by the specific impact of adverse health factors. In the case of extraction of sand and gravel from alluvial deposits in the bed of the Mishka area of the Danube (from 462.0 km to 459.4 km) near Babovo, Slivo pole Municipality, Rousse Region, the adverse health factors will include noise pollution, suspended solids and PM air pollution. In the preceding paragraphs a detailed analysis was made of the impact of these factors on the environment and the scale of potential impact.

Although at present there are no specific legal regulations, as per old Ordinances the protection area for such sites is 300 meters. On site it was established that within said 300-meter zone surrounding the borders of the site for extraction of gravel and sand there are no country homes, or food industry plants or warehouses. The nearest residential areas are those of Ryahovo and Babovo which stand at 1 km to the west and 2 km to the southeast respectively of the project site.

Given the analysis of the expected impact in terms of noise pollution, suspended solids and PM air pollution and the location of the project (Ryahovo - 1 km to the southwest and Babovo - 2 km to the southeast of the project site) the population of the nearest inhabited areas is not likely to be exposed to any harmful influence from the site. The implementation of the investment plan is not expected to pose a health risk.

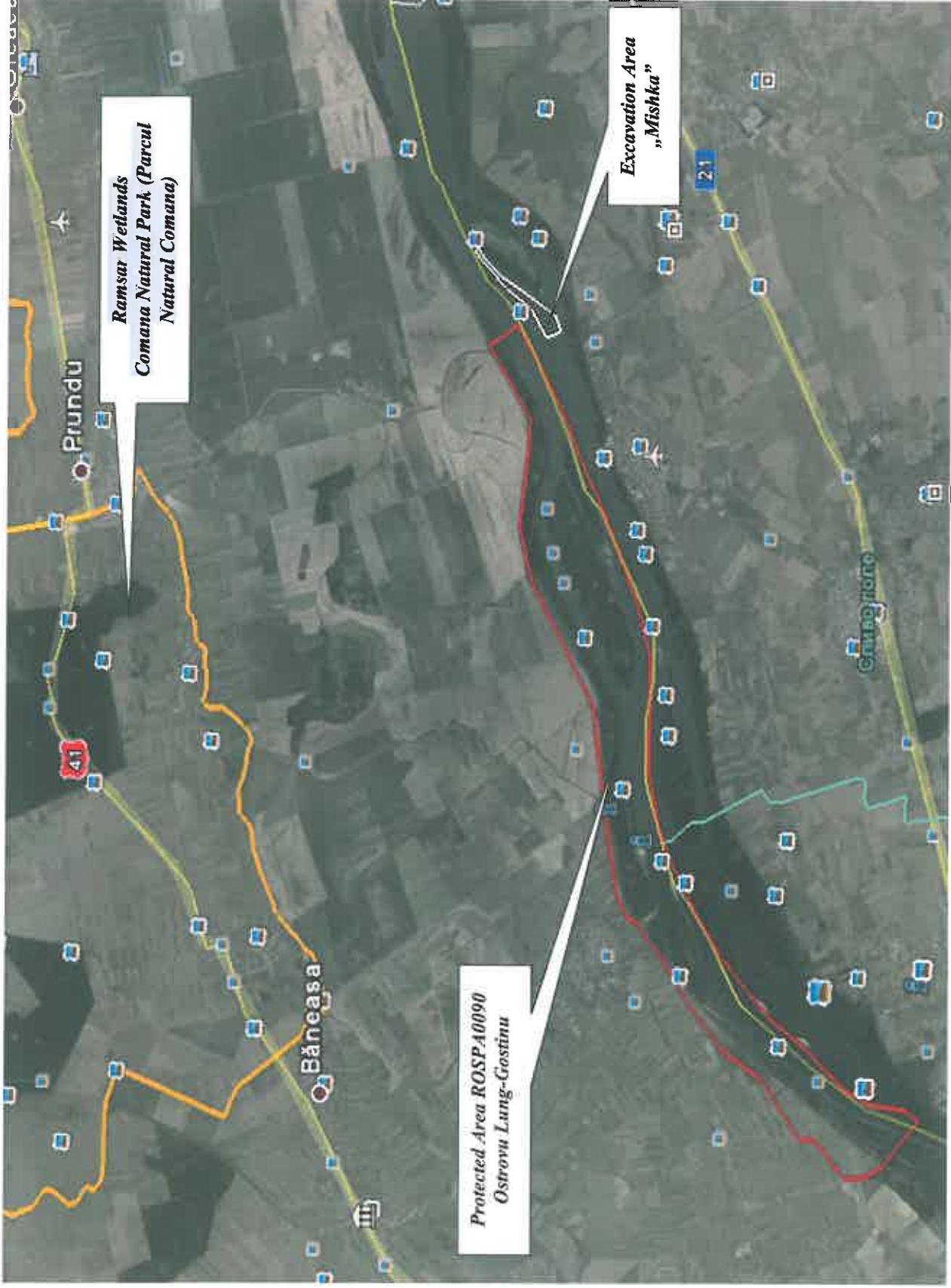
On the territory of Romania there are also two villages – Pueni at a distance of about 10 km and Prundu at about 9.7 km from the site.

**Based on the view that the implementation of the Investment Proposal would not pose a health threat to the residents of Babovo and Ryahovo, this can also be said about the Romanian villages, so transboundary pollution would not be an issue.**

**Everything said so far regarding noise pollution, suspended solids, health risks, and the unlikelihood for negative impact on the habitat of the Romanian protected area ROSPA0090 Ostrovu Lung-Gostinu and on areas ROSPA 0022 (Comana Natural Park) and ROSCI 0043 (Comana) confirms that the implementation of the Investment Proposal for extraction of sand and gravel from alluvial deposits in the bed of the Mishka area of the Danube (from 462.0 km to 459.4 km), near the village of Babovo, Slivo pole Municipality, Rouse Region, would not cause transboundary impact or pollution.**

.....  
Alexander Chakmakov  
Executive Director





*Diagram of the actual Excavation Area and Protected Area ROSPA0090 Ostrovu Lung-Gostinu and Ramsar Wetlands*







**МИНИСТЕРСТВО НА ОКОЛНАТА СРЕДА И ВОДИТЕ**  
**ИЗПЪЛНИТЕЛНА АГЕНЦИЯ ПО ОКОЛНА СРЕДА**  
**ГД „ЛАБОРАТОРНО – АНАЛИТИЧНА ДЕЙНОСТ“**  
**Регионална лаборатория Бургас - 03**

8001, гр. Бургас, ул. „Первомай“ № 67, п.к. 675, тел./факс: 056/ 813209, e-mail: rlbargas@omva.com.bg

Лист 1  
Всичко листове 2

**ПРОТОКОЛ ОТ ИЗПИТВАНЕ**

**№ 03-0663**  
от 15.08.2013 г.

Акредитирана лаборатория за изпитване  
Сертификат № 135 ЛИ/08.07.2013г./валиден до 30.09.2015 г.  
издаден от ИА БСА, съгласно БДС EN ISO/IEC 17025

**1. Шум**

(наименование на продукта)

**2. Заявител на изпитването:** „Биоинформ Консулт“ ООД, гр.Бургас, ул.„Успенска“ №3,  
Договор № 40/06.08.2013 г., Протокол за проведени контролни/собствени измервания на  
нивата на шум № 870/13.08.2013 г.

(наименование и адрес на заявителя; основание за изпитване; номер и дата на протокола за проведени контролни/ собствени измервания на нивата на шум)

**3. Метод за изпитване:** ВВЛМ 3001/2010

(номер на стандартизирани или валидираните методи)

**4. Период на измерване:** дневно ниво на шум – от 12:30 ч. до 18:00 ч.

(ниво на шум - дневно, вечерно, нощно и време на измерване)

**5. Брой измерителни точки:** 8 броя,

4 броя измерителни точки (ИТ) в аналогични на проектирания обект източници на шум:

- 2199 Ш – ИТ 1 - кей за насипни товари ИзПЗона-Русе;
- 2201 Ш – ИТ 3 - преминаваща баржа на около 350м от о-в Мишка;
- 2205 Ш – ИТ 7 - дълбачка до о-в Алеко;
- 2206 Ш – ИТ 8 - пресевна инсталация до гр.Мартен;

1 ИТ – фонова:

2200 Ш – ИТ 2 - р.Дунав срещу о-в Мишка - бъдещият обект;

3 ИТ – в място на бъдещо въздействие:

- 2202 Ш – ИТ 4 - с.Ряхово жилищна зона;
- 2203 Ш – ИТ 5 - с.Бабово жилищна зона;
- 2204 Ш – ИТ 6 - с.Сандрово пристан.

(брой, код (№) на извадките и описание на измерителните точки, брой измерителни контури)

**6. Дата на извършване на изпитването/измерването:** 12.08.2013 г.

**Ръководител на лабораторията:**

инж. Т. Михалев  
(фамилия, подпис, печат)

**ВЯРНО С  
ОРИГИНАЛА**

## 7. Резултати от изпитването/ измерването:

№ по ред	Наименование на характеристиката	Единица на величината	Стандартизирани/ валидирани методи	Код (№) на извадката по вх.-изх. дневник	Резултати от изпитването (стойност, неопределеност)	Стойност и допуск #	Условия при изпитването
1	2	3	4	5	6	7	8
1	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2199 III	67,7±0,3	-	средна температура на въздуха = 31,5°C,
2	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2200 III	31,2±0,3	-	
3	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2201 III	79,5±0,3	-	
4	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2202 III	42,1±0,3	55	относит. влажност на въздуха = 60,2%,
5	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2203 III	39,5±0,3	55	
6	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2204 III	40,5±0,3	-	средна скорост на вятъра = 0.5m/s
7	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2205 III	86,5±0,3	-	
8	Еквивалентно ниво на шума	dB(A)	ВВЛМ 3001/2010	2206 III	68,6±0,3	-	

**Легенда:** # - съгласно Наредба № 6/26.06.2006 г. за показателите на шум в околната среда, отчитащи степента на дискомфорт през различните части на денонощието, граничните стойности на показателите за шум в околната среда, методите за оценка на стойностите на показателите за шум и на вредните ефекти от шума върху здравето на населението, Приложение № 2, Таблица № 2.

- Забележки:**
1. Ако е необходимо, протоколът от изпитване може да включва мнения и интерпретации за определени изпитвания (заклочения не се допускат) само в съответствие с изискванията на т.5.10.5 от БДС EN ISO/IEC 17025.
  2. Резултатите от изпитванията се отнасят само за изпитваната извадка. Извлечения от изпитвателния протокол не могат да се размножават без писмено съгласие на лабораторията за изпитване.
  3. Неразделна част от протокола за изпитване е протоколът по Приложение № 3 към чл.19 от Наредба № 54/13.12.2010 г. и план скица на територията на промишления източник.

**Провел изпитването:**

Р.Минчева  
(фамилия, подпис)

**Ръководител на лабораторията:**

инж. Т. Михалев  
(фамилия, подпис, печат)

ВЯРНО  
ОРИГИНАЛ



**МИНИСТЕРСТВО НА ОКОЛНАТА СРЕДА И ВОДИТЕ**  
**ИЗПЪЛНИТЕЛНА АГЕНЦИЯ ПО ОКОЛНА СРЕДА**  
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3001, пр. Бургас, ул. „Партизани“ № 67, в.к. 675, тел/факс: 056/ 81 5209, e-mail: rburgas@mbaх.com.bg

Акредитирана лаборатория за изпитване  
 Сертификат №135 ЛИ/08.07.2013г./валиден до 30.09.2015 г.  
 Издаден от ИА БСА, съгласно БДС EN ISO/IEC 17025

Обект: Кабинети за сакса и парк „Ботаника“ ЕА  
 Подобект: Улицата „Минько“ общ. Сливница  
 Град: гр. Сливница, ул. Улицата „Минько“ общ. Сливница  
 Адрес: гр. Сливница, ул. Улицата „Минько“ общ. Сливница  
 Телефон: 0899911153  
 ЕМК/Булстат: 110055220

**ПРОТОКОЛ № 270, 13.08.2013г.**  
**ЗА ПРОВЕДЕНИ КОНТРОЛНИ/СОБСТВЕНИ ИЗМЕРВАНИЯ**  
**НА НИВАТА НА ШУМ**

**I. Данни за промишления източник на шум:**

- Предмет на дейност: Изпитания за шум на инертни материали (пясък и скала) от рудното м-р. Рудна в с.к.м. 462 до км 459,4
- Местоположение на промишления източник на шум:  
 – описание съгласно Наредба № 6 от 2006 г. за показателите за шум в околната среда, отчитащи степента на дискомфорт през различните части на денонощието, граничните стойности на показателите за шум в околната среда, методите за оценка на стойностите на показателите за шум и на вредните ефекти от шума върху здравето на населението (жилищни зони и територии, централни градски части, територии подложени на въздействието на интензивен автомобилен трафик, територии, подложени на въздействието на релсов железопътен и трамваен транспорт, територии подложени на въздействието на авиационен шум, производствено-складови територии и зони, зони за обществен и индивидуален отдих, зони за леденби заведения, зони за научноизследователска и учебна дейност, тихи зони извън агломерациите) Улицата „Минько“ общ. Сливница  
 - местоположение на мястото на въздействие (адрес, отстояние в метри до промишления източник, описание на съответната устройствена зона и територия) с. Рудна в с.к.м. 462; с. Бидево в с.к. 4км, жилищни зони

- Въздействие на източника на шум – продължителност на работа в часове: 1
- Описание на основните източници на шум в границите на промишления обект:  
По посоки: врата, електричните кранове, автомобилни трансмисии, самоходен машин

**II. Условия на провеждане на измерването:**

- Описание на метеорологичната обстановка:  
Ясно, T<sub>оп</sub> = 31,5° C, RH<sub>оп</sub> = 60,2%, V<sub>ср</sub> = 0,5 m/s  
 (при наличие на апаратура - данни за температура, налягане, влажност, скорост на вятъра)
- Описание на режима на работа и натоварването на мощностите:
- Наличие на шум от източници, несвързани с дейността на обекта (шум от близко разположена транспортна артерия, от съседен обект и др.) Прелинаващи бавни транспортни средства
- Разположение на измерителните точки:  
В с.к.м. 462 от агломерацията източници на шум на проектираната обикл., 1 мт факела, 3 мт в мястото на въздействието

**III. Резултати от измерването:**

Начало на измерването:	<u>12.08.2013г; 12:30ч</u>	Край на измерването:	<u>13.08.2013г; 18ч</u>
	(дата и час)		(дата и час)

Използвани технически средства за измерване: Интегриращ шумомер “Bruel&Kjaer”- “Mediator 2238”, № 2285788; звуков калибратор “Bruel&Kjaer 4231”, № 2309165; анемометър “Extech 45158”, № 12205  
 (наименование, тип, идентификационен номер)

№ по ред	Описание на точката (измерителна точка – ИТ) съгласно <u>Закон</u> на <u>Кметта</u>	Еквивалентно ниво на шум dB(A)	Скорост на вятъра, m/s	Код (№) на извадката от вх.-изх. дневник
1.	<u>ИТ1 – кат за нашинитовари ИЗ-Русе</u>	<u>65,4</u>	<u>0,9</u>	<u>21099 III</u>
2.	<u>ИТ2 – Рудна в с.к.м. 462 – община Сливница</u>	<u>65,4</u>	<u>0,2</u>	<u>2200 III</u>

1	2	3	4	5
3.	ИТЗ - преминаваща барьера на ул.350м и Машка	79,5	0,0	2201 II
4.	ИТЧ - с. Рахово	48,1	0,0	2202 III
5.	ИТЗ - с. Бабико	39,5	0,0	2203 III
6.	ИТБ - с. Сандраво - пр.метан	40,5	1,3	2204 II
7.	ИТЗ - Фабрична до в-в.Алеко	86,5	0,9	2205 II
8.	ИТЗ - гр. Мартен - преминаваща инсталация	68,6	0,0	2206 II
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Изчислените резултати по „Методика за определяне на общата звукова мощност, излъчвана в околната среда от промишлено предприятие и определяне нивото на шума в мястото на въздействие” се отразяват в Протокол от изпитване.

Настоящият протокол се изготви в два еднакви екземпляра по един за всяка страна.

Извършил измерването:

1. Тодина Мичева, г. специалист  
(име, фамилия, длъжност)

Подпис:

[Signature]

Законен представител на оператора на промишления източник или упълномощено от него лице:

1. Доч. С. Виларски, Управител, Бизнис Консулт. Вел  
(име, фамилия, длъжност) (подпис)

Свидетели: \*

1. ....  
(име, фамилия, длъжност)

(подпис)

2. ....  
(име, фамилия, длъжност)

(подпис)

Дата: 17.08.2013г.

Приел извадките за изпитване: [Signature]  
(име, фамилия)

Подпис:

[Signature]

\*Попълва се в случай, че законният представител на оператора или упълномощеното от него лице откаже да подпише протокола.