SERBIA ACCELERATING INNOVATION AND GROWTH ENTREPRENEURSHIP (SAIGE) PROJECT

Program PRISMA

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

CHARACTERISATION AND TECHNOLOGICAL PROCEDURES FOR RECYCLING AND REUSING OF THE RUDNIK MINE FLOTATION TAILINGS (REASONING)

FINAL DOCUMENT

Belgrade, 28/12/2023

TABLE OF CONTENTS

Contents

ABBREVIATIONS AND ACRONYMS	3
EXECUTIVE SUMMARY	4
LEGAL AND ADMINISTRATIVE FRAMEWORK	4
PROJECT DESCRIPTION	6
BASELINE DATA FOR RUDNIK MINE	8
ASSESMENT OF THE POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS OF SPECIFIC THE PROJECT	
Potential impact on sampling site	11
Potential impact on the health and safety of workers	12
Potential impact of generated waste	12
Potential impact of working in laboratories	13
Potential social impact	13
MITIGATION PLAN	15
MONITORIN PLAN	20

PUBLIC CONSULTATION DETAILS AND MINUTES OF MEETING FOR THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN, in separate document

ABBREVIATIONS AND ACRONYMS

SRO Scientific Research Organization

IMI Institute for Medical Research

FMGUB Faculty of Mining and Geology, University of Belgrade

ITNMS ITNMS Institute for Technology of Nuclear and Other Mineral Raw Materials,

Belgrade

IMSI Institute for Multidisciplinary Research, University of Belgrade

IGPC Institute of General and Physical Chemistry

TF Bor Technical Faculty in Bor, University of Belgrade

IPB Institute of Physics Belgrade, University of Belgrade

EIA Environmental Impact Assessment
OHS Occupational Health and Safety

SOP Standard Operating Procedure

FWP Food and Waterborne Parasites

SF Science Fund of Republic of Serbia

PIU Project Implementation Unit

ESMP Environmental and Social Management Plan

EXECUTIVE SUMMARY

The environmental and social checklist screening carried out during the evaluation of the project is consistent with the ESMF classification and ranked the project as of moderate risk.

The screening result shows that this project has *low risk* considering and covered by ethics (Ethical approvals obtained) and *moderate* considering the environment.

The purpose of the Environmental and Social Management Plan (ESMP) is to highlight the negative environmental impacts and management problems during the preparation and implementation of the research project REASONING CHARACTERISATION AND TECHNOLOGICAL PROCEDURES FOR RECYCLING AND REUSING OF THE RUDNIK MINE FLOTATION TAILINGS (REASONING) awarded through the PRIZMA program by the Science fund of the Republic of Serbia.

The contents of this ESMP document are a brief project description with a background which is relevant for the assessment, including the current state of the environment in which the project will be realized, the legal framework which accompanies project realization, identification of sensitive receptors, potential impact and impact assessment. The key components of this document are the mitigation and monitoring plans.

Therefore, this ESMP is focused on all aspects of health and safety during sampling, preparation of concentrate from drilled cores and Rudnik tailings, analyses, and management of all kinds of waste that will be produced. Document is focused on health and safety, and environmental protection during project realisation, in particular on potential risks including accidents during realisation of the Project and mitigation measures proposed. To note that the necessary documents of Rudnik mine related to environmental protection of the flotation waste disposal and related health, safety and first aid measures for workers are in place¹ and possible available upon request (tbc).

This ESMP is therefore prepared to set out specific mitigation, monitoring, and institutional measures to be taken during implementation to eliminate adverse environmental and social impacts, offset them or reduce them to acceptable levels.

Project environmental and social risk is moderate. As noted above, there are specific environmental risks related activities out of SROs (collecting samples) and work in participating SROs laboratories. There are specific social risks associated with sampling - all raised concerns can be readily addressed through mitigation measures.

LEGAL AND ADMINISTRATIVE FRAMEWORK

LEGAL FRAMEWORK

Relevant laws of the Republic of Serbia

Law on Science and Research ("Official Gazette of RS", No. 49/19),

Law on Waste Management ("Official Gazette of RS", no. 36/2009, 88/2010, 14/2016, 95/2018),

¹ Agreement on cooperation with Rudnik Mine; Decision on the Acceptance of the Environmental Impact Assessment Study of the Tailings Dam No. 9 of the "Rudnik" Mine and Flotation.

Low on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, 95/2018, 40/2021),

Rulebook on classification and categorization of solid mineral resources and the way to keep the evidence, 1979. Official Gazette of SFRY 53/79 (in Serbian).

Rulebook on conditions, criteria and content of projects for all types of geological research (Official Gazette of RS", no. 45/2019, 72/2021).

Law on Environmental Protection ("Official Gazette of RS", No. 135/2004, 36/09 and 36/2009, 72/2009, 43/2011, 14/2016, 76/18 and 95/18),

Law on Nature Protection ("Official Gazette of RS", no. 36/2009, 88/2010, 91/2010, 14/2016, 95/18 and 71/21),

Law on Fire Protection ("Official Gazette of RS", No. 111/2009, 20/2015, 87/2018, 87/2018),

Law on Free Access to Information of Public Importance ("Official Gazette of RS", No. 120/2004, 54/2007, 104/2009 and 36/2010),

Law on Chemicals ("Official Gazette of RS", No. 36/2009, 88/2010, 92/2011, 93/2012 and 25/2015)

Legal framework for drilling, drilling monitoring and sampling is defined by the Low on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, 95/2018, 40/2021), and for drilling within the exploitation field no permits are required. For all tests and analyses the most important laws are Law on Environmental Protection ("Official Gazette of RS", No. 135/2004, 36/09 and 36/2009, 72/2009, 43/2011, 14/2016, 76/18 and 95/18), and Law on Waste Management ("Official Gazette of RS", no. 36/2009, 88/2010, 14/2016, 95/2018).

Mining waste management is based on "Law on Mining and Geological Exploration". The development of mining waste management is related to "Regulation on Conditions and Procedure for Permit of Waste Management, as well as criteria, characterization, classification and reporting on mining waste". The Regulation was published in the Official Gazette of RS No. 53/2017, and became valid on 01.01.2020. This regulation is compliant with the European "Directive 2006/21 / EC of the European Parliament and of the Council of 15 March 2006 on the Management of Waste from Extractive Industries and Amending Directive 2004/35/EC"

Relevant Institutions

Institutional framework is based on the Business and Technical Cooperation Agreement between FMGUB as leading SRO and Rudnik mine, and Confidentiality Agreement between FMGUB as leading SRO and Rudnik mine. Before the execution of field work, FMGUB will prepare another contract with Rudnik mine related to access to cores, measurements during drilling and using all data necessary for REASONING Project realisation.

All acts and documents of Project SROs relevant for project realisation are with mitigation measures and monitoring plan.

The roles of SROs in the context of the ESMP are provided in the table with mitigation measures planned.

PROJECT DESCRIPTION

Project Proposal Title: CHARACTERISATION AND TECHNOLOGICAL PROCEDURES FOR RECYCLING AND REUSING OF THE RUDNIK MINE FLOTATION TAILINGS

Acronym: **REASONING**Leading SRO: **FMGUB**

In the REASONING Project will be involved thirteen researchers: four (4) from the Faculty of Mining and Geology; University of Belgrade (FMGUB), four (4) from the Institute for Technology of Nuclear and Other Mineral Raw Materials, (ITNMS), one (1) from the Institute for Multidisciplinary Research, University of Belgrade (IMSI), one (1) from the Institute of General and Physical Chemistry (IGPC), two (2) from the Technical Faculty in Bor, University of Belgrade (TF Bor), and one (1) from the Institute of Physics Belgrade, University of Belgrade (IPB). The project duration is 3 years, as per the funding propositions.

The aims of the REASONING project are detailed mineralogical and geochemical characterisation of tailings from the active Rudnik mine and define procedures, and technological solutions for recycling and reusing the part of "cleaned" material.

Implementation phase of the Project includes: 1) WP 1 Project management and coordination, Lead SRO - FMGUB; 2) WP 2. Mineralogical and geochemical characterization, Lead SRO – ITNMS, Involved SRO – FMGUB, IMSI, IGPC, IPB; 3) WP 3. Electrochemical separation and extraction of elements Lead SRO – IGPC, Involved SRO – IMSI, TFBor; 4) WP 4. Technological investigation and procedures for the valorization of useful components from the tailing material, Lead SRO – ITNMS, Involved SRO – TFBor; WP 5. Dissemination and communication activities, Lead SRO – FMGUB, Involved SRO – ITNMS, IGPC, IPB.

The REASONING Project will be located:

- 1) One part on the Rudnik mine flotation tailings (WP 2.1. Sampling core material and pore fluid for physical-chemical measurements);
- 2) Second part in the laboratories of the FMGUB (WP 2.2), IMSI (WP 2.3; WP 3.1 and 3.2), IPB (WP 2.5) and
- 3) Third part in laboratories of the ITNMS (WP 2.4, WP 4.1. 4.3) and TFBor (WP 4.2).

Rudnik mine flotation tailings

Rudnik is an active mine with approximately 448 employees. The Mine and Flotation Rudnik doo is located 5 km southwest from Rudnik village, and 100 km south of Belgrade, capital of Republic of Serbia, in the municipality of Gornji Milanovac, in Moravica district. The largest settlement near the flotation tailings is Rudnik with 1,490 inhabitants. From the flotation tailings dam, the closest facilities for individual housing are located at a distance of approximately 110 m west of the border of the complex. Four households are located in the area of flotation plant and flotation pond, as seen in Figure below.

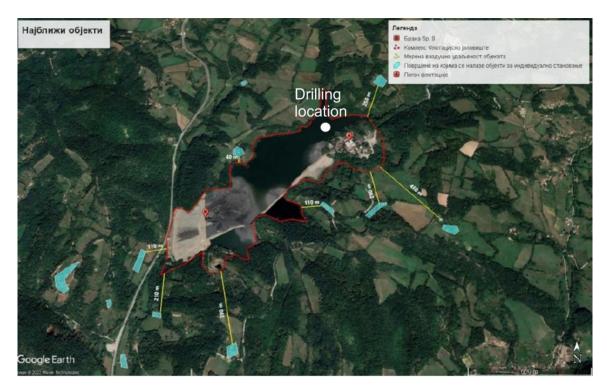


Figure: Location of flotation plant (A), flotation pond (red line) and the households (blue shapes). The location of drilling is marked with white circle.

The aims of the REASONING project are detailed characterisation of tailings with focus on the content of different elements such as Pb, Zn, Cu, Au, Ag, Bi, W, REE, PGE, selected critical minerals, and defining new knowledge, procedures, and technological solutions which will enable recycling and reusing of part of the flotation tailings from the "Rudnik" mine. Realization of project investigation will have no influence on disruption of their activities, except for a short period while preparing drilling location. Project will not engage anyone from Rudnik mine for our research, all research will be by consortium. No expectation of any injuries, because no one will be allowed to approach the drilling rig while in operation. Minor injuries can always happen but will be highly unlikely because team consists of experienced researchers, who will supervise younger researchers.

To achieve above explained goal, a detailed and multidisciplinary mineralogical, geochemical, and geophysical characterisation of tailings will be performed. Magnetic susceptibility in the flotation tailings will be measured for the first time in Serbia. Based on achieved results, the most efficient mineral processing procedures will be defined by which these useful components may be extracted into marketable products. Therefore, the potential reusing and recycling of such materials should be primary goal, as it improves not only economical, but even more environmental and societal issues. Thee potential application of both raw tailings material, as well as purified from clay and metallic minerals, will be examined, particularly in the construction industry.

Laboratories

Laboratories of the FMGUB, IMSI, IPB, ITNMS and TFBor will be included in the project activities. All SROs from the consortium are working according to the best available practices and have appropriate internal acts to follow the procedures, as mentioned in the mitigation plan.

BASELINE DATA FOR RUDNIK MINE

The mining activity are performed from the Middle Ages to the present days. From the beginning of modern exploitation, Rudnik mine was producing Pb and Zn concentrate and since 1988, when a new mineral processing plant was installed, it produces Pb, Zn, Cu concentrates with Ag.

This part of the ESMP data is based on the Environmental Impact Assessment Study for upscaling of waste disposal and dam Nr. 9 (Rudnik mine), which was approved by the Ministry of Environmental Protection, in accordance with the LAW ON ENVIRONMENTAL IMPACT ASSESSMENT ("Official Gazette of the RS" Nos 135/04 and 36/09).

Rudnik village and mine facilities are located between 500 and 725 m above sea level. The approved exploitation field and exploration field, within which the exploitation and exploration is performed, are mostly on the territory of the Municipality of Gornji Milanovac, and the small part in the territory of the municipalities of Topola, Kragujevac and Knić.

Population

The Rudnik village belongs to the municipality of Gornji Milanovac. In a circle of 1,000 m from the flotation plant, there are only rural households, about a dozen. South of the border of the Northeastern part of the Flotation complex (near the flotation plant), there is a residential area at about 200 m built for temporary stay of mine and flotation workers and one rural household. From the northeast side at about 250 m from the border of the complex, there is a rural household and one weekend facility. Southeast of the flotation plant, there is a rural household, 110 m away from the limit of the complex. Southwest, at about 450 m from the border of the complex, there is also one country household. The nearest village household, in relation to Flotation tailings, is located 40 m from the northern edge of the tailings. Western, at a distance of approximately 110 m from the western border of the flotation complex (near dam no. 9), there are facilities for individual housing. South of the border of the complex, at a distance of 210 and 390 m, are two rural households. All other objects are further than 1,000 m. The flotation plant and tailing pond is surrounded by agricultural land, predominantly meadows, less arable fields, gardens, orchards and forests at steep terrains near the watercourses. No data on vulnerable groups, and the number and structure of that population and how many vulnerable and disadvantaged people live there.

Health and Safety of Rudnik mine

Health and safety system of Rudnik mine is internally regulated, enforce and monitoring. The whole flotation plant and flotation pond area is constantly monitored by the Rudnik mine and there were no accidents since the beginning of operation several decades before.

The case of possible breakthrough of the dam has been seriously defined in EIA study (2023) and Additional mining project of upscaling of tailings and dam no. 9, of flotation tailings of Rudnik mine and flotation - book IX, Hydraulic consequences of the breakthrough of a flotation tailings dam with the system of labeling of the endangered area, 2018.; Preliminary design of System for observation, notification and alarm in case of demolition of Rudnik Dam near Gornji Milanovac, Institute "Mihajlo Pupin", 2010; Study on the notification and alert of the population in the area vulnerable from the demolition of Dam no. 9 "Rudnik", 2007. Project related possible accident, not statistically likely, situations at the location during the project implementation are a breakthrough of the dam (the formation of flood waves as a result), injuries at work (light to severe), traffic accidents, and fire on

installations, equipment. Project measurements and sampling on location for approximately one month or a little more.

Health and Safety of the Population

The impact of the project on the health of the population can be viewed as the impact of the project to the population in the near and further areas. For the area of Rudnik tailing pond there are no data on previously conducted tests on the impact of air quality, water, land and environmental noise on human health.

The professional assessment of potential impacts of human health for a particular territory is implemented by the competent institute for public health.

Geology and Soil

The main rock mass at the location of Rudnik flotation dam no. 9, which is the location of field work of REASONING project, is made of flisch, composed of marlstone and claystone, subordinately sandstone, All these sediments are thin bedded. The soil and caprock outside the flotation pond is poorly developed with thickness of up to 0.5 mln the area of flatation pond there are no landslides that may impact the stability of flotation tailings.

Climate characteristics

The climate of the Rudnik mine complex and flotation tailings disposal is moderate-continental. In the vicinity of the Rudnik, there is no meteorological station included in the observation network of the Republic Hydrometeorological Institute of Serbia.

Seismology

There is a measurement and monitoring of seismological movement at the flotation tailings location. Based on the catalog of the Republic Seismological Institute obtained by the registration of network of seismological stations in the territory of the tailings of the Rudnik mine, a total of 149 seismic events during 2018 were registered in the radius of up to 30 kilometers. 65 earthquakes with magnitude from 0.2 to 1.0 Richter scale, 64 earthquakes with magnitude from 1.0 to 2.0 units of Richter scale, and 2 earthquakes with magnitude from 2.0 to 3.0 units of the Richter scale were detected.

Air quality

The most common winds of the greatest intensity come from the direction of northwest and southeast. Under the influence of these winds, potentially polluting exausting gasses from drilling rig from the project site may have a negligible impact on particular individual housing places, as there is no densely populated places along the direction of these winds. According to EIA study the only possibility of dusting is from the body of the flotation tailings dam no. 9 is possible under the influence of winds from the southeast direction. However, this part of the flotation tailings is on the opposite side of the Project drilling location and will not influence it as it will disperse small amount of exhausting gasses from drilling rig.

Waste

During the technological process of underground excavation of ore and flotation concentrations, two types of waste are generated, which differs by their physical, chemical, mineralogical and toxicological characteristics: 1) flotation tailings and 2) stone waste without mineralization. Flotatical tailings is a very fine grained material that has passed all stages of physical processing. According to

the chemical and mineralogical composition, it is similar to the ore, but with an important change as useful minerals have been removed. This waste is generated as barren with very low concentration of both useful minerals and the remaining potentially hazardous minerals/elements. It comes out in the form of a low concentration suspension suitable for hydraulic transport to the active tailings. All waste management is regulated by Law on Waste Management ("Official Gazette of RS", no. 36/2009, 88/2010, 14/2016, 95/2018), and Low on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, 95/2018, 40/2021).

Water resources

Groundwater wells are determined in alluvial deposits in the Rudnik stream valley downstream from the dam and at depths 1.5 to 2 meters below the surface. In the conditions of the competent authorities for EIA study of upscaling of flotation dam no. 9 there are no wells in the vicinity of the flotation tailings. According to the detailed watercourses regulation "Rudnik flotation" in Majdan village (which includes the project location), there are no sanitary protection zones within the plan. The closest zone of sanitary protection is approximately 4.5 km southeast of the project location. Realisation of the Project will not contribute to the water contamination as the drilling will occur in water-saturated waste material, using freshwater. Quality of surface and underground waters are periodically monitored by the Rudnik mine.

Soil

The soil and caprock outside the flotation pond is poorly developed with thickness of up to 0.5 mIn the area of flotation pond there are no landslides that may impact the stability of flotation tailings. Within the flotation tailings complex there is no soil.

Flora and Fauna

Within the Project site (flotation waste disposal) and in nearby environment, there are no registered rare or endangered plant and animal species.

Noise

In the process of tailings disposal, there are no sources that contributes to an increased environmental noise level. During drilling, slightly elevated noise levels will occur by the engaged drilling rig, but the impact on the nearest household is highly unlikely as it is more than 300 m away.

Cultural heritage

According to the Decision of Nature Protection Institute of Serbia the Project location is not within the protected area for which the protection procedure was either conducted or initiated in the spatial coverage of the ecological network of the Republic of Serbia. On the location or near the location, there are no areas protected by international or domestic regulations due to their ecological, landscape, cultural or other values, which can be affected by the operation of the flotation plant and waste disposal. There are no areas or natural forms of high ambient value in the location or near location. The nearest natural conservation object is a strict natural reserve "Veliki Šturac" located northeast more than 4 km from the location of the flotation tailings. Because of a great distance and natural barriers, a strict natural reserve cannot be compromised by the work of flotation and realization of this Project.

ASSESMENT OF THE POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS OF SPECIFIC TASKS WITHIN THE PROJECT

The SROs implementing the project will ensure, through abiding by the state laws and rulebooks that none of the project related activities will have a disruptive bearing of any kind on the baseline data (in any of its segments, including the soil, air quality, waste, water resources, flora and fauna, or noise levels).

Potential impact on sampling site

Sampling core material and pore fluid for physical-chemical measurements will be performed at specified locations within Rudnik mine flotation tailing. Representative samples will be provided by drilling and sampling of flotation tailings. It is necessary to highlight that from technical point of view project starts after Rudnik mine performs drilling of boreholes. Field work during project realisation is related to Rudnik mine flotation pond and includes physical measurements after boreholes are drilled, as well as sampling of cores for all necessary analyses.

Preparation phase of the REASONING Project includes preparation of all necessary documents for access to the location where boreholes will be drilled and to establish all necessary procedures/instructions related to researcher's safe work on the flotation tailing of the Rudnik mine (and laboratories in SRO who provides chemical analysis).

Complete field work, including drilling of exploration holes, will be performed within the exploitation field of the Rudnik mine, which was approved by Ministry of Mining and Energy. The integral part of exploitation field is the tailings waste disposal, where all exploration works will be performed. To note that the whole tailings area has Environmental Impact Assessment Study for upscaling of waste disposal and dam Nr. 9, which was approved by the Ministry of Environmental Protection. Therefore, all projects' activities within restricted area, including this Project, are with no possibility for any person to enter without permission (as implementing Rudnik mine internal measure from EIA Study).

The drilling will start after procurement of necessary equipment and chemicals and other consumables are acquired, hopefully 3 months after the contract is signed. It is planned to be finished in a month. In total 120 samples will be collected for chemical analyses and approximately 20-30 samples for other analyses and tests. Total amount of such kind of samples will be 250 g per sample. For sampling related to preparation of concentrates and other mineral processing tests it is need for cca 1 ton per sample, in total 5 tons. The REASONING project is based on sampling of drilled flotation waste so it will not create any other amount of waste at the drilling site. Waste that will be produced during preparation of concentrates from drilled and sampled waste will be treated according to the procedures of laboratories and SROs involved in analyses of all materials obtained during realisation of the Project.

The most common causes of accidents in flotation tailings are technical shortcomings (omissions caused by the human factor) and natural disasters. Potentially physical accidents during drilling monitoring, measurements, and sampling, such as small injuries, more serious injuries, snake bites, can occur. Project researchers are not allowed to be near the drilling rig while drilling, which prevents most injuries. All researchers and collaborators must wear PPE - protective clothes and shoes with metal cap, helmets, safety glasses, gloves and ear protection (during drilling). In case of injuries during drilling, it is the duty of subcontractor to perform all health and safety measures, to

provide first aid kit and personal protective equipment. To note that Rudnik mine has internal procedure and a list of persons educated to give first aid. During sampling and field measurements done by SROs, the same procedure will be performed and all SROs involved will monitor these activities. Rudnik mine has its own emergency medical vehicle to transport any injured person to the nearby hospital in Gornji Milanovac. Possible injuries during drilling and sampling have no impact on local community. The leading SRO and PI will be in daily communication with management of the Rudnik mine during field work.

The likelihood of fire as the right situation at the location of the tailings "Rudnik" is very small given the characteristics of the technological process, characteristics of flotation tailings that is disposed and the type of equipment used. During realization of the Project, fire can occur only on the drilling rig, in which case drilling contractor is equipped with fire extinguisher. In case of fire occurrence on electrical installations dry powder and carbon dioxide is used to extinguish.

The location of flotation tailings consists of poorly populated areas. In the project location, as well as nearby, there are no especially sensitive receptors (natural habitats, hospitals, schools, kindergartens, etc). The potential impact on local population is negligible as the nearest household is more than 350m away from the drilling site. The realization of the project will not lead to migration and changes to the concentration of the population. Bearing in mind that the flotation tailing is in line with spatial planning documentation, Project realization will not produce an impact on concentration and migration of the population. The nearest households are more than 400 m away and both are protected additionally by small hills. There is no dust as the flotation pond is covered by water and waste material that will be drilled is water-saturated and cannot produce any dust. Noise level will be very low.

Project team will inform the nearby community about research work planning to execute. Promotional publications and appearances will be prepared for addressing the target groups of the REASONING project. Publications and appearances will include newsletters, leaflets, workshop publications, final conference publication, journal articles and other media appearances. In the scope of project promotional material there will be project posters and leaflets that will be distributed to all interested stakeholders. Electronic newsletters in English and Serbian will be prepared during the project and will address academic representatives, government, industry representatives, as well as public. All reports and materials will be publicly available at the project website after internal and external approval. Project activity is also to organize a workshop in the Rudnik mine and the local community will be invited to attend.

Potential impact on the health and safety of workers

Potential impacts on the health and safety of researchers while working in laboratories is estimated as very low. It is in the mitigation measures and monitoring plan check lists and will be covered by acts and codes of SROs which are performing these tasks.

Potential impact of generated waste

The only waste that Project realisation will create is during processing and preparation of concentrate and testing of the waste material taken from tailings. After concentrate is prepared, it will be treated by magnetic separation, clay removal, leaching methods and electrochemical methods to extract all potentially economically valuable components. After those procedures, the remaining aluminosilicate material will be tested as secondary raw material for construction industry. The rejects and leftovers of processed waste material will be stored in ITNMS until the end

of Project according to the standard procedures of their accredited laboratory (Agreement/Contract on the collection, transportation, and disposal of hazardous and non-hazardous waste).

All rejects and leftovers after chemical analyses in IMSI will be treated according to their act on waste management (Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal).

Environmental and safety protection is in the mitigation measures and monitoring plan check lists and will be covered by acts and codes of SROs which are performing these tasks.

Potential impact of working in laboratories

Laboratories of the FMGUB, IMSI, IPB, ITNMS and TFBor will be included in the Project activities. These laboratories/SROs have relevant internal acts, which assure implementation of good environmental and social standards. These include:

FMGUB: Rulebook on Safety and Health at Work and Act on risk assessment

IMSI: Rulebook on Safety and Health at Work; Rulebook on use and maintains of equipment at the Institute for Multidisciplinary Research; Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal

IGPC: Rulebook on safety and health at work, with a program for safe work; Record of the practical training of employees; Rules of Procedure and Procedures No 1- 17 Accreditation Certificate specifies the general requirements for the competence, impartiality and consistent operation of laboratories:

ITMNS: Rulebook on Safety and Health at Work; Agreement on the collection, transportation and disposal of hazardous and non-hazardous waste;

TFBor: Act on risk assessment; Rulebook on Safety and Health at Work, and responsible expert;

IPB: Rulebook on Safety and Health at Work and Act on risk assessment at the workplace and in the working environment.

Potential social impact

The REASONING project is expected to provide a large positive socio-economic influence during and after project realisation. Project related research will be possible beneficial to local communities, vulnerable and marginalized people, or society as whole as it is aiming to the potential reusing and recycling of waste materials as primary goal, as it improves not only economical, but even more environmental and societal performance. If so, it will make possible to Rudnik mine to extend usage of existing flotation pond for a longer period of time, and if commercial extraction of ore minerals from waste is possible, it will create new working positions.

SUMMARY OF ENVIRONMENTAL AND SOCIAL IMPACT

The project management strategy has been designed to emphasize project specific training, proficiency testing, working strictly according to SOPs and the maintenance of records and documents, including monitoring plans for every task.

Review of the impact on the environment that are predicted for the duration of the project is listed below.

- Population: Low.
- Working in the field: The consequential impact is moderate. and related Health and Safety.
 Aappropriate mitigation and monitoring measures during the project implementation are planned.
- Social: Low
- Geology and soil: Low.
- Climatic characteristics: Low
- Seismology: Low.
- Air quality: Low. Potential impact on air quality is very low and very local, as drilling will be in a remote part of the tailing pond, covered with water and water-saturated, which prevents formation of dust particles during drilling, or it is very low.
- Working in the laboratory including Life and Fire Safety: Moderate/Low
- Waste: Moderate/low, controled and managed
- Water resources: Low, As drill holes will be in the waste material itself and using either fresh water or water from the tailing pond, it cannot cause any impact on water.
- Soil: Low
- Flora and Fauna: Low.
- Noise: Low.
- Cultural heritage: Low.

The consequential cumulative environmental and social impact is moderate.

Date:	Prepared by:	Title:	Signature:	
28.12.2023.	Vladimir Simić	Prof. Dr., PI		
			Baucet	

MITIGATION PLAN

Phase	Issue		Cost of Mitigation (If Substantial)	Responsible institution*	Monitoring
		PREPARATORY PHAS	SE		
Project Preparation	Concluded contract with the Rudnik mine	Provided access control to the location (area) where tests are performed ² .	The Grant recipient	The responsible person (PI) should conduct monitoring, inform nearby community about research work and notify the PIU and SF of the result SF/PIU	SF/PIU
Project preparation	Preparation for setting up demonstration field in Rudnik mine location.	Provided occupational safety and health measures and equipment (first aid, fire-fighting equipment, etc.) ³ .	The Grant recipient	The responsible person (PI) should conduct monitoring and notify the SF of the result	SF/PIU
Project preparation	Life and fire safety (LFS) procedures in laboratory	All researchers are familiar with the current Evacuation Plan and Protection and Rescue Plan, with the dangers of fire and fire protection measures and are trained in handling fire extinguishers, hydrants and other devices used for extinguishing fires by the Law, as well as with the "Instructions for action in case of fire".	None anticipated	Participating SRO's	SF/PIU
	<u> </u>	PROJECT IMPLEMENTATION	N PHASE	•	

² Agreement with Rudnik Mine.

³ Rulebook of the Law on Safety and Health at Work ("Official Gazette of RS", no. 101/2005, 91/2015 and 113/2017); Rulebook on preventive measures for safe and healthy work at the workplace ("Official Gazette of RS", no. 21/20109 and 1/2019).

Project execution	Possible health impact during measurements of water temperature and pH after drilling	Provided means and equipment for personal protection at work (gloves, masks, protective glasses, protective shoes, protective helmets, etc.) ⁴ .	The Grant recipient	Rudnik mine The WP2 coordinator is responsible for this project activity	SF/PIU
Project execution	Possible health impact during sampling	Provided means and equipment for personal protection at work (gloves, masks, protective glasses, protective shoes, protective helmets, etc.). Participant involved in sampling from FMGUB are trained for field work and is obligatory to work in accordance with the Rulebook on occupational safety and health and provide all safety measure ⁵ .	The Grant recipient	Rudnik mine The WP2 coordinator is responsible for this project activity	SF/PIU
Project execution	Sampling procedure	Ensured proper sampling with application standard operating procedures ⁶	The Grant recipient	The WP2 coordinator is responsible for this project activity	SF/PIU
Project operate	Possible accident situations (with serious negative impact or consequences for the environment and/or human health) during driling and field work	Apply procedures defined for accident situation on the Rudnik Mine ⁷ (explained within title Environmental and Social risks) Communicate with community	Rudnik mine	Rudnik mine The PI is responsible for this project activity	SF/PIU
Project operate	Control of equipment and consumables	Ensured control of purchased equipment and consumables, and their verification before use according to responsible SRO.	The Grant recipient	FMGUB, ITNMS –IMSI	SF/PIU

⁴ FMGUB: Rulebook on Safety and Health at Work, Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, article 129-131).

⁵ Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, article 129-131).

⁶ Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, article 129); FMGUB: Rulebook on Safety and Health at Work.

⁷ Environmental Impact Assessment for upscaling of waste disposal and dam Nr. 9, approved by the Ministry of Environmental Protection.

Project operate	Positioning of equipment and means	Ensured adequate positioning of equipment and positioning of means.	The Grant recipient	FMGUB, ITNMS –, IMSI – , TFBor –	SF/PIU
Project operate	Geophysical measurements	Applied standard operating procedures and provided instructions for safe use of work equipment 8.	The Grant recipient	FMGUB —	SF/PIU
Project operate	Mineralogical examination	Applied standard operating procedures and provided instructions for safe use of work equipment ⁹ .	The Grant recipient	ITMNS –	SF/PIU
Project operate	Geochemical examination	Applied standard operating procedures and provided instructions for safe use of work equipment ¹⁰ .	The Grant recipient	IMSI	SF/PIU
Project operate	Electrochemical examination	Applied standard operating procedures and provided instructions for safe use of work equipment ¹¹ .	The Grant recipient	IMSI and IGPC –	SF/PIU
Project operate	Storage of Chemical waste after analyses	Applied instructions for non-hazardous materials management and non-hazardous waste management according to responsible SRO ¹² .	The Grant recipient	IMSI- should conduct monitoring and notify the PI and SF of the results	SF/PIU

⁸ FMGUB: Rulebook on Safety and Health at Work

⁹ FMGUB: Rulebook on Safety and Health at Work

¹⁰ IMSI: Rulebook on Safety and Health at Work, University of Belgrade-Institute for Multidisciplinary Research; Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research; Rulebook on use and maintains of equipment at the Institute for Multidisciplinary Research.

¹¹ IMSI: Rulebook on Safety and Health at Work, University of Belgrade-Institute for Multidisciplinary Research; Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research; Rulebook on use and maintains of equipment at the Institute for Multidisciplinary Research; IGPC: Rulebook on safety and health at work, with a program for safe work; Record of the practical training of employees;

¹² IMSI: Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal; ITMNS: Agreement on the collection, transportation and disposal of hazardous and non-hazardous waste; TFBor: Act on risk assessment.

Project operate	Chemicals and consumables consumption	Ensured adequate availability of materials and consumables according to responsible SRO ¹³ .	The Grant recipient	ITNMS –IMSI- TF Bor – should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Management and storage of chemicals	Ensured adequate storage of materials and consumables according to responsible SRO ¹⁴ .	The Grant recipient	ITNMS –IMSI – TFBor –should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Management of different flotation tailings before and after analysis and treatment	Special room will be organized for storage od flotation tailings before and after chemical analysis. The obtained wastewater will be additionally neutralized to obtain pH value between 6 and 7. This wastewater will be stored in appropriate tanks before transportation.	The Grant recipient	ITNMS –IMSI- TFBor – should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project operate	Management of toxic/hazardous materials and waste	Applied standard procedures for toxic/hazardous materials and waste management ¹⁵	The Grant recipient	ITNMS –IMSI- TF Bor – should conduct monitoring and notify the PI and SF of the results	SF/PIU

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¹³ FMGUB: Rulebook on Safety and Health at Work, and Act on risk assessment; ITMNS: Rulebook on Safety and Health at Work; IMSI: Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research; IGPC: Rulebook on safety and health at work with a program for safe work, Rules of Procedure and Procedures No 1- 17 Acreditation Certificate specifies the general requirements for the competence, impartiality and consistent operation of laboratories; TFBor: Rulebook on Safety and Health at Work, and responsible expert; IPB: Rulebook on Safety and Health at Work and Act on risk assessment at the workplace and in the working environment.
¹⁴ ITMNS: Rulebook on Safety and Health at Work; IMSI: Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research; TFBor: Rulebook on Safety and Health at Work.

¹⁵ **ITNMS**: Agreement on the collection, transportation and disposal of hazardous and non-hazardous waste. **IMSI**: Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal.. **TF Bor**: Act on risk assessment number.

Project operate	Proper and safe functioning of equipment	Ensured proper and safe functioning of equipment, including proper handling and safe operation ¹⁶		ITNMS –IMSI- TF Bor – should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project operate	Inspection of equipment	Ensured regular inspection, cleaning, and checking of work equipment, including scheduled maintenance and calibration ¹⁵ .	The Grant recipient	ITNMS –IMSI- TF Bor – should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project operate	Potential risks and the corresponding risk management	Provided instructions of the potential risks and the corresponding risk management ¹⁷	The Grant recipient	PI and WP leaders	SF/PIU

^{*} Items indicated to be the responsibility of the contractor shall be specified in the bid documents

¹⁶ ITMNS: Rulebook on Safety and Health at Work; IMSI: Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research; TFBor: Rulebook on Safety and Health at Work.

¹⁷ **FMGUB:** Act on risk assessment; ITMNS: Act on risk assessment; IMSI: Act on risk assessment; IGPC: Act on risk assessment; TFBor: Act on risk assessment; IPB: Act on risk assessment at the workplace and in the working environment.

MONITORIN PLAN

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	when is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform	Institutional Responsibility	Monitoring
					monitoring?		
			PREPARATOR	RY PHASE			
Project Execution	Concluded contract with the Rudnik mine that will provide measurements and sampling	Institution implementing the Project (FMGUB)	Provided access control to the location (area) where tests are performed 18	Once, before going to the sampling location		PI should conduct monitoring and notify the SF of the result SF/PIU	SF/PIU
Project Execution	Preparation of working location in Rudnik mine tailings	At the office of Rudnik mine and Institution implementing the Project (FMGUB)	Provided occupational safety and health equipment (first aid, fire-fighting equipment, etc.) ¹⁹	Once, before going to the project location (Rudnik mine)	The Grant recipient	PI should conduct monitoring and notify the SF of the result SF/PIU	SF/PIU
			PROJECT IMPLEMEN	NTATION PHASE			
Project Execution	Measurements of water temperature and pH after drilling	On site/ Rudnik mine	Provided means and equipment for personal protection at work (gloves, masks, protective glasses, protective shoes, protective helmets, etc ²⁰ .	During sampling, WP2, Sub-activity 2.1	The Grant recipient	Rudnik mine The WP2 coordinator is responsible for this	SF/PIU

¹⁸ Agreement with Rudnik Mine.

19 Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, article 129-131).

20 FMGUB: Rulebook on Safety and Health at Work; Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, article 129-131).

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	when is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring?	Institutional Responsibility	Monitoring
						project activity SF/PIU	
Project Operate	Provided instruction for safe use during sampling	On site/ Rudnik mine	Provided means and equipment for personal protection at work (gloves, masks, protective glasses, protective shoes, protective helmets, etc.) ²¹ .	During sampling WP2, Sub-activity 2.1	The Grant recipient	FMGUB -	SF/PIU
Project Operate	Provided sampling procedure	On site/ Rudnik mine	Ensured proper sampling with application of standard operating procedures ²² .	During sampling WP2, Sub-activity 2.1	The Grant recipient	The WP2 coordinator is responsible for this project activity	SF/PIU
Project Operate	Provided possible accident situations during driling and field work	On site/ Rudnik mine	Apply procedures deffine for accident situation on the Rudnik Mine ²³	During sampling WP2, Sub-activity 2.1	The Grant recipient	Rudnik mine PI should conduct monitoring and notify the SF of the result	SF/PIU
Project Operate	Provided control of equipment and consumables	In laboratory	Ensured control of purchased equipment and consumables, and their verification before use	Once, before realisation WP2, Subactivity 2.2	The Grant recipient	FMGUB – ITNMS –IMSI –, TFBor –	SF/PIU

FMGUB: Rulebook on Safety and Health at Work.
 Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, article 129); FMGUB: Rulebook on Safety and Health at Work.
 Environmental Impact Assessment for upscaling of waste disposal and dam Nr. 9, approved by the Ministry of Environmental Protection.

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	when is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform	Institutional Responsibility	Monitoring
					monitoring?		
			according to responsible SRO				
Project Operate	Provided adequate positioning of equipment and means	In laboratory	' '	Once, before realisation WP2, Subactivity 2.2	The Grant recipient	FMGUB –ITNMS –, IMSI –TFBor – Grozdanka Bogdanović	SF/PIU
Project Operate	Provided instruction for safe use during geophysical measurements	In laboratory	Applied standard operating procedures and provided instructions for safe use of work equipment ²⁴ .	During realisation WP2, Sub-activity 2.2	The Grant recipient	FMGUB –	SF/PIU
Project Operate	Provided instruction for safe use during mineralogical examination	In laboratory	Applied standard operating procedures and provided instructions for safe use of work equipment ²⁵ .	During realisation WP2, Sub-activity 2.3	The Grant recipient	ITMNS –	SF/PIU
Project Operate	Provided instruction for safe use during geochemical examination	In laboratory	Applied standard operating procedures and provided instructions for safe use of work equipment. ²⁶	During realisation WP2, Sub-activity 2.3	The Grant recipient	IMSI –	SF/PIU
Project	Provided	In laboratory	Applied standard operating	During realisation	The Grant	IMSI –and IGPC –	SF/PIU

FMGUB: Rulebook on Safety and Health at Work
 FMGUB: Rulebook on Safety and Health at Work
 IMSI- Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research.

Phase	What	Where	How	When	Monitoring Cost	Institutional Responsibility	Monitoring
Operate	parameter is to be monitored? instruction for safe use during	is the parameter to be monitored?	is the parameter to be monitored/ type of monitoring equipment? procedures and provided instructions for safe use of work	is the parameter to be monitored-frequency of measurement or continuous? WP3, Sub-activity 3.2	What is the cost of equipment or contractor charges to perform monitoring?	•	
	electrochemical examination		equipment ²⁶				
Project Operate	Provided storage of chemical waste after analyses	In laboratory	Applied instructions for non-hazardous materials management and non-hazardous waste management according to responsible SRO ²⁷ .	Periodically during realisation of WP2, Sub-activity 2.3 and WP3, Sub-activity 3.2	The Grant recipient	IMSI- should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Provided chemicals and consumables consumption	In laboratory	Ensured adequate availability of materials and consumables according to responsible SRO ²⁸	Periodically during the implementation of the activities WP2, WP3, WP4	The Grant recipient	ITNMS –IMSI-, TFBor –should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Management and storage of chemicals	In laboratory	Ensured adequate storage of materials and consumables according to responsible SRO ²⁹ .	Periodically during the implementation of the activities WP2, WP3, WP4	The Grant recipient	ITNMS –IMSI –, TFBor –should conduct monitoring and notify the PI and	SF/PIU

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²⁷ IMSI: Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal..

²⁸ **ITNMS**: Rulebook on Safety and Health at Work. **IMSI**: Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research. **IGPC** Rulebook on safety and health at work with a program for safe work, Rules of Procedure and Procedures No 1- 17 Accreditation Certificate specifies the general requirements for the competence, impartiality and consistent operation of laboratories.**TF Bor**: Rulebook on Safety and Health at Work.

²⁹ ITMNS: Rulebook on Safety and Health at Work; IMSI: Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research; TFBor: Rulebook on Safety and Health at Work.

Phase	What	Where	How	When	Monitoring Cost	Institutional Responsibility	Monitoring
	parameter is to be monitored?	is the parameter to be monitored?	is the parameter to be monitored/ type of monitoring equipment?	is the parameter to be monitored- frequency of measurement or continuous?	What is the cost of equipment or contractor charges to perform monitoring?		
						SF of the results	
Project Operate	Storage of different flotation tailings before and after analysis and treatment	In laboratory	Special room will be organized for storage od flotation tailings before and after chemical analysis. The obtained wastewater will be additionally neutralized in order to obtain pH value between 6 and 7. This wastewater will be stored in appropriate tanks before transportation (valid Contract) ³⁰	Periodically during the implementation of the activities WP2, WP3, WP4	The Grant recipient	ITNMS –IMSI-, TFBor –should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Management of toxic/hazardous materials and waste	In laboratory	Applied standard procedures for toxic/hazardous materials and waste management according to responsible SRO ³¹	Periodically during the implementation of the activities WP2, WP3, WP4	The Grant recipient	ITNMS –IMSI- TFBor –should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Provided proper and safe functioning of	In laboratory	Ensured proper and safe functioning of equipment, including proper handling and	Periodically during the implementation of the activities WP2,	The Grant recipient	ITNMS –IMSI- TFBor –should conduct monitoring	SF/PIU

³⁰ **ITNMS**: Agreement on the collection, transportation and disposal of hazardous and non-hazardous waste. **IMSI**: Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal. **TF Bor**: Act on risk assessment number.

³¹ **ITNMS**: Agreement on the collection, transportation and disposal of hazardous and non-hazardous waste. **IMSI**: Guideline for work in Laboratory: Instructions for safe work with chemicals, their storage, adequate and safe disposal. **TF Bor**: Act on risk assessment.

Phase	What	Where	How	When	Monitoring	Institutional	Monitoring
	parameter is to be monitored?	is the parameter to be monitored?	is the parameter to be monitored/ type of monitoring equipment?	is the parameter to be monitored- frequency of measurement or continuous?	Cost What is the cost of equipment or contractor charges to perform monitoring?	Responsibility	
	equipment		safe operation according to responsible SRO ³²	WP3, WP4		and notify the PI and SF of the results	
Project Operate	Provided inspection of equipment	In laboratory	Ensured regular inspection, cleaning, and check of work equipment, including scheduled maintenance and calibration according to responsible SRO ³³ .	Periodically during the implementation of the activities WP2, WP3, WP4	The Grant recipient	ITNMS –IMSI- TFBor –should conduct monitoring and notify the PI and SF of the results	SF/PIU
Project Operate	Possible occurrence of the potential risks and the corresponding risk management	In laboratory	Provided instructions of the potential risks and the corresponding risk management according to responsible SRO ³⁴	Periodically during the the activities WP2, WP3, WP4	The Grant recipient	PI should conduct monitoring and notify the SF of the result	SF/PIU

³² FMGUB: Rulebook on Safety and Health at Work and Act on risk assessment; ITNMS: Rulebook on Safety and Health at Work; IMSI: Rulebook on use and maintains of equipment at the Institute for Multidisciplinary Research; IGPC: Rulebook on safety and health at work with a program for safe work, Procedure for managing equipment, calibrated equipment and reference materials Accreditation Certificate specifies the general requirements for the competence, impartiality and consistent operation of laboratories; TFBor: Rulebook on Safety and Health at Work; IPB: Rulebook on Safety and Health at Work and Act on risk assessment at the workplace and in the working environment.

³³ ITMNS: Rulebook on Safety and Health at Work; IMSI: Guidebook for safe work with chemicals in laboratories of the Institute for Multidisciplinary Research,; TFBor: Rulebook on Safety and Health at Work.

³⁴ **FMGUB:** Act on risk assessment; ITMNS: Act on risk assessment; IMSI: Act on risk assessment; IGPC: Act on risk assessment number; TFBor: Act on risk assessment at the workplace and in the working environment.

III. PUBLIC CONSULTATION DETAILS AND MINUTES OF MEETING FOR THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

PROJECT

CHARACTERISATION AND TECHNOLOGICAL PROCEDURES FOR RECYCLING AND REUSING OF THE RUDNIK MINE FLOTATION TAILINGS REASONING

Introduction

This document is an annex to the Environmental and Social Management Plan, providing details on the Public Consultation. The Public Consultation schedule and plan was to present the key identified environmental management issues related to the project to the relevant expert public and gain further insights on the topic by the participants, should any be identified during the discussion.

The Public Consultation was held in person, and the key technical and content related aspects of the Public Consultation are presented below.

1. Manner in which notification of the consultation was announced:

Notification of the consultation was announced on the website of the University of Belgrade, Faculty of Mining and Geology on 05.12.2023. The announcement is available at the: https://rgf.bg.ac.rs/datoteke/aktuelnosti/Poziv%20na%20JK.pdf.

УНИВЕРЗИТЕТ У БЕОГРАДУ-РУДАРСКО-ГЕОЛОШКИ ФАКУЛТЕТ

11120 Београд 35, Ђушина 7, п.п. 35-62 Тел: (011) 3219-100, Факс: (011) 3235-539



UNIVERSITY OF BELGRADE, FACULTY OF MINING AND GEOLOGY

Republic of Serbia, Belgrade, Djusina 7 Phone:(381 11) 3219-100, Fax:(381 11) 3235-539

PYRAPCHO-FEOROWES GALYATET

Ep. 2537

05.12. 20 23 год БЕОГРАД, Бушина бр. 7

БЕОГРАД, Бушина бр, Saglasno Okviru Svetske Banke za upravljanje uticajima projekata na životnu sredinu i društvo, Univerzitet u Beogradu – Rudarsko-geološki fakultet poziva na

JAVNE KONSULTACIJE

Javnost, organe i organizacije zainteresovane za

PLAN UPRAVLJANJA UTICAJIMA NA ŽIVOTNU SREDINU I LOKALNU ZAJEDNICU (ESMP)

za

projekat Karakterizacija i tehnološki postupci za recikliranje i ponovno korišćenje flotacijske jalovine rudnika Rudnik (Characterisation and technological procedures for recycling and reusing of the Rudnik mine flotation tailings) - REASONING

Uvid u predmetni dokument može se izvršiti na internet stranici Univerziteta u Beogradu – Rudarsko-geološkog fakulteta: https://rgf.bg.ac.rs/.

Pitanja se mogu postaviti i primedbe i sugestije dati tokom javnih konsultacija ili u pisanom obliku dostavom na adresu Univerziteta u Beogradu – Rudarsko-geološkog fakulteta, Đušina 7, 11000 Beograd sa naznakom za projekat REASONING, ili na e-mail adresu dekan@rgf.bg.ac.rs, najkasnije do 15:12.2023. do 16 časova.

Javne konsultacije održaće se 20.12.2023. godine u 10 časova u svečanoj sali na Rudarsko-geološkom fakultetu, Đušina 7, 11000 Beograd.

Za dodatne informacije možete se obratiti na sledeću e-mail adresu <u>dekan@rgf.bg.ac.rs</u> sa naznakom za projekat REASONING.

Dekan Rudarsko-geološkog fakulteta

Dr Biljana Abolmasov

2. Date consultation was held

The consultation was held on December 20, 2023.

3. Location consultation was held

Location of consultation was at the University of Belgrade, Faculty of Mining and Geology, Đušina 7, Belgrade, room 260.

4. Who was specifically invited

There were no specifically invited persons.

5. List of Attendees

List of Attendees is below. In total 17 persons were present at the consultations.







Public consultations on ESMP for the project:

Characterisation and technological procedures for recycling and reusing of the Rudnik mine flotation tailings - REASONING

List of Attendees

Nr.	Name	Organisation or occupation	Contact details
1		Pro-5001M	
2		NMCU	
3		43-1451	
4		RWITH AACHEN UNIVERSIT	
5		Prob- 5T	
6		UO4X	
7		NOOX	
8		10FH	
9		IMS 1	
10		iPB	
11		RGF - BEOGRAD	
12		RGF - BEOGRAD	
13		RGF - BEOGRAD	
14		[THMC - BED [PA]	
15		RCF - Brochso	
16		P10-6 CON MAN	
17		MTHMC-DOOTPED	
18			

University of Belgrade, Faculty of Mining and Geology

December 20th, 2023

6. Meeting Agenda

The agenda of the meeting was attached to the official announcement on the website together with the ESMP of the REASONING project to provide participants with detailed information on the identified risks and the planned mitigation measures in advance. The content of the agenda is as follows:







JAVNE KONSULTACIJE

za

PLAN UPRAVLJANJA UTICAJIMA NA ŽIVOTNU SREDINU I LOKALNU ZAJEDNICU (ESMP)

za

projekat Karakterizacija i tehnološki postupci za recikliranje i ponovno korišćenje flotacijske jalovine rudnika Rudnik (Characterisation and technological procedures for recycling and reusing of the Rudnik mine flotation tailings) – REASONING

Rudarsko-geološki fakultet, Đušina 7, Beograd Sala 260 – II sprat

Dnevni red

10:00 – 10:30 Registracija učesnika 10:30 – 10:40 Otvaranje javnih konsultacija 10:40 – 11:00 Prezentacija Projekta 11:00 – 12:55 Diskusija, pitanja i odgovori 12:55 – 13:00 Rezime i zatvaranje javnih konsultacija

7. Summary Meeting Minutes (Comments, Questions and Response by Presenters)

Public consultations started at 10:15 as the registration of participants was faster than expected. At the beginning of the consultations vice dean of Faculty presented information on the PRIZMA projects, particularly REASONING, but also noted the importance of preparing documents like ESMP.

After that, PI of the project presented the project in Serbian language. There were no questions regarding ESMP. There was only one question from the project team member regarding what it means upscaling of flotation tailing dam and which security measures are performed to keep it safe. This question was answered by another team member who is expert on that question.

8. List of decisions reached, and any actions agreed upon with schedules and deadlines and responsibilities

It was not necessary to reach any decision or action at this moment, but the project team will be in close contact with Science Fund and Rudnik mine as our partner and owner of the research site.

Public consultation report reviewed by Environmental and Social Expert

26/12/2023

Andjelka Mihajlov

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