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Deponent: NLB Tutunska Banka AD Skopje

SOCIAL IMPACT ASSESSMENT

MINE COMPLEX FOR PRODUCTION OF CATHODE COPPER – "KAZANDOL", VALANDOVO, MACEDONIA

Prepared by:

EMPIRIA EMS, Skopje and BIOS PRO, Skopje

Skopje, December 2015

Content

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List of Abbreviations

BAT	Best Available Techniques
EARM	Employment Agency of Republic of Macedonia
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
EU	European Union
GIIP	Good International Industry Practice
IFC	International Finance Corporation
IFI	International Financial Institution
ILO	International Labour Organization
LRP	Livelihood Restoration Plan
MEPP	Ministry of Environment and Physical Planning
NGOs	Non-governmental Organizations
OG	Official Gazette
OHS	Occupational Health and Safety
OHSP	Occupational Health and Safety Plan
PAPs	Project-Affected Peoples/Parties
PR	Performance Requirements
PS	Performance Standard
RAP	Resettlement Action Plan
Ref.	Reference
RM	Republic of Macedonia
RPF	Resettlement Policy Framework
SEA	Strategic Environmental Assessment
SEP	Stakeholder Engagement Plan
SIA	Social Impact Assessment
SSO	State Statistical Office
TMP	Traffic Management Plan
UN	United Nations

Executive Summary

The private mining company SARDICH MC Ltd Export Import - Skopje (hereinafter referred to as the Investor or Operator) is proposing to build and put into operation a new mining complex for production of cathode copper on a site, in the area called Kazandol, in the municipality of Valandovo, located in the Southeast region of the Republic of Macedonia (hereinafter referred to as the Project).

The Project has been developed by SARDICH MC in response to meet the Macedonian legislative requirements and those of the International Finance Corporation (IFC) and European Bank for Reconstruction and Development (EBRD). Finnish Fund for Industrial Cooperation Ltd (FINNFUND) is considering the provision of a loan to partially finance the Project.

This document is Social Impact Assessment (SEA) for the proposed Project and it treats all potential adverse and positive impacts. Social impacts are identified and appropriately treated, by using the GIIP (Good International Industry Practice) approach. Proposed mitigation measures are using the policy framework from two IFI's, namely IFC and EBRD, and positive international experiences from the mining sector.

The most adversely affected community is the one in the village of Kazandol, which actually borders the concession field, and it is some 300-400 m far from the mine complex. Their single connection to the world shall be used by both, the project and the residents. Their health and safety, their livestock and their way of life shall be the most affected by this project, but not in a sense to survive unbearable life condition, but in a sense of influences that can significantly change their life, sooner or later. The community is slightly vulnerable and the project might contribute toward intensifying such state. Thus most of the social mitigation measures are concentrated around this community.

1 Introduction

The private mining company SARDICH MC Ltd Export Import - Skopje (hereinafter referred to as the Investor or Operator) is proposing to build and put into operation a new mining complex for production of cathode copper on a site, in the area called Kazandol, in the municipality of Valandovo, located in the Southeast region of the Republic of Macedonia (hereinafter referred to as the Project).

The Project has been developed by SARDICH MC in response to meet the Macedonian legislative requirements and those of the International Finance Corporation (IFC) and European Bank for Reconstruction and Development (EBRD). Finnish Fund for Industrial Cooperation Ltd (FINNFUND) is considering the provision of a loan to partially finance the Project.

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2 Description of the Project

The wider area of the project is situated in the southeast part of the Republic of Macedonia, within the boundaries of Valandovo Pole ('Valandovo Field'), at a relative distance of 4 km from the town of Valandovo, southwards positioned. Valandovo Pole is a fertile alluvial plain surrounded by the mountains Serta (Konechka Planina) on north and western slopes of Belasica on east, as well as hills marked by the common name Pogana on south. The field expands towards southeast to River Vardar's valley and then proceeds southwards into Gevgelija Pole.

Administratively, the project is located in the Municipality of Valandovo (Figure 1). The Municipality of Valandovo is situated in southeastern part of Macedonia spreading over an area of 331 km^2, accommodating 17 settlements with total of 11.890 inhabitants, 6.000 of whom live in the town of Valandovo. The Municipality is a cross-road of important roads leading to the City of Skopje and municipalities of Gevgelija, Dojran and Strumica. Highway E-75 Skopje – Gevgelija as part of European Corridor X runs through the municipality.

The following settlements (Figure 2) exist in the surrounding of the mine complex, within 5 kilometers radius:

- the town of Valandovo (4402 inhabitants)[1] is situated on north;
- the settlement Pirava (1844 inhabitants) is on northwest;
- the settlements Brajkovci (437 inhabitants) and Balinci (328 inhabitants) are on west;
- the settlement of Kazandol (147 inhabitants) is positioned on southeast
- the settlement of Chestovo (abandoned).

[1] Data are taken from the Population and Dwellings Census 2002, conducted by State Statistical Office.

Figure 1 – Administrative organization of the wider region of the mine complex site

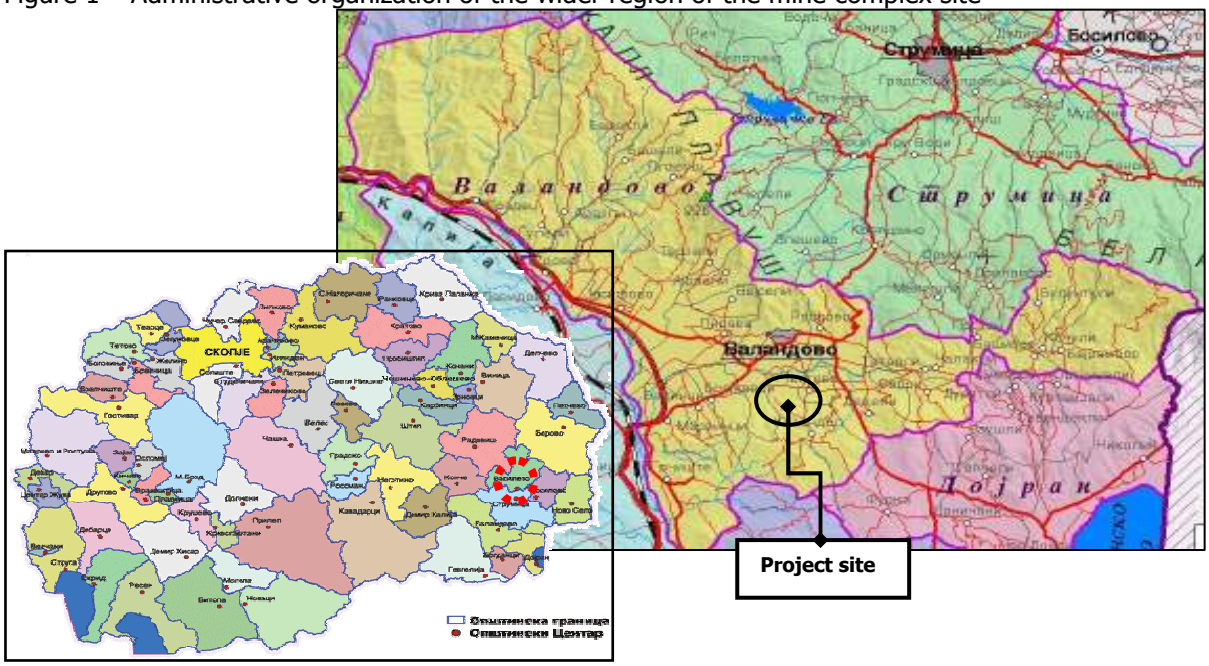
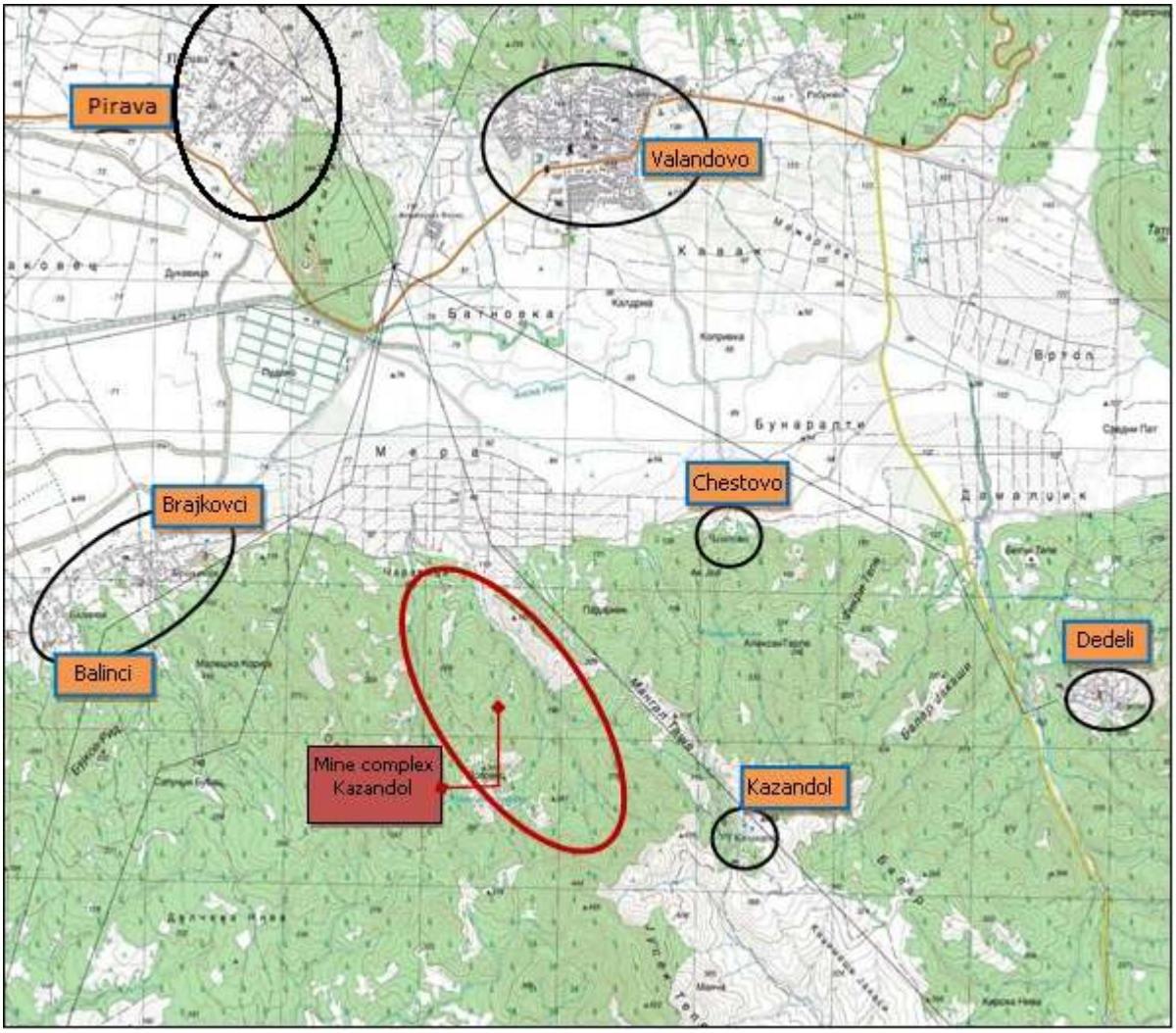


Figure 2 – Overview of the mine complex site relative to the settlements in the area



The project for establishment of the mine complex for production of cathode copper Kazandol will be implemented within defined concession area for exploitation, the overall area of which is around 15 km^2. The overall area of the mining complex site is around 284 hectares.

The project aims to build and manage with a new mine complex for production of cathode copper, an installation which includes two interconnected groups of activities:

- Excavation - exploitation of metallic minerals by surface elevation pit with a level progressive excavation of the raw materials.
- Technological activities for the heap leaching of raw minerals and production of cathode copper in a processing technology complex, after application of special technology which is characteristic for the oxide copper ore present at the site.

The excavation of raw the minerals on the surface mine pit shall be carried out on a mine field by a discontinuous system of exploitation. On the basis of the implemented research and determined geomechanical features of the operational environment, the technological process of exploration shall be carried out through the implementation of the following operations:

- Drilling and blasting operations and crushing,
- Loading and transport of ore and slag
- Disposal of slag

The entire technological process for the production of cathode copper includes two separate functional segments: geo-technological complex and the processing complex designed according to the principles of the best available techniques (BAT).

For the purposes of the geo-technological complex, progressive formation of copper ore storage place (heap) is foreseen, on which fields of sprinkling (spraying) solution shall be established. The heap shall be specifically designed area within the scope of the mine complex, where the copper ore shall be crushed to the required size shall be deposited in the suitably designed conditions. The transport and the transfer of the heap leaching solutions to the fields will be carried out through thrust pipelines. Drained productive solutions shall be accumulated in two technological ponds - operation pond - Pond 1, and operation and emergency pond - Pond 2, which is designed with an operating and emergency volume.

Within the frames of this complex, facilities with various properties will be placed in order to implement and control the process of processing of the production solutions of the heap leaching of copper ore and obtaining the final product - cathode copper. The total area of the processing complex will be about 25.000 m^2, and the surface of the technological installations and buildings within the scope of the complex will be about 3.500 m^2.

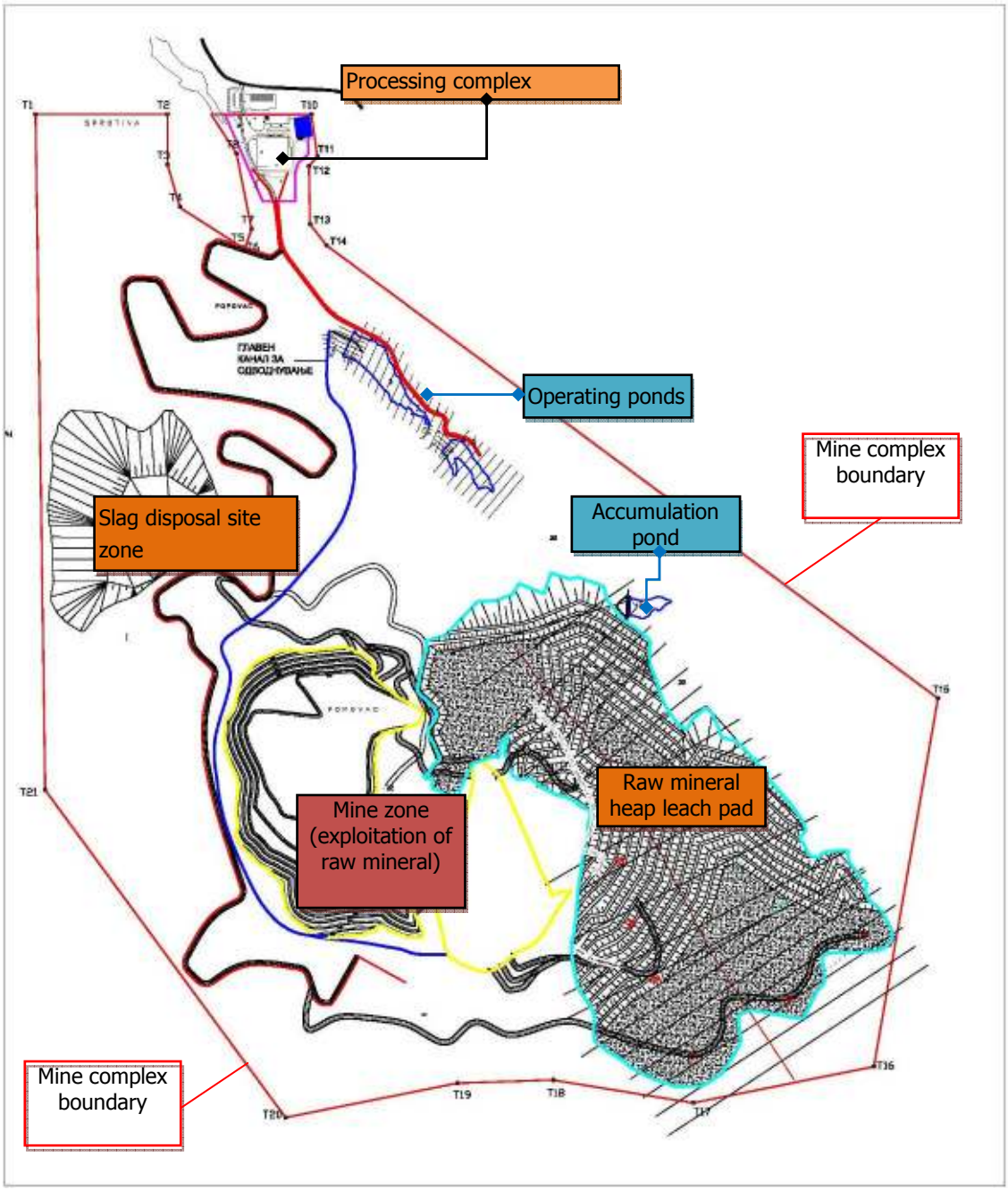
The technology for processing the production solutions can be divided into the following stages:

- Extraction and re-extraction
- Electrolytic deposition
- Further separation of phases
- Purifying of the organics

Exploitation period of the complex is provided to be for a period of 15 years. A more detailed project description is provided in the project Environmental and Social Impact Assessment (ESIA).

The Figure below presents overview of the main activities and structures within the range of the mine complex.

Figure 3 – Main elements of the mine complex for cathode copper production Kazandol



3 Analysis of Alternatives

Analysis of alternatives has been thoroughly elaborated in the EIA study, a main document created for the purpose of this project.

4 Stakeholder Engagement

For the purposes of this project there is a separate document called Stakeholder Engagement Plan, where all previous, ongoing and future stakeholder engagement activities are registered.

5 Legal and Policy Framework

5.1 Overview of Applicable National Legislation

The Republic of Macedonia is a party to numerous international human rights conventions of the United Nations and of the Council of Europe. The legislation of Republic of Macedonia is in direction toward complete compliance with existing EU Directives. Several domains of Project's importance are completely covered.

The Community health and safety domain is covered by Macedonian legislation with the following legal acts: construction law, law on road safety, law on public health, law for health protection, law for transport of hazardous materials, law for preventing the spreading of the infectious diseases, etc. Issues related with community health and safety are covered as well under other issues like noise and vibrations, labor and working conditions, air quality and climate and hydrology, law on protection and rescue, law on crisis, law on social protection, law on housing, law on equal opportunities for woman and men, law on traffic health and safety on the roads.

Macedonian Law on Occupational Health and Safety (OHS) and secondary legislation requires employers to take all the necessary measures and maintain acceptable working conditions. Labor law regulates most of the relations related to workforce and rights of the employees. Employees are under the obligation to obey and observe all the measures taken to ensure acceptable occupational health and safety. Employers:

- must inform the employees of the occupational risks and preventative measures that must be taken to address these risks.
- must inform employees of their legal rights and obligations and must provide the employees with the necessary training on occupational health and safety.
- are responsible for the provision of a safe working environment and must provide workers all the required personal protective equipment.
- must regularly check this and all other health and safety equipment and ensure that it is in good working order.
- must take necessary measures to prevent occupational illnesses.
- must prepare a health and safety plan prior to the commencement of construction works.

Other aspects covered by Macedonian legislation are trade unions, working time, Pension and Disability Insurance, Labor inspection, disbursement and minimum salary, health insurance, antidiscrimination, protection against annoyance at work, and others issues.

The Law on expropriation regulates the procedure for expropriation of property for projects that are of public interest and the connected rights for real estates (immovable properties). The Law on Expropriation regulates the procedure for expropriation of property for projects that are of public interest, and the connected rights for real estate (immovable properties). Other legal documents covering land acquisition are: law on privatization and rent of construction land, law on construction land, law on agricultural land, law on ownership and other material rights and other laws.

Implementation of the Project will follow the framework laws and regulations of the Republic of Macedonia (RM) as well as applicable IFC and EBRD policies and standards.

5.2 Macedonian Legal Framework for Stakeholder Engagement

Public disclosure and consultation activities are organized in connection to the preparation of project documentation and related strategic and other studies, under the following laws:

- Law on Urban and Spatial Planning (OG of RM, no. 51/05, later replaced by 199/14, 42/14, 44/15)

This law regulates the system of spatial and urban development of Macedonia, including public information and participation throughout the process of development and adoption of urban and spatial planning documents.

- Law on Environment (OG of RM, no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 187/13, 42/14, 44/15, 129/15)

This law and its associated secondary legislation set out the requirements for undertaking environmental impact assessment (EIA) of potential environmental impacts of public and private projects which are likely to have a significant impact on the environment before development consent / construction permit is granted in the form of approval for project implementation.

In summary, the procedures for disclosure and consultations include the following steps:

- The public is informed about details of disclosure of the draft plan/document (where the hard copy is available for review, the dates and time when it can be reviewed) through the media and citizens/organizations are invited to send comments and/or attend public consultations;
- Public consultations are held in an appropriate local venue (e.g. city hall) and the plan/document is presented;
- Comments received from all stakeholders are processed and the plan/document is revised to reflect them. A report on which comments have been adopted and which have not, with a justification, is delivered together with the draft plan/document to relevant authorities who judge whether the comments have been meaningfully considered and addressed;
- All comments are responded to in written form.

The public has to be involved in every stage of the EIA procedure and all decisions made during the process must be published in the appropriate media. The following documents will be publically disclosed: Notification of intention for project implementation, the EIA Screening Decision, the EIA Scoping Decision, Announcement of Availability of the EIA study, Non-Technical Summary of the EIA study, Report on Adequacy of the EIA study, Decision on granting consent to, or rejecting the application for the project.

Other applicable laws which foresee disclosure of project information or enable access to information, including mechanisms for grievances and appeals, include:

- The Law on Construction (OG of RM no. 130/09, 124/10, 18/11, 36/11, 54/11, 13/12, 144/12, 25/13, 70/13, 79/13, 137/13, 150/13, 163/13, 27/14, 28/14, 42/14, 115/14, 149/14, 187/14, 44/15, 129/15)
- The Law on Expropriation (OG of RM, no. 95/12, 131/12, 24/13, 27/14, 104/15)
- The Law on Access to Public Information (OG of RM no. 13/06, 86/08, 06/10, 42/14, 148/15)
- The Law on Acting upon Complaints and Proposals (OG of RM no. 82/08, 13/13).

5.3 Macedonian Legal Framework for Social Issues

Social domain is the key pillar of every law. But those that are of particular interest relating to this project are:

- Law on Social Protection (OG of RM no. 79/09, 148/13,164/13, 187/13, 38/14, 44/14, 116/14, 180/14, 33/15, 72/15, 104/15, 150/15, 173/15)
- Law on Pensions and Disability Insurance (OG of RM no. 53/13, 170/13, 43/14, 44/14, 97/14, 113/14, 160/14, 188/14, 20/15, 61/15, 97/15, 129/15, 147/15, 154/15, 173/15)
- Law on Housing (OG of RM no. 99/09, 57/10, 36/11, 54/11, 13/12, 55/13)
- Law for Health Protection (OG of RM no. 43/12, 145/12, 87/13, 164/13, 39/14, 43/14, 132/14, 188/14, 10/15, 61/15, 154/15, 132/15)
- Law on Public Health (OG of RM no. 22/10, 136/11, 144/14, 149/15)

- Law on Sanitary and Health Inspection (OG of RM no. 71/06, 139/08, 88/10, 18/11, 53/11, 164/13, 43/14, 144/14, 51/15, 150/15)
- Law on Equal Opportunities of Women and Man (OG of RM no. 06/12)
- Law on Traffic Safety (OG of RM no. 169/15)
- Law on Safety and Rescue (OG of RM no. 93/12, 41/14)

Social welfare and protection in Macedonia comprises of services and benefits from the tax-financed social welfare system (social prevention – which according to the Law on Social Welfare includes - educational and advisory work, development of self-assistance forms, volunteering work etc., institutional care, non-institutional care and monetary assistance) and contributory- based social insurance system (pensions and disability, health and unemployment insurance).

Law on Pensions and Disability Insurance defines the obligatory pension insurance of workers under working contract and the natural persons performing activity, the bases of the capital funded pension insurance, as well as the special conditions how certain categories of insured persons receive the right to pension and enjoy disability insurance. The rights deriving from the pension and disability insurance are the following: right to age-related pension, right to disability pension, right to re-allocation to other adequate, working post, right to adequate employment, right to re-qualification or higher qualification and right to adequate financial compensations, right to family pension, right to monthly compensation for physical damage, and right to minimal pension.

The key point from social perspective relevant to this project in the Law on Housing is that it envisages the possibility for renting state-owned apartments to socially endangered and homeless persons in accordance with the Law on Social Protection. This Law deals, among other things, with the issue of social housing and the housing of the vulnerable groups (children without parents or without parental care, users of social and permanent financial assistance, persons affected by natural disasters, disabled persons and persons who need assistance and care by other persons, the socially endangered persons belonging to the Roma community, lone parents with minor children).

The Law on Equal Opportunities of Women and Man defines basic and special measures for establishing equal opportunities for women and men, competences, tasks and duties of the responsible actors for ensuring equal opportunities, the procedure for determining a non-equal treatment of women and men, and the related issues. It aims to promote the principle for establishing equal opportunities for women and men in political, economic, social and education fields, as well as in all other aspects of social life.

5.4 Macedonian Legal Framework for Labor and Working Conditions

Labour and working conditions is considered as one of the most important social issues in Republic of Macedonia. Since its independence, the Republic of Macedonia has signed 75 of 77 conventions with ILO (one has been denounced and one is not applicable since RM has no exit to sea).
Major part of the conventions has been channelled either through the Law on Labour Relations and or through Law on Occupational Health and Safety. Other Labour-related laws are as follows: Law on Labour Inspection, Law on Employment and Insurance in Case of Unemployment, Law on Peaceful Resolution of Labour Disputes, Law on Voluntary Work, Law on Employment of Foreigners, Law on Employment of Disabled Persons and Social Protection Law.
There is a series of subordinated acts and rulebooks that cover issues that have been identified in these two laws. The main legislation that covers Labour and Working Conditions issues are following:

- Law on Labour Relations (OG of RM no. 167/15)
- Law on Occupational Health and Safety (OG of RM no. 92/07, 92/07, 163/11, 53/13, 137/13, 23/13, 25/13, 164/13, 158/14, 15/15, 129/15)
- Law on Labour Inspection (OG of RM no. 35/1997, 25/2002, 29/11, 164/13, 147/15)
- Law for Transport of Hazardous Materials and amendments (OG of RM no. 92/07, 17/11 and 54/2011)
- Law on employment and insurance against unemployment (OG of RM no. 112/14, 154/15)

- Law on Protection from Harassment at the Work Place (OG of RM no. 79/13, 147/15)
- Law on construction (OG of RM no. 130/09, 124/10, 18/11, 36/11, 54/11, 13/12, 144/12, 25/13, 70/13, 79/13, 137/13, 150/13, 163/13, 27/14, 28/14, 115/14, 149/14, 187/14 44/15)
- Law on Wages (OG of RM no. 26/13, 170/13, 139/14, 147/15)
- Law on Employment & Work of Foreigners (OG of RM no. 70/07, 5/09; 35/10; 148/11, 84/12, 38/14)
- Rulebook on the minimal requirements for safety and health at work for temporary and mobile construction sites (OG of RM no. 105/08)
- Rulebook on the minimal requirements for workers' health and safety at workplace (OG of RM no. 154/08)
- Rulebook for personal protective equipment that uses employees at work (OG of RM no.92/07);
- Rulebook for occupational health and safety at work for workers exposed on risk of noise (OG of RM no. 21/2008)
- Other extensive list of subordinated Rulebooks covering working conditions in various environments

The Law on Labour Relations, as a pillar for legislation related to labour, defines labour relations between employees and employers established on the basis of an employment contract. In details, this Law regulates all of the specific duties and rights of both, the employers and the employees when concluding and are under employment contract and in particular the ones in relation to the performance of the work.

The main points that the Law on Labour Relations covers are as follows:

- the right of trade unions and their associations to a strike for the purposes of protecting economic and social rights of their members
- issues related to trade unions and associations of employers
- employees` right to freely establish a trade union and become members under conditions stipulated by statute or rulebook of the trade union
- the rights and obligations during strike
- collective agreements
- peaceful resolution of individual and collective labour disputes
- special protection of older workers
- protection of workers under the age of 18 years protection of people with disability with the right to a professional rehabilitation
- the protection of the workers due to pregnancy and parenting;
- prohibition of performance of work during pregnancy and after delivery of birth;
- special protection during pregnancy; "the right to paid leave due to pregnancy, delivery and parenting";
- the right of the female worker to return to work from leave due to pregnancy, delivery and parenting;
- the right of using paternity leave or leave for the guardian of the child;
- the right of a shortened working hours for parent of a child with development-related/problems and special educational needs.

5.5 Macedonian Legal Framework for Protection of Cultural Heritage

The protection of cultural heritage, whether it is registered or not, material on spiritual, is covered with specialized legislation consist mainly of:

- Law on Protection of Cultural Heritage (OG of RM no. 20/04, 71/04, 115/07, 18/11, 148/11, 23/13, 137/13, 164/13, 38/14, 44/14, 199/14, 104/15, 154/15) and associated and othe subordinated legislation
- Rulebook on National Registry of Cultural Heritage (OG of RM no. 25/05)
- Law on Memorials and Monuments (OG of RM no. 66/04, 89/08 и 152/15)

- Law on Museums (OG of RM no. 66/04, 89/08, 116/10, 51/11, 88/15 и 152/15)

Republic of Macedonia ratified the (UNESCO) Convention for the protection of the World Cultural and Natural Heritage in 1991.

5.6 Macedonian Legal Framework for Expropriation and Land Acquisition

In the Republic of Macedonia, the legislative acts given below regulate the issues of obtaining State ownership rights to privately owned land parcels based on the necessary public needs:

- Expropriation Law (OG of RM no. 95/12, 131/12, 24/13, 27/14);
- Law on Construction (OG of RM no. 130/09, 124/10, 18/11, 36/11, 54/11, 13/12, 144/12, 25/13, 79/13, 137/13, 163/13, 27/14, 28/14, 42/14, 115/14, 149/14, 187/14, 44/15).
- Law on Assessment (OG of RM no. 115/10, 158/11, 185/11, 64/12, 188/14)
- Methodology for assessment of the market value of the real estate (OG of RM no. 54/12)
- Rulebook on the method of cadastral classification and determination and registration of the change of cadastral culture and land class (OG of RM no. 144/13)
- Law on acting upon illegally constructed buildings (OG of RM no. /11, 54/11, 155/12, 53/13, 72/13, 44/14 and 115/14)
- Law on Property and Other Real Property Rights (OG of RM no. 18/01, 99/08, 139/0935/10);
- Law on acting upon complaints and proposals (OG of RM no. 82/2008, 13/13);
- Rulebook on the manner of action upon complaints and proposals (OG of RM no. 2/09);
- Law on Property Cadastre (OG of RM no. 40/08, 158/10, 51/11).

5.7 IFI's Policies

The Project has been screened as a Category A project under IFC's Sustainability Framework (2012)[2] and EBRD's Environmental & Social Policy (2014)[3]. It means that this project, as a Greenfield investment, might generate potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.

IFC's raises efforts to carry out investment and advisory activities with the intent to "do no harm" to people and the environment, to enhance the sustainability of private sector operations and the markets they work in, and to achieve positive development outcomes.

IFC's Sustainability Framework articulates the Corporation's strategic commitment to sustainable development, and is an integral part of IFC's approach to risk management. The Sustainability Framework comprises IFC's Policy and Performance Standards on Environmental and Social Sustainability, and IFC's Access to Information Policy. The Policy on Environmental and Social Sustainability describes IFC's commitments, roles, and responsibilities related to environmental and social sustainability. IFC's Access to Information Policy reflects IFC's commitment to transparency and good governance on its operations, and outlines the Corporation's institutional disclosure obligations regarding its investment and advisory services.

IFC requires from its clients to establish an overarching policy defining the environmental and social objectives and principles that guide the project to achieve sound environmental and social performance. Their guidance for achievement of this aim is set in a guidebook Performance Standards (PS) on Environmental and Social Sustainability. These Performance Standards are the following:

PS1: Assessment and Management of Environmental and Social Risks and Impacts

PS2: Labor and Working Conditions

[2] http://www.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf?MOD=AJPERES

[3] http://www.ebrd.com/news/publications/policies/environmental-and-social-policy-esp.html

PS3: Resource Efficiency and Pollution Prevention
PS4: Community Health, Safety, and Security
PS5: Land Acquisition and Involuntary Resettlement
PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
PS7: Indigenous Peoples
PS8: Cultural Heritage

While managing environmental and social risks and impacts in a manner consistent with the Performance Standards is the responsibility of the client, IFC seeks to ensure, through its due diligence, monitoring, and supervision efforts, that the business activities it finances are implemented in accordance with the requirements of the Performance Standards.

IFC's central objectives are:

- To identify and evaluate environmental and social risks and impacts of the project.
- To adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment.
- To promote improved environmental and social performance of clients through the effective use of management systems.
- To ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately.
- To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.

IFC is committed to ensuring that the costs of economic development do not fall disproportionately on those who are poor or vulnerable, that the environment is not degraded in the process, and that renewable natural resources are managed sustainably. It also recognizes:

- climate change is a serious global challenge and that climate-related impacts may impede economic and social well-being and development efforts.
- the importance of ecosystem services and their role in climate change mitigation as well as adaptation
- the responsibility of business to respect human rights, independently of the state duties to respect, protect, and fulfill human rights.
- women have a crucial role in achieving sound economic growth and poverty reduction
- the importance of disclosure of information, both for itself and its clients, as a means of managing environmental, social, and governance risks

IFC seeks to provide accurate and timely information regarding its investment and advisory activities as well as more general institutional information in accordance with its Access to Information Policy.

EBRD

The European Bank for Reconstruction and Development (EBRD) believes that environmental and social sustainability is a fundamental aspect of achieving outcomes consistent with its transition mandate and recognizes that projects that foster environmental and social sustainability rank among the highest priorities of its activities.

The EBRD's Environmental and Social Policy 2014 outlines how the Bank will address the environmental and social impacts of its projects by:

- defining the respective roles and responsibilities of both EBRD and its clients in designing, implementing and operating projects in line with this Policy and the Performance Requirements
- setting a strategic goal to promote projects with high environmental and social benefits
- mainstreaming environmental and social sustainability considerations into all its activities.

The EBRD, as a signatory to the European Principles for the Environment, is committed to promoting the adoption of EU environmental principles, practices and substantive standards by EBRD-financed

projects, where these can be applied at the project level, regardless of their geographical location. When host country regulations differ from EU substantive environmental standards, projects will be expected to meet whichever is more stringent.

The EBRD:

- recognizes the responsibility of clients and their business activities to respect human rights and that this is an integral aspect of environmental and social sustainability. This responsibility involves respecting human rights, avoiding infringement on the human rights of others, and addressing adverse human rights impacts that their business activities may cause, or to which they may contribute.
- believes that gender equality is a fundamental aspect of a modern, well-functioning market economy and democratic society.
- will assess to what extent tariff changes caused by projects may create problems of affordability of basic levels of services for disadvantaged and/or vulnerable groups of the population
- recognizes the importance of addressing both the causes and the consequences of climate change in its countries of operations.
- will be precautionary in its approach to the protection, conservation, management and sustainable use of living natural resources and will require relevant projects to include measures to safeguard and, where feasible, enhance ecosystems and the biodiversity they support.
- is committed to the principles of transparency, accountability and stakeholder engagement.

The bank has adopted a comprehensive set of specific Performance Requirements (PRs) that the projects are expected to meet. The Bank expects its clients to manage the environmental and social issues associated with the projects to meet the PRs over a reasonable period of time.

To help clients and/or their projects achieve issues defined in the Environmental and Social Policy, the Bank has defined specific PRs for key areas of environmental and social sustainability as listed below:

PR 1: Assessment and Management of Environmental and Social Impacts and Issues
PR 2: Labor and Working Conditions
PR 3: Resource Efficiency and Pollution Prevention and Control
PR 4: Health and Safety
PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement
PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
PR 7: Indigenous Peoples
PR 8: Cultural Heritage
PR 9: Financial Intermediaries
PR 10: Information Disclosure and Stakeholder Engagement

All projects undergo environmental and social appraisal. The appraisal will assess whether the project is capable of being implemented in accordance with this Policy and its PRs and include the assessment of the potential financial, legal and reputational risks as well as identify potential environmental or social opportunities. The social and environmental appraisal is integrated into the EBRD's overall project appraisal.

The EBRD's environmental and social appraisal includes consideration of three key elements: (i) the environmental and social impacts and issues associated with the project; (ii) the capacity and commitment of the client to implement the project in accordance with the relevant PRs; and (iii) to the extent appropriate, the facilities and activities that are associated with the project, but are not financed by the EBRD.

The EBRD's appraisal requires the clients to identify stakeholders potentially affected by and/or interested in the projects, disclose sufficient information about the impacts and issues arising from the projects and consult with stakeholders in a meaningful and culturally appropriate manner.
The EBRD reviews the environmental and social performance of projects and the compliance with the environmental and social commitments as agreed in the legal documentation.

6 Methodology

This chapter defines the methodologies used for description of social baseline and assessment of social impacts for this project.

6.1 Social Baseline Methodology

The social baseline for this Project is based on data collected from direct communication with stakeholders, available project documentation (SEA, EIA and Conceptual Closure Plan), printed materials and site visits to the Project area.

In order to gather current and relevant information, regarding way of life, existing problems and potential threats, a process of consultation with key stakeholders from project area was conducted. During these consultations, various methodologies and strategies were implemented:

- Review of available technical specifications related to the proposed project aimed at identification of potential social impacts and individuals and groups likely to be affected
- Analysis of the relevant legislation (National and IFI)
- Observations of land use in project area
- Stakeholder engagement via consultation meetings with representatives of various stakeholders: Local authorities, National authorities (ministries and agencies), Residents living in settlements in the project area and Non-governmental organizations (NGOs)

Two types of data were utilized, namely:

- Directly collected data/measurements - referring to sources of information collected directly in the Project area.
- Indirectly collected data – referring to the data that have already been published /printed.

The use of this dichotomy in collecting data relevant for understanding of local environmental and social concerns, current environmental and social conditions and processes, cultural and social habits, as well as socio-economic conditions of residents in the Project area, will be in line with the need for appropriate identifying of potential adverse social impacts and how these can be avoided, minimized or mitigated.

Data for the social baseline derive from various available sources. Certain data presented here were collected during the stakeholder engagement process, which is standard practice in analysis of the social environment. Gathered data processed were crosschecked with official data published by governmental institutions.

Relevant unpublished data was collected in several site visits. This information helped create a solid base for analysis of the baseline condition of the project area and covered:

- Current condition of infrastructure (local roads, water supply, electricity, waste water and waste management)
- Locations of nearby settlements and common distance
- Configuration of the terrain
- Housing quality and density of population
- Living conditions in the settlements (way of life)
- Identify other life habits and cultural values
- Identify economic habits and conditions that cannot be found in papers.

Indirectly collected data included consulting official publications and databases that have been developed mainly by the Governmental bodies/institutions. Most governmental Institutions and Agencies collect statistics appropriate for their field of work.

Reports from local government, as well as scientific sociological, ethnological, cultural, archaeological and other studies for this region are also published in various forms. Most of it is available in the National and University Libraries in printed form and some of it is internet based.

This analysis generally demonstrates micro (site - specific) approach to the environmental and social conditions in the near vicinity of the project area. Mezzo (municipal) approach and sometime macro (national) approach are used mainly due to the necessity to precisely describe the sensitivity of the possible adverse impacts that this project might generate.

During the data gathering and their procession in order to properly address adverse effects, there were certain methodological restrictions. Some restrictions were due to the institutional organization and authorizations, some were of communication nature, certain had relevant limits in organization of work and some were simply dependent on financial means.

6.2 Impact Assessment Methodology

Activities related to changes in the current human environment always originate various social impacts which sometimes can have negative prefix. Therefore it is necessary to have proper identification of possible problems and consequences they carry with it and consequently propose adequate mitigation measures that can compensate caused harms.

The aim of social impact assessment is to evaluate temporary and durable impacts of the proposed project. It should emphasize the necessity to create positive outcomes and full benefit for the community also, not only for the investors.

The following topic issues were considered during assessment of potential social impacts:

- Demographic changes
- Community health and safety changes
- Changes in housing and infrastructure goods
- Livelihood and economic changes
- Land use, property ownership and tenure changes
- Social cohesion changes
- Changes in quality of life
- Workforce and Working conditions

The approach to the assessment of Social impacts follows the standard procedure of established international practice for Impact Assessment: description of current social environment (constructed as baseline), addressing the changes to that social environment caused by the Project, determining the significance to those impacts and prescribing adequate mitigation measures.

A goal of the SIA process is to get to a position where the project does not have any major residual impacts; certainly not ones that would endure into the long term or extend over a large area. However, for some aspects there may be major residual impacts after all practicable mitigation options have been exhausted.

The SIA identify the social impacts resulting from implementation of the project in its different phases: pre-construction, construction, operational and decommissioning phase. Pre-construction phase is a phase before commencement of construction activities and includes preparation of required plans, tendering procedure, projects' planning and organizational activities. Construction phase includes preparation of site and construction activities. The operational phase follows activities undertaken during the lifetime of operation of the mine, production, its regular maintenance, repair and reconstruction. The decommissioning phase embraces activities for closure and reclamation of the mining site and associated facilities (leaching pads, installations, ponds, buildings and other).

Criteria for evaluation of the potential Project's impacts are presented in the following table.

Table 1 – Impact Assessment Criteria

Criteria of impact	Rating	Description
Nature	Positive	Impact that are considered to represent an improvement on the baseline or introduces a positive change
	Negative	An impact that are considered to cause an adverse change from the baseline, or introduces an undesirable element into the baseline
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
	Cumulative	Result from multiple environmental/social impacts on a single receptor or effects that result from the combined effects of separate development projects
Scale	Site only	Effects of an impact experienced within or in close proximity at 1 km from the project site
	Local area	Effects of an impact experienced from 1 km to 20 km radius of the site
	Regional	Effects of an impact experienced within 20-50 km radius of the site
	National	Effects of an impact experienced within beyond a 50 km radius of the site
Duration	Short-term	Impacts predicted to last only during construction
	Medium-term	Impacts predicted to last for an intermediate period extending beyond the end of construction
	Long-term	The impact and its effects will continue or last for the entire operational life of the project
	Permanent	The impact and its effects will continue or will last beyond the operational life of the project
Likelihood	Certain	The impact will occur under normal operating conditions
	Likely	The impact is likely to occur at some time under normal operating conditions
	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Negligible	No perceptible change to the specific condition assessed
	Low	Detectable but minor change to the specific condition assessed
	Medium	Detectable change to the specific conditions assessed resulting in non-fundamental temporary or permanent change
	High	Fundamental change to the specific conditions assessed resulting in long term or permanent change, typically widespread in nature, and requiring significant intervention to return to baseline; exceeds national standards and limits.
Significance	Negligible	An impact of negligible significance is where a resource or receptor will not be affected in any way by a particular activity, or the predicted effect is deemed to be imperceptible or is indistinguishable from natural background levels.
	Minor	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is sufficiently small and well within accepted standards, and/or the receptor is of low sensitivity/value.
	Moderate	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable. This does not necessarily mean that "moderate" impacts have to be reduced to

Criteria of impact	Rating	Description
		"minor" impacts, but that moderate impacts are being managed effectively and efficiently.
	Major	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued/ sensitive resources/ receptors.

Assigning impact significance relies on reasoned argument, professional judgement and consideration of the views and consideration of appropriate organizations. Some topics may have their predicted impacts assessed using quantitative thresholds and scales in the determination of significance. Assigning each impact to one of four significance categories enables different topic issues to be placed within the same scale to allow a direct comparison. The significance is considered as a function of Magnitude of the impact and the likelihood of its occurrence. The significance rating matrix is described in the following Table.

Table 2 – Significance Rating Matrix

SIGNIFICANCE = Magnitude x Likelihood		**Likelihood**		
		Unlikely	Likely	Certain
Magnitude	Negligible	Negligible	Negligible	Negligible
	Low	Negligible	Minor	Minor
	Medium	Minor	Moderate	Moderate
	High	Moderate	Major	Major

Since all considered impacts in this SIA study are not solely adverse, but there are impacts that are beneficiary to the local or wider community and affected groups, the following color coding is set in order to assist in visual identification of consideration of impacts that this project will induce.

Table 3 – Significance Color Coding

Negative Ratings	Positive Ratings
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

7 Social Baseline

7.1 Project Area

The notion of project area has two layers of understanding. First layer is defined regarding the socio-economic and political organization of the territory and authorizations that are transferred to certain legal political body responsible for organization of life and resources in the charted territory. That is Municipality of Valandovo. The second layer refers to the narrow understanding of affected territory such as affected settlements with their administrative boundaries and location of mine and associated facilities.

The first, macro approach, where it refers to municipality as a whole, helps us to understand the life of the residents of municipality, since most of the resources for this project are taken from the municipality, not just from these several affected settlements.

The second, the micro approach, tends to reflect the exact footprint of directly affected settlements with included mine and associated facilities. The necessity to deal with two different layers of understanding of Project area comes from the intention not to minimize the significance of the social impacts that will arouse from this project, particularly impacts that are addressing directly affected settlements.

Municipality of Valandovo is located in the southeastern part of the Republic Macedonia, south of Demir Kapija gorge, east of the river Vardar and west and north of the branches of mountains Plavush and Belasica. Its north borders are shared with Municipality of Strumica, while northwest it borders Municipality of Konche and Municipality of Demir Kapija. On west it borders Municipality of Gevgelija, while south borders are shared with both municipalities that share international border Dojran and Bogdanci. Only small part of border on east is shared on international level, with Republic of Greece.

The municipality, actually the town Valandovo as a local urban center was, and still is, a crossroad of many important roads leading to Skopje, Gevgelija, Dojran and Strumica. The highway of international significance E-75 passes through municipality of Valandovo.

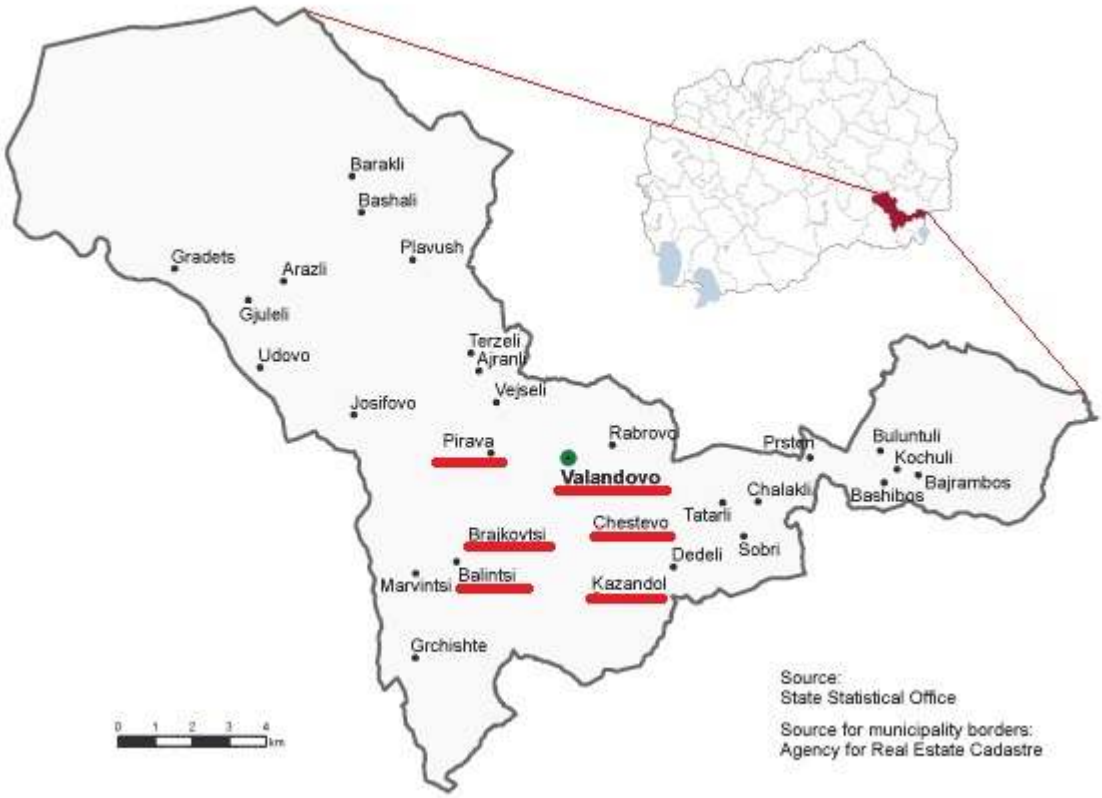
The municipality of Valandovo is holds relatively large territory of 331 km². Regarding the terrain the municipality can be divided into two parts: the hilly – mountain and plain area. Hilly - mountainous land holds approximately 20.8 square kilometers or 63% of the territory of the municipality. The plain part covers an area of 12.3 square kilometers or 37% of the territory of the municipality.

The project area in a narrow sense, embraces five live settlements and one abandoned: Valandovo, Pirava, Kazandol, Brajkovci, Balinci and Chestovo (abandoned). The mine and mining facility is located between the villages Kazandol and Brajkovci, with geographical and visual orientation toward Pirava and Valandovo.

The most affected settlement is the village of Kazandol since it is at some 1km distance from the location of the open pit. Actually the concession field / mine complex will be some 100m far from the first houses and the leaching heap will be some 500m far from Kazandol village. The road that leads toward the village will be upgraded and also used for the purposes of the mine, not only for the Kazandols' residents.

The following map shows the position of the directly affected settlements and all other that belongs to this municipality.

Figure 4 – Map of Municipality of Valandovo with affected settlements



7.2 Land use and Land take

Land with an area of about 284 hectares is needed for the project in order to establish the proposed mine complex. This land, in total, is governmentally-owned land that belongs to the Republic of Macedonia. Currently, the land in the entire width of the complex is not used for any commercial or agricultural activity. Therefore, the construction and operation of mine complex would not imply a need for acquisition, redemption or Expropriation of land other property or from private individuals and impact of that kind - loss of land within the scope of the location of the project - will not appear. Best part of it is forest. Accordingly, the project will not cause involuntary physical eviction or forced economic loss or restricting access to natural and economic resources. In general, the acquisition of the entire land for construction of the project and determining the intended use thereof for the production – industrial objectives shall be conducted in accordance with the relevant Macedonian legislation.

The process of acquisition of the land, including aspects of transformation of land from forest in industrial will be implemented in accordance with the relevant Macedonian legislation. Eventually in case of need for additional land acquisition, it will be conducted in accordance with relevant Macedonian legislation and IFI requirements and standards.

Any possible occurrence of loss of land or other property, as well as causing damage to the activities of the local population or loss of income from those activities, caused by activities related to the construction or operational phase of mining complex will be subject to compensation pursuant positive Macedonian regulation and IFI requirements and standards.

The map in Appendix 2 shows the land use in the local area around the mine complex.

7.3 Demography

The demographic image of the municipality of Valandovo has not changed since the last held Census in 2002. It does not suffered significant changes like it is a case in almost all parts of Republic of Macedonia. For the period of 12 years the Municipality of Valandovo has lost only 0.3% of the population, while on the national level the population increases for 2.3%. The following table gives overview of the demographic image of the municipality for the period since last hold Population and Dwelling Census in 2002.

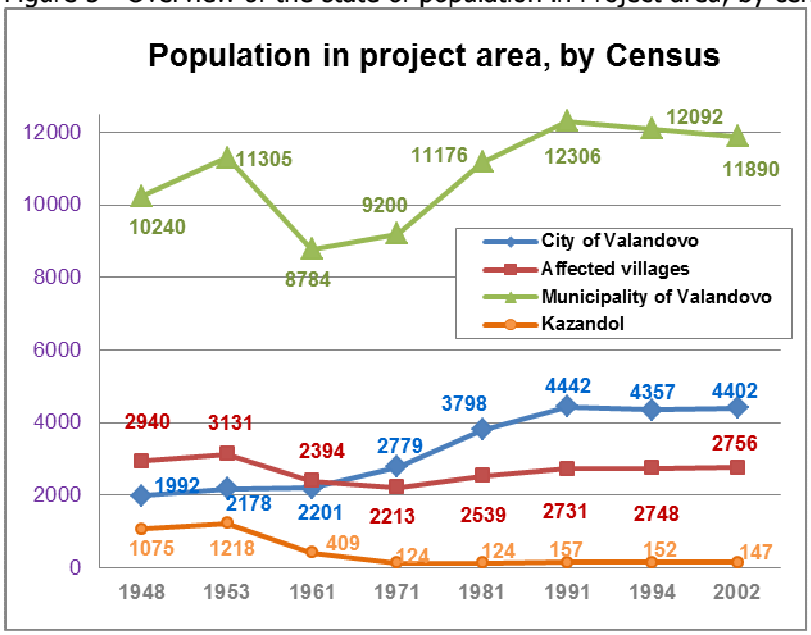
Table 4 – Demographic image in the municipality of Valandovo

	Estimation (31.12.2014)	Census (2002)	Dwellings (2002)	Households (2002)	(km2)	Population Density (2014)	Population Density (2002)	Population growth
Republic of Macedonia	2069172	2022547	698143	564296	25713	80	79	46625
Municipality of Valandovo	11851	11890	4050	3545	331,4	36	36	-39

(Source: SSO website[4])

Small variation in number of population has been registered in the project area during the past 7 decades. The following figure shows the movement of population figures by census year in four different entities: City of Valandovo, village of Kazandol, all affected villages and the municipality as a whole.

Figure 5 - Overview of the state of population in Project area, by census year

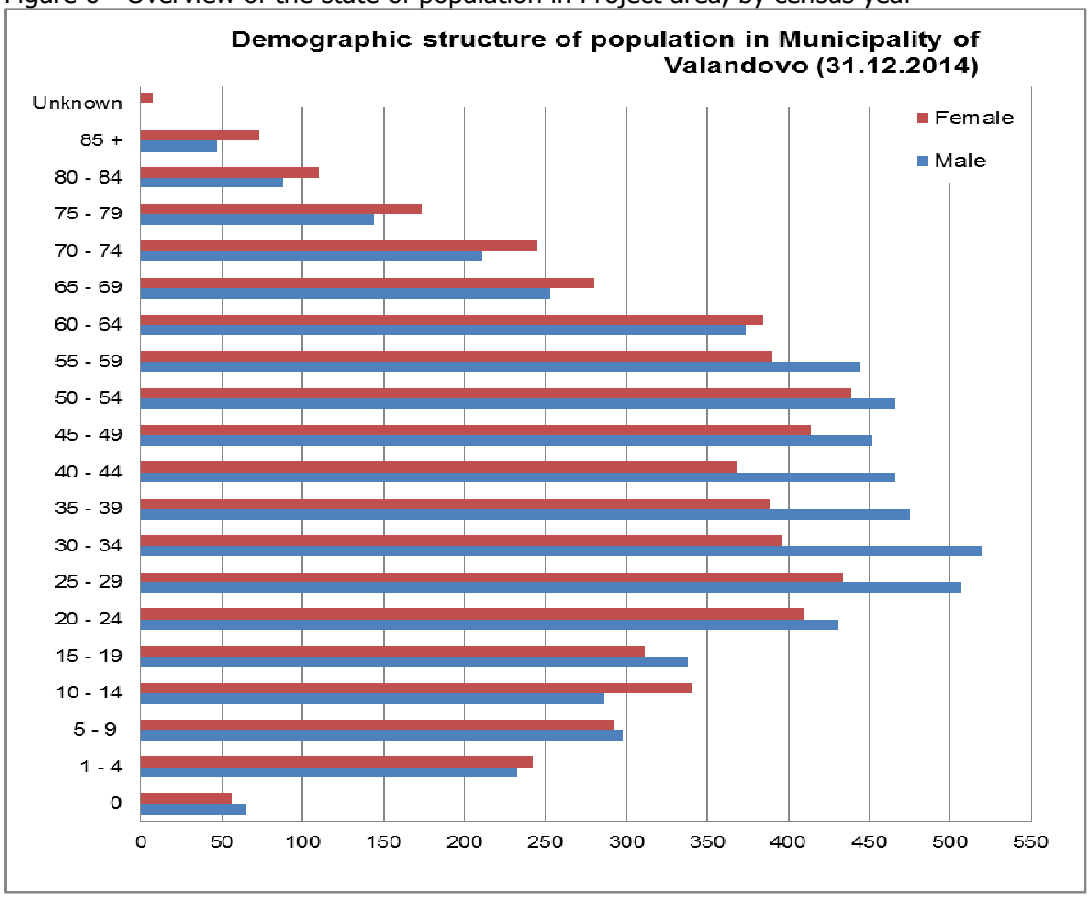


(Source: SSO website)

Last registered state of population, by gender and interval of years (5 years) is presented on the following Figure. Women comprise 48.6% of the population in the municipality. Men are dominant in the serial of years of age 20-60, where the difference is 5% of the whole population. This means that there are many unmarried and/or divorced/widowers within these serials of years of age.

[4] Presented numbers for 2002 have being generated from Census 2002, while data for 2014 are official estimations made by State Statistical Office, and available at its website. Source: website of State Statistical Office.

Figure 6 - Overview of the state of population in Project area, by census year



(Source: SSO, report 2.4.15.10 – Estimation of population, 2015)

Migration rate in municipality of Valandovo is low, compared to other municipalities in Republic of Macedonia. The following table shows that there is a very low level of migration in the municipality.

Table 5 – Migrations in municipality of Valandovo, 2014

Type of migrants 2014	Valandovo	Macedonia
Total immigrants	66	8525
Immigrated persons from another municipality	52	6591
Immigrated persons from other settlements in the same municipality	14	1669
Immigrated persons in the Republic of Macedonia from abroad	0	265
Total emigrants	59	9000
Emigrated persons from another municipality	45	6591
Emigrated persons from other settlements in the same municipality	14	1669
Emigrated persons from the Republic of Macedonia abroad	0	740

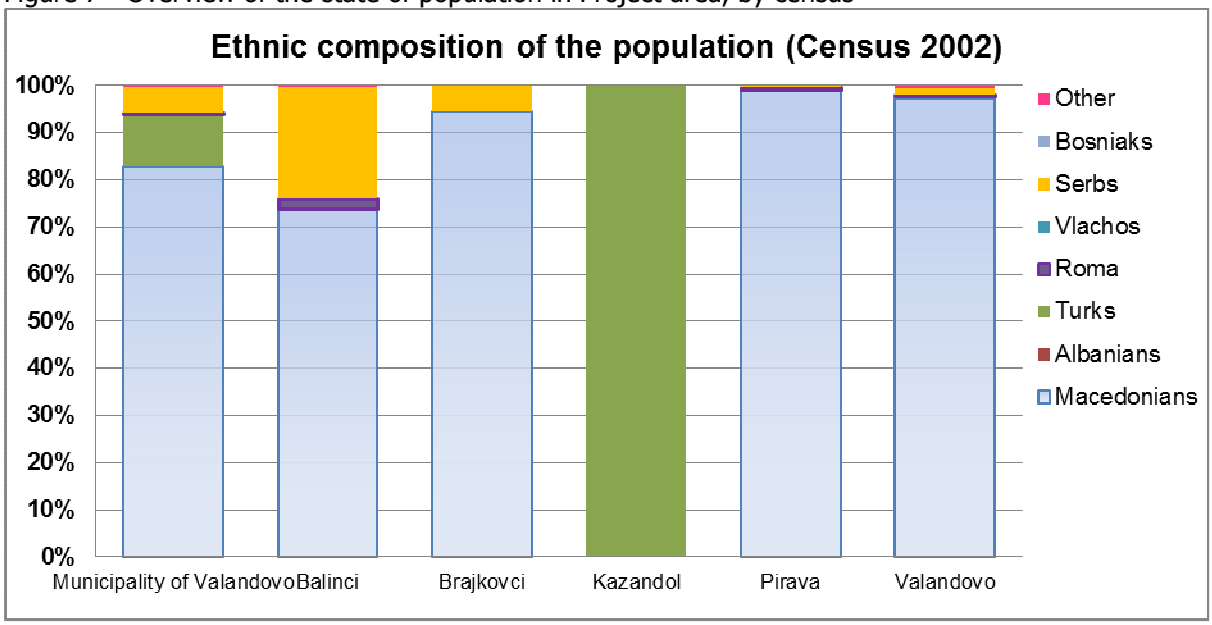
(Source: SSO, report 2.4.15.08 - Migrations 2014)

The net migration, for 2014 year counts seven (7) persons, which is recorded increase for 0.1% of the total population in the municipality. Most of the emigrants are migrating due to lack of employment opportunities, particularly those with university education. On the contrary, immigrants settling in the municipality are having lower educational profile. Women are the main actor in migration process in the municipality. In 2014 11 female has moved to the municipality, while some 4 man has left the municipality. Regarding the ethnic profile of those who emigrate, in total Macedonians are still the most mobile ethnic group. The net population immigration of Turkish ethnic origin in municipality counts seven (7) people, mainly women. Marriage is the main reason for 33 individuals who emigrated

in 2014. This is the same reason for 37 individuals that immigrated in the municipality. Most migrants are on the age 15-29 years of their life.

The ethnic composition of the affected population, in narrow and wide sense, is presented on the following graph. During the census in 2002, there were 9.630 Macedonians (82.7%), 1.333 Turks (11.2%), 639 Serbs (5.4%), 32 Roma (0.3%) and 54 others (0.5%). But, as it is presented on the following figure, some settlements have relatively homogeneous population regarding ethnic structure. All residents of village of Kazandol belong to Turkish ethnic group. Pirava, Valandovo, and Brajkovci show small variations in ethnic composition. Macedonians are the dominant ethnic group not only on the municipal level, but in all affected settlements, excluding village Kazandol. The following Figure explains the ethnic image of the affected population.

Figure 7 - Overview of the state of population in Project area, by census



(Source: SSO website)

The village of Kazandol, according to the local representatives counts 35 houses with ca. 90-100 mature people (18+ years of life) and some 30 - 40 children (underage)[5]. There are 10 houses with 3-4 children living with their parents. All of the residents are of Turkish ethnic origin. Recently (past year) two complete families have immigrated to Germany.

7.4 Economy and Livelihood

In general, Macedonian citizens provide their income throughout:

- Engaging own labor and skills (salary and other tolls)
- Income from rental property and property rights (real estate and other assets)
- Income of individual farmers and independent proprietors
- Transfer income (pensions, social transfers, transfers to the unemployed and private transfers from abroad)
- Capital gains (Proceeds from sale of securities, participation in equity and real estate) and
- Dividends and interest income (inflows of investment or capital inflows)

The most common type of income in the project area is engaging own labor, salary or other benefits, although other types of income are not rare. Increased living costs imply the need for achieving addi-

[5] The State Statistical Office undertakes a "People, Dwelling and Households" Census every ten years. Most of the data presented here are generated from the 2002 Census. In 2011, a new regular "Population, Dwellings and Households" Census was planned and started, but it didn't reach its end, due to some technical and minor political obstacles. It was delayed indeterminately.

tional income which is very difficult to record, but it is notable in good consumption, growth of personal savings in banks and the creation of tangible goods, primarily property.

People in the project area are combining different ways of achieving income. A portion of those revenues do not fall under the category of legally achieved (non-taxed). There is a certain level of grey economy that sustains the lives of ordinary citizens. Renting property or property goods i.e. fertile agricultural land, unregistered garage businesses and workshops, illegal woodcutting, fishing/hunting and selling meat for re-sale and other are actually the part of the way to earn additional income in the project area. Some people are harvesting herbs and plants used in pharmaceutical and culinary purposes (rare species of plants, herbs, mushrooms, etc., located on less frequented places).

The economy in the municipality is mainly based on agriculture and services. The following table gives overview of the structure of companies in the municipality, by main activity. Wholesale and retail trade; repair of motor vehicles and motorcycles (markets, shops etc) is the main activity to 35% of the companies in Valandovo municipality. Some 14.6% of the companies are dealing with agriculture, while some 12.6% are transport related companies. Some 34 companies (9.6%) have production (manufacturing and processing). This applies to agricultural products and some garment.

Table 6 – Active business entities by sections of activities

situation at 31 December	2014
Total	**357**
Agriculture, forestry and fishing	52
Mining and quarrying	0
Manufacturing	34
Electricity, gas, steam and air conditioning supply	2
Water supply; sewerage, waste management and remediation activities	1
Construction	8
Wholesale and retail trade; repair of motor vehicles and motorcycles	125
Transportation and storage	45
Accommodation and food service activities	21
Information and communication	2
Financial and insurance activities	3
Real estate activities	1
Professional, scientific and technical activities	12
Administrative and support service activities	0
Public administration and defence; compulsory social security	1
Education	3
Human health and social work activities	18
Arts, entertainment and recreation	8
Other service activities	21
Activities of households as employers	0
Activities of extraterritorial organisations and bodies	0

(Source: SSO website)

In 2014 most of the companies in the municipality (73%) are micro companies, employing mainly 1-5 people. Some 25% companies are small companies, while 2% are medium companies. The following table gives overview of the health of the businesses in the municipality.

Table 7 – Active business entities by size (state as of 31st December)

	Municipality of Valandovo				
Year	**Total**	**micro**	**small**	**medium**	**large**
2014	357	260	89	8	0
2013	357	256	93	21	4
2012	369	268	94	7	0
2011	360	232	124	4	0
2010	373	200	169	4	0

(Source: SSO website)

The unemployment rate in the municipality is not as high as it is on national level. There are traits of seasonality, as notable from the following table (December 2014 vs. August 2015), where additional workforce is engaged in agricultural activities during the harvesting season.

Table 8 – Unemployment figures

Unemployment	**Macedonia**			**Valandovo**		
(31 December)	**Total**	**Rural**	**Share**	**Total**	**Rural**	**Share**
August 2015	125605	38469	**30,63%**	690	389	56,38%
2014	123661	37436	**30,27%**	756	434	57,41%
2013	96200	26089	**27,12%**	447	237	53,02%
2012	243403	79394	**32,62%**	1639	1077	65,71%
2011	281144	92686	**32,97%**	1959	1309	66,82%
2010	321341	109179	**33,98%**	2111	1430	67,74%

(Source: EARM website)

The Kazandol village makes small contributes to the economy of the municipality in sense of employment. Almost all of the families are receiving agricultural subsidies, due to their agricultural way of life (livestock breeding and planting tobacco). There are 3 people employed in glasshouses, other 3 are employed in agricultural factory Anska Reka, one in Casino in Gevgelija and the remaining are employed in governmental/public institution. In total, in Kazandol village some 13 people are employed and regularly receive salary. Some 5 houses are regularly receiving pension. There are houses in the village that receive financial help from their relatives (children) working abroad.

Some 3 people in the village are hunting rabbits, wild boars and wild birds for sale. Collecting mushrooms and herbal harvesting (for tea and pharmacies) is also frequent practice by residents of Kazandol. Some of the residents occasionally do illegal woodcut.

7.5 Agriculture

The main source of income in the municipality of Valandovo comes from agricultural activities. Municipality has excellent climate and geographical position which enables quality and quantity of agricultural production.

The land in municipality is actively used in agricultural activities. Some 9543 ha of agricultural land is used for agricultural activities. Near 53% has been used as pasture, while the remaining 47% is cultivated. Main part of the cultivated land belongs to arable land and gardens, while 36% are vineyards, some 5% are orchards and 1% is meadows. The following table gives overview of the distribution of land in various agricultural activities.

Table 9 – Agricultural area by category of use, by municipality

2014 / ha	Valandovo
Agricultural area	9.543
Cultivated land	4.478
Arable land and gardens	2.603
Orchards	236
Vineyards	1.594
Meadows	45
Pastures	5.065

(Source: SSO website)

In 2014 in Valandovo municipality there were 60235 fruit bearing trees. Plum trees were the most present with 23% of the total trees and their participation in total production of fruits in the municipality counts 28%. Apricots hold the second most present fruit with 17% of all fruit trees and 13% of total fruit production. Sour cherries are present with 15%, but their participation in total fruit production counts 10%. Peaches are fourth in presence with 15% and 14% of participation in fruit production from trees. Cherries take only 10%, but their production is 14% of the total production.

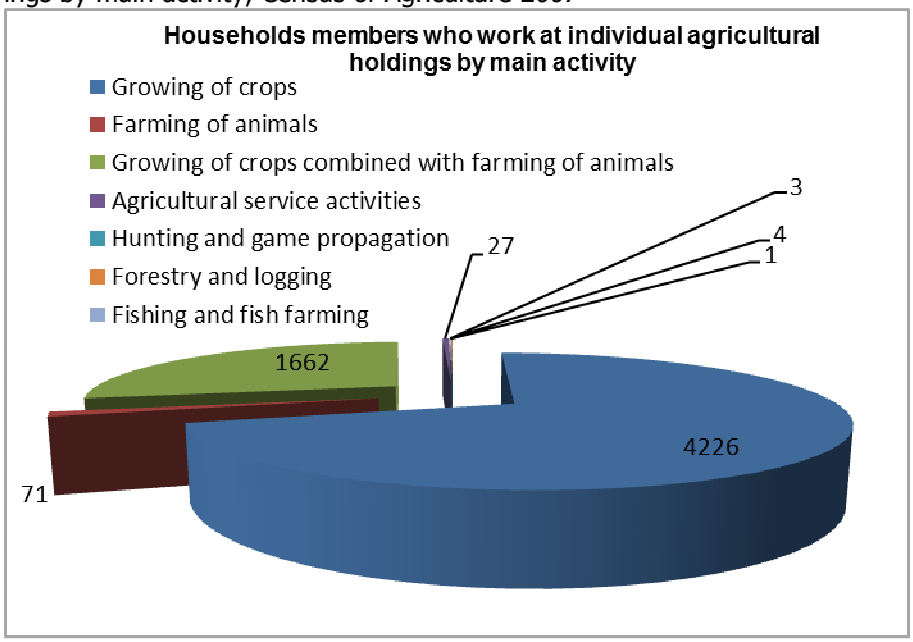
When it comes to vineyards, in 2014, some 1576 ha of vineyard were harvested, with 4015 number of bearing vines. Total production counted 11.912 tons, which is 6% of the total vine production in Republic of Macedonia.

Also in 2014, the sown area in the arable land and gardens counted, as follows: Wheat 375ha, Cabbage 231ha, Barley 212ha, Tobacco 211ha, Alfalfa 201ha, Maize 192ha, Melons and Watermelons 152ha, Potatoes 71ha, etc.

During the census of Agriculture in 2007, conducted by State Statistical Office, in municipality of Valadnovo there were 2399 agricultural holdings that utilizes 2138a (of 2563ha available) land divided in 8539 parts. The average part of used agricultural land counts 3.56 ha.

There were 5994 people (41.4% female) engaged in the agricultural activities. Some 70% were growing only crops, 1.2% are only farming animals, while 28% besides farming animals also grow crops. The following figure illustrates the proportions of all engaged household members.

Figure 8 - Households members in municipality of Valandovo who work at individual agricultural holdings by main activity, Census of Agriculture 2007



(Source: SSO website)

Farming pigs, cattle, poultry, horses and sheep is still popular practice in the project area. The following table shows the distribution of livestock by individual agricultural holdings.

Table 10 – Number of individual agricultural households with livestock, poultry, hares and beehives and Number of units, Census of Agriculture 2007

Valandovo	cattle	horses	sheep	goats	pigs	polutry	hares	beehives
Individual agricultural holdings with	403	253	212	32	676	544	41	22
Number of units	1837	286	3891	2482	1268	8903	540	355

(Source: SSO website)

Irrigation is also practice that is common in the municipality, since the climate conditions (heat) makes pressure to the agricultural production. Vineyards, vegetable, cereals and orchards are widely irrigated. The following table presents the structure of irrigated land during the census in 2007.

Table 11 – Irrigated area, Census of Agriculture 2007

Irrigated area of…	(ha)
Total irrigated area (ha)	**1164**
cereals	126
industrial crops	11
vegetable	318
fodder crops	61
orchards	109
vineyards	528
meadows	6
other plants	5
Total number of agricultural holdings that irrigate	**1916**

(Source: SSO website)

In the municipality successfully operate the wineries and grapes processing and semi processed products plants. Additionally there are plants growing early produced vegetables products, with an emphasis on tomatoes, as well as plants for canned fruit and vegetables.

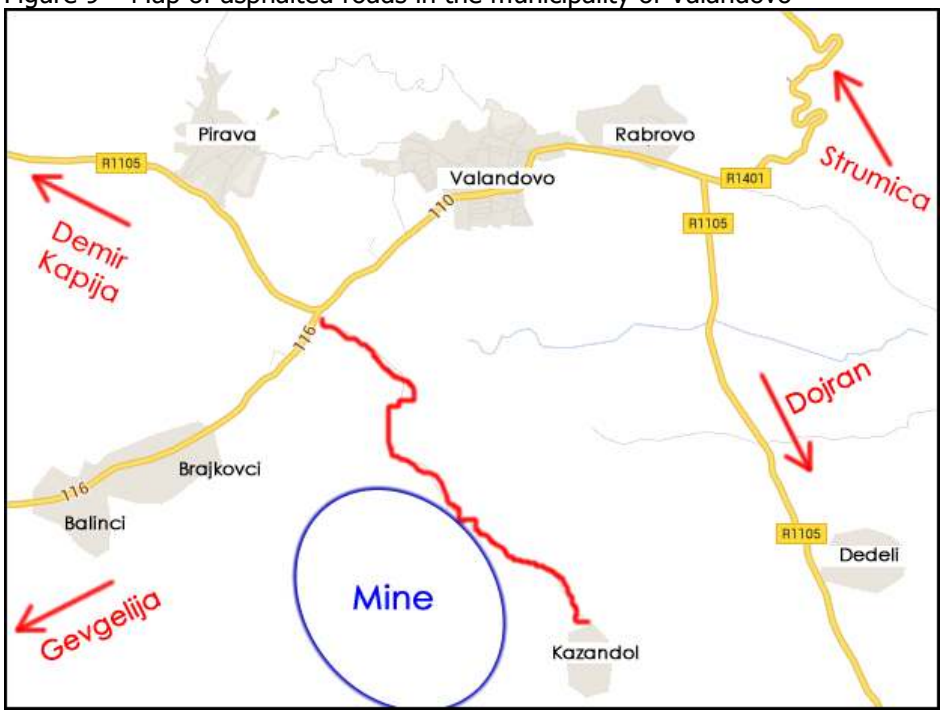
People in Kazandol village find livestock farming and agricultural activities as a primary source of livelihood provision. Namely, better part of the houses plant tobacco since it is subsided by the government. There are other fruits and vegetables grown by the villagers such as cabbage, plums, figs, cherries, maize etc. Wheat is also present as a plant. Farming animals is seemingly the most viable business since there are 10households that keep almost 250 cattle, some 7 keep 1500 sheep, and almost every house has in average 5 goats (some 300 goats in total). Every house also has poultry. The cow and sheep milk is brought to the local centres for buying milk in villages Udovo or Bogdanci. Almost every household owns tractor and attachable mechanization for land cultivation.
Livestock from Kazandol has been taken to local surrounding hills for grazing: for cattle and goat radius ca. 1-1.5km, for sheep 1-3km (see Appendix 2)

7.6 Housing, Communication and Community Services

The municipality of Valandovo consists of 29 settlements, of which one is an urban settlement (the city of Valandovo). Since its density is very low (38 people/km2), most of the residents live in individual houses. Several flats can be found only in the city. The typical household usually consists of spouses and children, and sometimes parent(s) of one of the spouses can live in the same household.
All villages are connected to electric grid, and all have own water supply. The wastewater is only regulated in Valanodovo and Pirava. Other settlements are organized on individual basis, with individual septic tanks. Telephony is present in every settlement.

All settlements are connected with roads. Actually there is a good road network connecting all settlements. The road network in the municipality is presented on the following map.

Figure 9 – Map of asphalted roads in the municipality of Valandovo



(Source: Google Maps)

Every house in Kazandol is connected to the electric grid. Also, recently they all connected to new local water supply system enabled by private enterprise owning Casino in nearest municipality bordering Greece. In recent 5 years there are 10 new houses in the village. The road toward Kazandol, from the junction with Valandovo and Brajkovci is built 1997/98 year and it is the single communication connection with the lower parts of the municipality.

There is no representative in the Council of Municipality of Valandovo from Kazandol.

7.7 Health and Social Welfare

The healthcare system consists of three segments: primary, secondary and tertiary health care. The primary health care in Macedonia is provided through a network of private and public health care: walk in clinics and health centers. The system of primary health care includes preventive, promotional and curative services through different profiles of health workers and allied professionals: doctors, specialists in general practice dentists and pediatricians, specialists in school medicine, gynecologists and specialists in occupational medicine. The secondary health care is provided through a system of specialist advisory services, general and specialist hospitals, offices and institutes. The tertiary health care is practiced in clinical hospitals and the University Clinical Centre in Skopje. These two levels are responsible for providing preventive, curative and rehabilitation health services by various specialists and subspecialists. Macedonia has a comprehensive system of health care, geographical and financial access, control of communicable disease and almost complete national vaccine coverage.

The health care system is mainly financed by compulsory health insurance, which creates opportunities for all citizens to have health insurance. Compulsory health insurance is financed by means of deductions from the salary, designed for health insurance, the amount of which is determined by the National Assembly. Furthermore, Macedonia's state budget provides funds to cover health costs insurance for those citizens who are not eligible for health insurance under which any of the above reasons, including groups such as children under the age of 18 (and 26 if they are studying); pregnant women, nursing mothers; People older than 65 years, etc.

Within the municipality Valandovo, the health care is organized through the state and private health institutions. In the city of Valandovo there is a Health center Valandovo, that provides primary care for ambulatory care sensitive conditions and within there are governmentally supported departments: Laboratory, First Aid Ambulance, Immunization, House visit for ill and elderly, Roentgen, Physician therapy, Gynecology, Dentistry and Daily center for children with disabilities. Additionally, in the municipality there are several private entities that work with healthcare: 6 general practices, 8 dental practices, 1 gynecology and 3 pharmacies. The following table gives overview of the state of the human resources that is involved in the health care in the municipality of Valandovo.

Table 12 – Coverage of the health sector with medical personal in Municipality of Valandovo, 2012

2012	Valandovo	RM
NUMBER OF DOCTORS IN THE HEALTH REGIONS OF RM		
Number of ressidents per Doctor	702	358,1
Total number of Doctors	**17**	**5755**
General Practice	9	1875
General Practice (% of the total number of Doctors)	52,9%	32,6%
At specialization	0	326
At specialization (% of the total number of Doctors)	0,0%	5,7%
Specialists	8	3554
Specialists (% of the total number of Doctors)	47,1%	61,8%
Number of Stomatologists	**7**	**1652**
Number of residents per 1 Stomatologist	1704	1247,6
Number of Pharmacists	**5**	**888**
Number of residents per 1 Pharmacists	2385	2321
STAFF IN THE MEDICAL UNITS IN RURAL AREAS, BY HEALTH REGIONS, IN RM		
Permanent Doctors	0	225
Periodical Doctors	0	7
Health workers with High School and Vocational school	0	334
Hot spots	0	262

(Source: Health Map of the Republic of Macedonia 2012)

The most common reasons for deaths, in 2012, in the Health region Valandovo were Diseases of the circulatory system (62%) and Neoplasms (17%).

The social care and welfare in Valandovo is conducted by the Centre for Social Works Valandovo. The following table presents the state of social welfare and care in the municipality. The overall image of the state of social welfare is that the municipality is within the average frames of national image. The only potential concern is the highest number of juvenile recipients of social welfare 454 individuals, or 3.3% of the total juvenile recipients of the social welfare. Knowing the fact that municipality of Valandovo participates with 0.57% in the total population in Republic of Macedonia, such high percentage might indicate that there is a particular vulnerable group among the juvenile population.

Table 13 – Coverage of the health sector with medical personal in Municipality of Valandovo, 2013

2014	Valandovo	RM	%
Children's allowances			
Child care allowances	140	17602	**0,8%**
Recipients of special allowances	29	7165	**0,4%**
One-off financial assistance for newborn child	47	8773	**0,5%**
Recipients of parental allowances for children			
Parental allowance for children	90	17965	**0,5%**
Single parental allowance	0	3	**0%**
Recipients of social welfare, 31.12.2014			
Juvenile	454	13859	**3,3%**
Adult	122	37083	**0,3%**
Trade companies for employment of disabled persons			
Institutions	0	245	0,0%
Users	0	2316	0,0%

(Source: SSO, report 2.4.14.15 – Social welfare, 2015)

In Kazandol there are some 3 families (six recipients) that receive social welfare packages distributed by the local Centre for Social Works. There is highly vulnerable family with many children and some of them with disabilities. Another 2 families have invalidity in the household.

7.8 Education, Childcare and Gender Issues

In municipality of Valandovo there are two primary schools and one secondary school. One object of the primary school (Josip Broz Tito) is located in the city of Valandovo with nine-year classes. Two other objects with nine-year classes are located in villages Pirava and Chalakli. There are also seven other object with five-year classes, from the same school, in the following villages: Brajkovci, Marvinci Grchishte, Sobri, Bashibos, Dedeli and Kazandol. Most of the classes are on Macedonian language excerpt those in villages Chalakli, Bashibos, Dedeli and Kazandol, which are held on Turkish language.
The second primary school in the Municipality (Strasho Pindzur) is located in the village of Josifovo and it has four other branches in the following villages: Udovo, Marvinci, Grchishte and Kalkovo.

Secondary education is conducted in the solely high school in municipality, Municipal High School "Goce Delchev". The school is organized in two divisions: gymnasium and agricultural-veterinary vocational education.

Childcare in the municipality is conducted by the Public Municipal Institution for Children Kindergarten "Kalinka". It is located in the city of Valandovo. The following table presents the number of students in the educational institutions in Valandovo municipality.

Table 14 – Number of students in Municipality of Valandovo

	Kindergarten			Primary School			High School		
Students	**Total**	**Female**	**%**	**Total**	**Female**	**%**	**Total**	**Female**	**%**
2010/2011	163	80	49,08%	1039	545	52,45%	457	229	50,11%
2011/2012	198	98	49,49%	1026	534	52,05%	428	217	50,70%
2012/2013	183	101	55,19%	1014	520	51,28%	381	181	47,51%
2013/2014	190	109	57,37%	1008	515	51,09%	347	172	49,57%
2014/2015	185	92	49,73%	1011	518	51,24%	298	156	52,35%

(Source: SSO website)

Education in Kazandol is conducted in a separate building (see following photo). This object is host to 9 children, studying at up to 5th grade. The other students attending 6th - 9th grade are studying in village Dedeli. The municipality organizes transport for the students from Kazandol to the school in Dedeli, or high school in Valandovo.

Figure 10 – Image of the school in Kazandol village

(Photo by Boris Stipcarov)

When it comes to the gender issues, there is recognizable difference in the way of life of woman in Kazandol and women in the plain areas of the municipality. The life of women in Kazandol is strongly traditional, dominated by 'housewife' lifestyle by taking care for the home and children and helping her husband with livestock or other agricultural activities. The women in plain areas beside this also seek paid work. They can be found as regularly employed, seasonal agricultural workers, farmers and other.

Only two women from Kazandol are employed. One is a teacher in Dedeli, while the other is hygienic in the local Kazandol School. A student from Kazandol is studying architecture in Skopje. She is at her second year of studies.

7.9 Cultural Heritage, Religion, Values and Habits

The project area has been populated since ages. Its geographic position and climate conditions provided excellent circumstances for establishment of human settlements. With centuries people here found pleasant environment that provides healthy life for all beings. Undoubtedly, they all left significant imprint on the local environment and culture. Such artefacts can be found in numerous archeological sites that stretch in the project area, like the ancient settlement and graveyard in nearby village of Marvinci. The archeological site of Isar Marvinci ("Isar-Calais") is of the greatest importance. This site is located near the village Kazandol of Marvinci, about 7 kilometers southwest from Valandovo and the relative distance of about 7 kilometers to the west of the location of the proposed mine complex near the highway Skopje - Gevgelija, on the left side of the River Vardar. In this area in the ancient times a settlement existed and on its remaining, thanks to favorable conditions and the position in the Vardar's Valley, later on an ancient settlement from Hellenistic time developed, which gradually grew into an important economic, transport and cultural center area, in the ancient times called Amphaxitis.

At the footprint of the proposed mine complex there are no archaeological sites or other recorded protected cultural heritage that will be directly affected by the construction and operation activities of the project.

The following table gives overview of Archeological findings in the project area.

Table 15 – Registered Archaeological sites in the project area

Settlement	Archaeological findings
Brajkovci	Manastir - Early Christian basilica. Chukarski Piroj – late Hellenistic and Roman times settlement.
Valandovo	Zelenishte – Early Roman Times Necropolis Isar Kale– Late Antique settlement Manastirishte - Late Antique Necropolis Stakina Cesma – Late Roman settlement.
Kazandol	Kazandolska Reka – Roman times settlement Mandra Cheshma - Fortified Medieval settlement
Pirava	Kartalovo Sedelo – Hellenistic and Roman times settlement Krstot – Late Antique Necropolis Turski grobishta – Shrine. Mausoleum from the Roman Times Chargo - Roman times settlement

(Source: Archeological map of R. Macedonia, Tome II, 1996)

In the affected project area there are several churches and one mosque. The orthodox churches are located in the following settlements: Priava – Temple Sveti Gjorgji, Valadnovo –Monastery Sveti Gjorgji and Temple Sveti DImitij, Brajkovci – Temple Sveti Gjorgji, Balinci – Temple Sveti Dimitrij.

The Mosque Hajji Ibrahim Jamisi is located in the village Kazandol. All residents of Kazandol belong to Muslim confession, although not all are regularly attending prayers. But those who do practice their religion in the newly constructed mosque that is located in the same village.

The project area is famous for three popular cultural events: FOLK FEST – festival of folk music (23-25 May each year), VALANDOVSKA RAKIJADA – competition for producing homemade alcoholic beverage Rakija (middle of October) and HID-BAH SHEN FEST (beginning of May) – festival of the Turkish ethnic community in the region, held in village of Chanakli.

8 Impact Assessment

8.1 Social Management System

8.1.1 Construction and Operation phase

Impact 1: Misguidance in realization of Social Management System

Implementing Social Management System requires good organization and dedicated employees that will manage all recommendations that derive from this document, contracts with IFIs, and contracted programs related to Community development and implementation of Good International Industry Practice.

Impact 1	Misguidance in realization of Social Management System	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impact resulting from non-Project activities that occur as a consequence of the Project
Scale	Local area	Effects of the project will be experienced in wider than just mining site, and can influence local suppliers too.
Duration	Medium-term	Impact will occur in both Construction and Operation phase
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation measures

An employed person in SARDICH MC must be appointed to manage and follow realization of mitigation measures and monitor programs and to report to highest instances in the company and external stakeholders/shareholders on regular basis.

This person must be familiar with all procedures of the company, IFIs standards/requirements, Plans and Programs that needs to be realized due to this development project and other issues that are not related to the process of production.

In order to achieve appropriate management, it is not recommendable to delegate management responsibilities of various parts of the Social (and Environmental) management system to different employees. It is vise to train, appoint and continuously develop professionals that can manage responsibilities that comes together with finances from external sources.

Residual

No residual impacts are visible if all of the measures are to be implemented.

8.2 Stakeholder Engagement

8.2.1 Pre-construction and Construction phase

Impact 2: Increased anxiety due to lack of communication with the local settlements and property owners close to the project area

Owners and land users of the parcels that are very close to the mine complex, particularly in terrain configuration such as this project, might become suspicious that their parcels might be impeded for access, illegally acquired, decrease the quality of land and other things. Such doubt can create negative attitude toward the project and sometimes people that turned to the negative attitude about the project can raise different questions related to their fear of loss of the land they own or exploit. They can generate also negative public opinion and sometimes try to take actions just to protect their own interest, which might be in collision with this project. Uninformed and partially informed stakeholders are potential threat to realization of the planned project.

Impact 2	Increased anxiety due to lack of communication with the local settlements and property owners close to the project area	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impact resulting from non-Project activities that occur as a consequence of the Project
Scale	Local area	Impact will dominantly influence just the Municipality
Duration	Short-term	Impact will occur in both, pre-construction and construction phase
Likelihood	Likely	Experience shows that lack of communication always grow anxiety and distrust
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

It is advisable SARDICH MC to conduct series of engagement activities with the stakeholders, particularly those who own parcels close to, or use the land under the project footprint. A Grievance mechanism must be created and be publically available in each affected settlement, Company/Project premises, and premises of municipality of Valandovo.

The Company must continuously and regularly maintain communication activities with affected residents from Kazandol and those who own or use land nearby the project footprint or the access road to the facilities, from the main road.

Residual

Residual impacts will remain, but with significantly lower intensity, since it is very hard to influence people's thoughts, interests and desires.

8.2.2 Operation phase

Impact 3: Decreased stakeholder engagement activities during operation

Once the production process starts, usually companies direct all available resources toward improvement of the efficiency of the company and usually forget about the necessity to continuously maintain good relationship with all stakeholders. One must have in mind that during the exploitation period of

mine there might be significant changes in the structure of the stakeholders and their interests and concerns. Things might easy get out of control if there is lack of communication between the Company Investor and affected stakeholders.

Impact 3	Decreased stakeholder engagement activities during operation	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality
Duration	Long-term	Impact will occur and last in Operation phase
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

The company must keep open an ongoing channel with the affected and interested stakeholders in the project area during the operation phase, since not all affected are able or willing to fill a grievance. The company must regularly hold semi-annual meetings with representatives from the local settlements and other affected stakeholders. Strong accent on women participation on these meetings must be in place.

Residual

No residual impacts are visible if all of the measures are to be implemented.

8.2.3 Decommissioning phase

Impact 4: Improper management of social issues rose during closure of the mine

When the company closes business it usually plans not to impose itself to extra costs. Particularly this is practice when management decides to prematurely stop or close active business, since it is no longer profitable for a certain period of time. People, whether they are directly or indirectly engaged with the company, or are part of affected community in some sense, have right to understand the politics of the company at some acceptable time in advance, just to adapt themselves to the new situation that expects them.

In such cases it usually conducts weak stakeholder engagement process, at very minimal level, or none engagement at all is being practiced. The motive, usually is to skip the undertaken obligations that brands the company as one following GIIP principles. Such improper management of social issues during closure of the mine can have a boomerang effect when company decides to re-open or expand business after some period of time. People will no longer have faith and confidence in company.

Impact 4	Improper management of social issues rose during closure of the mine	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality

Duration	Permanent	The impact and its effects will continue or will last beyond the operational life of the project
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

The Investor must, conduct series of stakeholder engagement activities with the local residents in Kazandol and with operators of the fields and vineyards in order to inform them on the outcomes of the mine closure. Public disclosure and consultation activities are organized in connection to the preparation of project documentation and related strategic and other studies.

The company must keep open an ongoing channel with the affected and interested stakeholders in the project area, even when it does not conduct any mining or production activity, and all rehabilitation and restoration activities are realized. Usually the person that is responsible for the Social and Environmental Management System and management and monitoring of undertaken obligations by contracts and by following GIIP principles can be the one that will ensure that after closure all grievances that have been submitted have been addressed properly and that there are no unsatisfied and problematic issues that remain to be discussion topic in the forthcoming years after closure of mine.

Residual

Residual impacts will remain, although all mitigation measures are implemented.

8.3 Economy and Livelihood

8.3.1 Pre-Construction phase

Impact 5: Delay in project realization

It is possible that there might be certain delays with procurement due to the misunderstanding that requirements of IFIs also apply to contractors' work in total. The IFI standards also apply to the subcontractor companies, too. Usually, it is not easy and simple thing to engage contractor that has all the necessary resources that are required for successful realization of constructing activities.

All of the standards and requirements regarding Environmental and Social Policy or Sustainable Framework must be met, and this can cause other effect - increase of the costs of investment.

Impact 5	Delay in project realization	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality
Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

The procurements must be carefully planned and conducted in a sense that all possible option for engaging subcontractors must be explored before opening tendering procedure. The personal in the Investor must start early consultations with all interested companies that might engage construction works. The company Investor must either allocate staff or engage experienced outsource that will prepare all the necessary procedures and documents before publishing tender.

Residual

Delays in project realization can always occur, although all procedures and recommendations are followed. After all, this project is complex and requires engagement of different professionals and companies that are not always in a complete shape to accept tasks and ready for team work.

Impact 6: Loss of small plots used for pastures of livestock

The Kazandol residents take their livestock to graze on the pastures spread some 1-1.5 km for cattle and goats and 1-3 km for sheep, in radius around the village. The Project footprint is in this range, although it is not often and whole used for grazing, but some small parts. By establishing this project, and setting fence around the mine complex, these amenities will no longer be of use for livestock grazing. Thus the farmers who took their livestock in future mine complex, have to find other free resources that would not endanger the economic value of other people from Kazandol that also take livestock to graze in these free areas.

Impact 6	Loss of small plots used for pastures of livestock	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence only footprint of the Project
Duration	Permanent	The impact and its effects will continue or will last beyond the operational life of the project
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	Low	Detectable but minor change to the specific condition assessed
Significance	Minor	Small amount of used land will be acquired

Mitigation Measures

It is necessary to timely inform the livestock owners on the plans to build fence around the mine complex and to reconsider the possibility to take livestock on other free locations within this range.

Residual

Residual impacts will significantly decrease with decommission phase, when the area of mine complex is to expected to be rehabilitated and restored to condition close to previous state.

Impact 7: Raising expectations of the affected population in a sense of employment

New mining project means that there are a potential number of employments that are available to the local population. But, not all of the unemployed individuals in the area can be engaged in mine. Unemployed people will expect that finally they will get the chance to enter any work place. In small and relatively traditional communities, discussion among the residents about the free working places that will come with the mine can heat up and raise the level of expectations.

Impact 7	Raising expectations of the affected population in a sense of employments	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality
Duration	Medium-term	Impacts predicted to last for an intermediate period extending beyond the end of construction
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

The Investor must, before commencement of any construction activity, come out in public with good Employment Plan, developed together with the local office of Employment Agency of Republic of Macedonia, where it states that there will be job places, but only for those who are qualified and has passed the training and prequalification process. It is not good to raise the expectations in such small social environment (municipality and affected settlements), due to the latent negative social consequences that such expectations always carry with it. The company will engage unqualified workforce, but also very qualified profiles since the mine is planning to work with specific environmental friendly production technology. Nevertheless, some people from Kazandol must be employed, and the Investor must enable their training for some of the planned jobs in mine.

Residual

Although the measure is to be implemented there residual impacts are expected.

Impact 8: Employment of local unemployed workforce

Job creation for the construction of a mining complex and over its operational phase can be considered a significant positive benefit from the project.

In the construction phase people will be needed a wide range of qualifications: from unskilled to highly qualified people. Jobs for unskilled workers will include activities that require mainly physical strength, while jobs which need semi-skilled workers will include work on various construction positions (reinforced concrete works, mounting works, installation works, etc.). Work positions that will require highly qualified persons will include management, supervision, control and maintenance.

During the operational phase, engagement of mining workforce will be required for the needs of open pit mining of raw mineral material and personnel needs for the process of heap leaching of the mineral material and producing cathode copper in the processing complex. Additionally, a need ill appear for engagement of highly skilled personnel for the management, monitoring, process control and maintenance of mining complex. Estimates of total needs for employment in manufacturing complex are given in the table below.

Unit	Assessment for personnel needed
Heap leaching of the raw mineral	11 employees
Production (4 shifts)	40 employees
Laboratory	9 employees
Maintenance	31 employees
Management and administration	19 employees

Source: Feasibility Study - Mining complex for production of copper cathodes – „Kazandol", Sardich MC DOOEL; 2014; prepared by IONTECH 2000 JSC, Sofia, Bulgaria

In terms of employment policy, SARDICH MC Operator will give priority for employment of residents of the local communities, with a bowl of nearby settlements. This is especially true of jobs for unskilled and semi-skilled persons who do not require special skills. Probably it will be necessary the working positions that imply the need for highly qualified personnel for the type of activity of the complex to be engaged people from outside the project area.

Impact 8	Employment of local unemployed workforce	
Criteria of impact	**Rating**	**Description**
Nature	Positive	Desirable
Type	Direct	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	High	Positive
Significance	Major	Impact do not need mitigation measures

8.3.2 Construction phase

Impact 9: Changing the livelihood provision of the people of Kazandol

Due to limited access to available resources like mushroom gathering, herbal harvesting, land for farming and grazing livestock and wood cut for firewood (even illegal), regarding existence of mine, there will be certain change in livelihood provision of the people of Kazandol, since they are living so close to the project footprint. Those who would not find employment within the company, and are using these resources in the project footprint for provision of livelihood might be very vulnerable if these free resources are cutoff.

Impact 9	Changing the livelihood provision of the people of Kazandol	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

Creation of Livelihood Restoration Plan in order to determine who actually will lose any sort of livelihood with implementation of this project. It is possible some of the local residents of Kazandol to claim loss of livelihood by the project, but actually they did not used this area at all. It is same with the private parcels that are stretched along the access road and near the Production facility. According the IFI these people are qualified to ask for livelihood restoration, but do they actually fall in this category, the Livelihood Restoration Plan should resolve such issues.

Residual

Although the measure is to be implemented, the residual impacts are expected.

Impact 10: Loss of qualified staff by local companies (Increase of operational costs)

New project in the area means possibility for some qualified workers on similar job positions to change the company in seek for better payment or working conditions. This new opportunity is not so welcomed by the companies that employee such staff. Namely, if they lose this qualified staff they alone will have to cope with problem to find new one and to train it to the acceptable level so working the process don't stop. This means increase of operational costs for the company that will lose qualified staff due to the opening of the mine.

Impact 10	Loss of qualified staff by local companies (Increase of operational costs)	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Regional	Impact will influence area wider than 20 km radius from the site
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Minor	Impact can be mitigated and managed

Mitigation Measures

The Investor must, before commencement of any construction activity, come out in public with good Employment Plan, developed together with the local office of Employment Agency of Republic of Macedonia. This plan should analyze the potential local employment market and come with solution that will be minimal loss for each affected side. The employment market in Valandovo is limited, as are the available qualified resources.

Residual

Although the measure is to be implemented, the residual impacts are expected.

Impact 11: Increased operation costs of the local agricultural companies due to the construction activities related to this project

In near vicinity of the production facility there is a substantial piece of land that is under vine. It is operated by the company Vizba from Valandovo. The access road toward these vineyards is the same access road that will be used for the mine and the same that is used by the residents of Kazandol. When the grape is being gathered, August/September, it is possible to cause some congestion on this road and to cause operational costs for the company operating these vineyards. It is similar with other agricultural companies operating in the same area close to the Project area.

Impact 11	Increased operation costs of the local agricultural companies due to the construction activities related to this project	
Criteria of impact	**Rating**	**Description**

Nature	Negative	Not desirable
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
Scale	Local area	Impact will influence local area
Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Low	The mitigation measures can help in minimizing the influence of the impact
Significance	Negligible	Impact is not expected to cause significant change

Mitigation Measures

Good communication and coordination of activities of both, and other, companies could mitigate the potential impact. The Investor, within its Social and Environmental Management System will place effort to coordinate construction activities during the period of vintage and gathering of the harvest.

Residual

No residual impacts are visible if all of the measures are to be implemented.

Impact 12: Increased level of professional engagement for the local companies

Construction and operational activities related to the mine will offer excellent opportunities for the local companies to become supplier or service provider to the mine. Local companies will find their interest in process of development, and later during the operation of the mine.

Impact 12	Increased level of professional engagement for the local companies	
Criteria of impact	**Rating**	**Description**
Nature	Positive	Desirable
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
Scale	Regional	Impact will have regional influence
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	Medium	Positive
Significance	Moderate	Impact do not need mitigation measures

8.3.3 Operation Phase

Impact 13: Livestock anxiety due to the operational noise and blasts and/or dislocation of the livestock to location far than current, near the village Kazandol

Although there will be limited operational noise and blasting noise, though it is expected such activities to cause significant level of anxiety at the livestock. There is no threat for the livestock, but local residents would surely send far from the village for grazing. This can cause certain economic impact since it will require resources to be allocated by the local farmers.

Impact 13	Livestock anxiety due to the operational noise and blasts and/or dislocation of the livestock to location far than current, near the village Kazandol	
Criteria of impact	**Rating**	**Description**

Nature	Negative	Not desirable
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
Scale	Local area	Impact will influence area wider than the project footprint
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Low	The impact is not expected to have significant influence
Significance	Minor	Impact can be mitigated and managed

Mitigation Measures

The Company will need to engage veterinary service to make a health check to the livestock on annual base, just to ensure farmers that their livestock is completely health and safe, although there are changes in the environment their livestock lives.

Residual

Although the measure is to be implemented, the residual impacts are expected.

Impact 14: Potential loss of quality of land due to the change in the topography and project activities

Although there is ensuring statement from the responsible environmental experts that there will be no pollution to the soil, particularly the soil that is next to the production facility, due to the terrain configuration it is possible in the future someone to raise claim that the company has contributed toward decrease of the quality of this land that is located in near vicinity of production facility.

The following image shows the perimeter of the potential impact 14.

Impact 14	Potential loss of quality of land due to the change in the topography and project activities	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint and its surrounding area
Duration	Permanent	The impact and its effects will continue or will last beyond the operational life of the project
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Low	The impact is not expected to have significant influence
Significance	Negligible	With implementation of proposed technology it is not expected any loss to the project bordering land

Mitigation Measures

It is advisable investor, before commencement of construction activities, to engage skilled and authorized expert /company to make assessment on the quality of the land and plants that are set in radius of 1km from the production facility. This should help to gather information on the current state of the land that is neighboring the production facility and if such need occurs later, to compare with the state in that moment. This should ensure the Investor that some potential further claims that their mine and associated facilities caused pollution or decrease of the quality of the land.

Residual

There is a high chance for residual impacts to remain, if such state occurs. But, at least the investor will have starting point for future action, thus not exposing itself to additional costs if this impact occurs.

Impact 15: Economic loss due to accidents

The topographic configuration and the location of the elements and facilities of the process for production of copper possess certain threat to the fields and vineyard located in the lower parts, next to the project area. If there is an incident or accident and there are spills or failure of water bodies than there is also possibility for initiation of economic loss to the closest fields and vineyards.

Impact 15	Economic loss due to accidents	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Low	The mitigation measures can help in recovery of the impact
Significance	Negligible	Impact is not expected to occur

Mitigation Measures

The investor needs to compensate affected people/companies, at replacement, for the induced damage by the accident

Residual

Although the measure is to be implemented, the residual impacts will remain since it is premature to make judgments upon something that still haven't happened

Impact 16: Economic benefits from this Project

The basic contribution to the economy at national and regional level by the implementation of the project will be the new opportunities for stimulating and intensifying the economic activities and developments in the region.

The estimations of the volume of overall capital investments which were made so far, indicate that the level of the same will be about 25 million Euro out of which, 18.7 million Euro are direct capital investment for the needs of production process in the proposed mine complex, i.e. for mining activities for exploitation of raw mineral, establishment and operation of dumps for heap leaching of the raw material, construction of facilities for the processing complex, construction of hydro-technical buildings and the other associated infrastructure.

In this context, it is expected that a significant part of the financial assets, to the total capital investment will be spent on construction activities / services and procurement and installation of the necessary equipment, which will be implemented by domestic companies through direct contracts or as subcontractors. It will provide higher income for local companies and intensification of overall economic growth in the region. On the other hand, labor flow will increase the demand for different types of services in the wider region, including accommodation, catering, maintenance of vehicles, supply of construction and other types of material, fuel supply etc., which will imply on increasing the overall commercial activity in the region and indirectly shall contribute the creation of new jobs.

During the period of operation of the proposed mine complex, operating costs, on the annual level, is estimated at about 10.5 million Euro, including costs for the mining activities, labor costs and payment of wages, energy costs, reagents and supplies and costs for service providers. The predominant part of the funds for the supply of labor and services will be spent in the Country and in the region of the project, which represents an outstanding contribution to the economy of the Country and to the local level.

An important benefit of the project will be a regular cash flow to the state public budget in the form of tax liabilities to the amount of 10% per annum of the income of the Investor and payment of the concession rights amounting to 2% of the income generated from the process for production of the cathode copper.

Considering the nature of the export of the product of the complex, and the current and anticipated prices of the metal on world trade markets, it can be expected very significant economic - financial benefit in the form of foreign exchange earnings in the Republic Macedonia. Part of these funds will enable the initiation of a new investment cycle by SARDICH MC, operator, especially in the direction of starting capital investment activities for the opening of new mine complexes and, consequently opening new jobs in the industrial sector in the Republic of Macedonia.

In a general context, the major economic contribution to the local community of the proposed project opportunities to stimulate and intensify the local economy and providing employment opportunities.
Increased revenue to the local community can be expected through:

1) New direct jobs during the construction and operational phases of the proposed mine complex
2) Development of the economy in the municipality of Valandovo
3) Increased financial inflows into the municipal budget or opportunity to intensify investment in municipal infrastructure and other needs

4) Opportunities to develop additional service activities related to mine complex

The proposed project will contribute to the diversification of the local economy, directly through the presence of new employment opportunities and indirectly, to a lesser extent, by consumption of locally produced goods and services. Depending on the volume of purchases that will be carried out in local communities, benefit may have other sectors of the local economy. Local procurement of general materials, products and services (food, catering, transport, security, etc.) can result in the growth of local enterprises and the local economy.

Impact 16	Economic benefits from this Project	
Criteria of impact	**Rating**	**Description**
Nature	Positive	Desirable
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
Scale	National	Impact will influence territory of the Municipality
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	High	Positive
Significance	Major	Impact do not need mitigation measures

8.3.4 Decommission Phase

Impact 17: Worsening the economic situation of the Kazandol residents and potential migration

The number of employments that is available to the local population is limited, due to the specifics of the work task and qualification needed for those tasks. The Investor will definitely consider employment of local residents and engage some better part. But here lies the potential threat to the local community (Kazandol). If most of the unemployed from Kazandol find employment into the mine, after it's decommission they will stay out of work. Families will be left without income for certain period of time. Also, with mine closure it is expected some of the residents to leave the village and to move to other location where there will be more opportunities for provision of income. Those who will lose their job with mine closure, if do not receive appropriate support from the investor or other instances, might take the chance to find livelihood provision in other locations. This potentially refers to those that will be employed in the mine.

Impact 17	Worsening the economic situation of Kazandol residents	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence location next to the project footprint
Duration	Permanent	The impact and its effects will continue or will last beyond the operational life of the project
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact must be mitigated and managed

Mitigation Measures

The Investor must take appropriate approach for proportional employment of the residents of Kazandol. This means that when there will be available employments, the Investor must take care of the state to employ just 10-20% of the whole available workforce. Each of the employed individuals from Kazandol must be part of different household (house). Thus the potential risk of impoverishment of the households after mine closure will be dispersed to several different households, and not to small number of households. This method would mitigate the potential socio-economic vulnerability of the Kazandols' residents with the process of mine closure.

Residual

Residual impacts are very hard to control since there are also external factors that influence the over-all picture, but the role of company in creation of this state will be set to minimum possible extent.

8.4 Community Health, Safety, and Security

8.4.1 Construction phase

Impact 18: Decreased safety of People and Livestock due to reconstruction of the access road to Kazandol and increased traffic on the same road

During the reconstruction of the road that leads toward Kazandol, there will be increased construction activities and increased transport of materials and machines. This also applies to the construction of associated facilities of the mine. Previously quite state with low level of traffic will suddenly become busy, crowded and dangerous place. Livestock and people can no longer freely move on the road due to presence of transport trucks and other construction related vehicles. The safety of the local residents and livestock will rapidly decline.

Impact 18	Decreased safety of People and Livestock due to reconstruction of the access road to Kazandol and increased traffic on the same road	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence location next to the project footprint
Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

A comprehensive **Traffic Management Plan** accompanied with series of local public awareness campaign, particularly addressed to the local herders, children and women must be created and realized. The campaign must be culturally sensitive due to the fact that some people, particularly women and children do not know the Macedonian language, but only Turkish language.

Residual

Although all of the measures are to be implemented there is still possibility for incidents and accidents to occur.

Impact 19: Increased threat for children and livestock due to creation of construction site

Another important issue related to the safety of the community is the need for the regulation of the access to major construction areas, i.e. prohibition of unauthorized access of persons due the possible security and health risks.

Impact 19	Increased threat for children and livestock due to creation of construction site	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence location next to the project footprint
Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

The contractor must develop and apply procedures to protect health and safety of the local communities, population and their livestock. They should include familiarization with the security rules of workers and the location, in order to prevent unauthorized access to active construction sites, camps for the workers, transport vehicles, construction machinery and storage facilities. Contractor must create and conduct **Construction Management Plan i**n order to respond to incidents and emergencies in a way that is suitable for construction risks. This plan will be based on prior identification of major-accident hazards and will include measures necessary to prevent major accidents and limit their consequences for local communities.

Safe pedestrian corridors across construction site must be provided on demand of the local residents and community

Residual

Although all of the measures are to be implemented there will always be "interested" parties that will try to find own way to satisfy personal curiosity, and to be present at the construction site at a given moment.

8.4.2 Operation Phase

Impact 20: Better and faster access to the health and social institutions in Valandovo

Improved infrastructure brings enhancements in quality of life of the affected population. The improvement of the road will mean that the local urban destination and all social and health facilities will be accessible faster than now. This might not be a big challenge for most of the settlements in the area, but for such remote places it is an issue that can bring positive results, particularly in case of emergency to reach health center or enable the visit by Social Care services.

Impact 20	Better and faster access to the health and social institutions in Valandovo	
Criteria of impact	**Rating**	**Description**
Nature	Positive	Desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as

		a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality
Duration	Permanent	The impact and its effects will continue or will last beyond the operational life of the project
Likelihood	Likely	The impact will occur under normal operating conditions
Magnitude	Low	Positive
Significance	Minor	Impact do not need mitigation measures

Impact 21: Increased health threat for the residents of Kazandol and their livestock due to the dust emissions and minor fumes from the mining and storage process

The implementation of new and improved technology of production of copper does not mean that there would not be any vaporization and dust in the air. The location of ore storage, after all, will be set to open air space where different climate conditions will make its influence. The wind, dry climate, fog and moisture will try to complicate the justification of chosen technology for production of copper. These minimal consequences for the environment due to ore disposal to an open air location, for a period of time, might cause certain decline of the health of residents of Kazandol and their livestock.

Impact 21	Increased health threat for the residents of Kazandol and their livestock due to the dust emissions and minor fumes from the mining and storage process	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint and neighboring land
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

The investor must create Plan for Protection of Public Health of the Kazandol residents where activities such as blood and respiratory checks for the residents of Kazandol will be main pillar. Medical examinations must be free of charge for the residents and conducted annually. Children and youth must be checked on semiannual base, while pregnant women even frequently. The medical checks must be organized in cooperation with Health center Valandovo and local office of the Institute for Public Health.

The livestock must also be regularly examined. Blood and milk samples from the livestock that is grazing in radius of 2 km from the mine complex must be taken, semiannually.

In case of proved decline in health of the population and livestock, the Investor must engage in Resettlement and/or Livelihood Restoration of the affected community, according to the GIIP.

Residual

Although the measure is to be implemented, the residual impacts are possible.

Impact 22: Increased safety threat for the residents of Kazandol and their livestock due to the entering the mine exploration field and associated facilities

Although it is known that the whole mine complex will be fenced, sometimes irregularities into the fence are possible, and such omissions might be misused by children and livestock. The curiosity by children might initiate their action for approaching toward mine exploration field and associated facilities. This is very dangerous for their health and safety. And it is same with livestock. Sometimes livestock is freely moving near fenced space, but if there is omission in the safety of the mine complex the livestock can encroach the mining field and associated facilities an get hurt, or cause even greater damage.

Impact 22	Increased safety threat for the residents of Kazandol and their livestock due to the entering the mine exploration field and associated facilities	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence only footprint of the Project
Duration	Long-term	Impact will occur and last in Operation phase
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Low	It is not expected any serious violation of the physical barrier set for people's protection
Significance	Negligible	Impact can be mitigated and managed

Mitigation Measures

Regular, quarterly conducted checks of state of whole fence of the mining area and associated facilities.

Residual

No residual impacts are visible if all of the measures are to be implemented.

8.5 Housing, Communication and Community Services

8.5.1 Construction Phase

Impact 23: Disruption of daily life caused by limited access to/from village for the Kazandol residents

Road reconstruction can temporary limit the access to and from the village of Kazandol. This is the only road toward the village. Local residents might get annoyed for their impeded access, even it is just for short time. Such annoyance can cause minor social tension between local residents on one side and constructor and Investor on the other side.

Impact 23	Disruption of daily life caused by limited access to/from village for the Kazandol residents	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint and neighboring land

Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

Appropriate mitigation measures must be imposed. Traffic Management plan must include enabling alternative approach toward/from the village, set of stakeholder engagement activities such as regular informing on the timeline of activities regarding the road and appropriate signage that will inform about the temporary change of the traffic regime. This activity should help not to impede the access of the people to their homes, property and fields, and business property.

Traffic Management Plan will be reviewed regularly, together with the relevant authorities, including local authorities, the authorities for road maintenance and police.

An important measure of the plan is the implementation of an information program to introduce the local population with planned transport activities of a larger scale. Population will be informed promptly of any potential necessary change in the traffic regime.

Residual

No residual impacts are visible if all of the measures are to be implemented.

8.5.2 Operation Phase

Impact 24: Anxiety due to the interrupted process of education and learning

The blasts can interrupt the educational process. This applies to the primary school in Kazandol. These blasts can temporary cause interruption in the educational process, but such frequent events can cause anxiety for interrupted process of education.

Impact 24	Anxiety due to the interrupted process of education and learning	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence local area due to the terrain configuration
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Low	The mitigation measures can help in recovery of the impact
Significance	Minor	Impact can be mitigated and managed

Mitigation Measures

An important information channel between the Investor and local government and affected communities should be established at the very beginning of the operational phase and maintained until its very end. The local population in Kazandol, as well as population in Pirava, Valandovo, Brajkovci and Balinci must be informed on a weekly basis on the schedule of planned blasting throughout the working week.

If blasting is causing significant problems for the process of education in Kazandol, than as potential mitigation measures should be considered the possible dislocation of the school to Dedeli where working noise from trucks and machinery and blasts would not interrupt classes, and the classes can be followed on native Turkish language. But this issue first should be brought to open discussion with broad range of relevant stakeholders.

Residual

Although the measure is to be implemented, the residual impacts are possible.

Impact 25: Impacting dwelling structures

Blasting can be very annoying and sometimes can cause material damage that is not visible at first hand. The village Kazandol located at the top of the hill that is connected to the one that will be exploited might not be immune to the shockwaves caused by the blasting. These shockwaves might cause certain damage to the houses in Kazandol.

Impact 25	Impacting dwelling structures	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint and neighboring land
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Low	It is expected none to low magnitude
Significance	Negligible	Impact can be mitigated and managed

Mitigation Measures

In order to protect investor from unpredicted risks, as well as the Kazandol residents from potential negative impact related to damages of the dwelling, it is wise for the investor to make initial screening of the state of all houses in Kazandol. It should check and document the state of all houses in the village. If some of the houses, later in the operation phase, report damage due to the shockwaves caused by blasting there will be recorded track of the state of the dwelling prior start of the mine operation.

Residual

Although the measure is to be implemented there residual impacts are expected. Sometimes vibration damages to objects are not easy visible.

8.6 Cultural Heritage, Religion, Values and Habits

8.6.1 Operation Phase

Impact 26: Potential destroy and loss of undiscovered archaeological location

At the project footprint there is no identification of archaeological sites and areas of cultural heritage that would constitute a limiting factor in the implementation of the project. But chance find is no planned activity, thus surprises can occur.

Impact 26	Potential destroy and loss of undiscovered archaeological location	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
Scale	Site only	Impact will influence project footprint
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Unlikely	The impact is unlikely to occur but may occur at some time under normal operating conditions
Magnitude	Low	The mitigation measures can help in recovery of the impact
Significance	Negligible	It is not expected any significant findings in the

Mitigation Measures

During the construction work and activities of the mineral resource exploitation in the zone of open pit mine, the contractor shall develop and implement procedures in case of accidental discovery of archaeological cultural good in order to comply with national legislation for the protection of cultural heritage. Workers should be trained for these procedures.

If during the performance of construction and mining works they discover an archaeological site or items of archaeological significance, the contractor shall:

- Immediately notify the competent public institution (Museum of Strumica) for protection of cultural heritage discovery
- Cease all operations in order to secure the site against possible damage by unauthorized access and
- Maintain the discovered items in place and in the condition they were found.

Residual

No residual impacts are visible if all of the measures are to be implemented.

Impact 27: Annoyance due to blasting during religious practices

Blasting can be very annoying and sometimes, particularly when people are practicing religious rituals. For Muslim believers the day Friday (The day of Jumu'ah) is of particular meaning and a very important day. It is more significant and more beneficial than any other day of the week. It is the day that Muslims gather together to pray in congregation. Directly before the prayer they listen to a lecture designed to empower them with valuable knowledge about God, and the religion of Islam. Particularly important is midday prayer (12-14h, depending on the daylight zone). Any kind of disturbance of this practice can be considered as disrespect of their values and one can easily face opposition to such practice.

Impact 27	Annoyance due to blasting during religious practices	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impact resulting from Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence territory of the Municipality
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project

Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	Medium	The mitigation measures can help in recovery of the impact
Significance	Moderate	Impact can be mitigated and managed

Mitigation Measures

In order to protect Kazandol residents from potential negative impact related to disruption of religious practices and causing certain dispute between the local community and the investor, the Investor must consider and plan Friday as day without blasting.

Sunday should also be day without blasting since most of the residents in other affected settlements in the project area are of Orthodox Christianity confession.

Residual

No residual impacts are visible if all of the measures are to be implemented.

8.7 Labor and Working Conditions

8.7.1 Pre-Construction Phase

Impact 28: Problems related to workforce organization and following procedures

The companies when they need to make quick process of workforce engagement do not follow the planned steps and recruit employees that are far from skilled and prepared for work. This applies for contractors and subcontractors, too. Such cheap resources will later return as problematic issues since there are standards and rules to be followed, all in compliance with GIIP. Unskilled workers need a good portion of training to meet these standards.

Often contractor companies are not part of the development process of the project, and therefore they don't have real image of the sensitiveness of construction area, and they approach the construction location more or less, mechanically, without paying too much attention to the local human environment. The employees of the contractor, if don't originate from the local settlements, usually have less sense for the necessities and values of the local population, particularly when it comes to the settlements in near vicinity of the construction activities. There are cases where these workers are part of disputes between the Investor and local community.

Impact 28	Problems related to workforce organization and following procedures	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Site only	Impact will influence project footprint
Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Low	The mitigation measures can help in recovery of the impact
Significance	Minor	Impact can be mitigated and managed

Mitigation Measures

The Investor must Create Employment Plan for the purpose of the mine, in cooperation with local office of the Employment Agency of RM.

Regarding the Worker Rights, all workers (including those of contractors and subcontractors) will have contracts which clearly state the terms and conditions of their employment and their legal rights. Contracts will be verbally explained to all workers where this is necessary to ensure that workers understand their rights. Contracts must be in place prior beginning of workers engagement. All workers (including those of contractors and subcontractors) will be able to join unions of their choice and have the right to collective bargaining.

Every employed worker, even by subcontractors too, must sign the Code of Conduct. It should be available and visible to anyone, and every worker has to understand the weight of the document and consequences it carries when being violated.

Residual

Although the measure is to be implemented, the residual impacts are possible.

8.7.2 Construction and Operation Phase

Impact 29: Failure to comply IFI standards related to workers and working conditions

Possible omissions in implementation of the standards and requirements can sometimes cost the Investor (contractor, subcontractor) a significant amount of resources, particularly if there is a workplace accident.

The investor, as well as contractors and sub-contractors are obliged to follow national requirements for Occupational Health and Safety, but sometimes, unintentionally all these actors pay less attention to the requirements related to labor issues, such as workers' rights, right to bargain, etc.

By failing to follow IFIs' standards and requirements, there is a great chance the health and safety of the workers to be put in danger.

Impact 29	Failure to comply IFI standards related to workers and working conditions	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Indirect	Impacts resulting from non-Project activities that occur as a consequence of the Project
Scale	Local area	Impact will influence local area
Duration	Short-term	Impacts predicted to last only during construction
Likelihood	Likely	The impact is likely to occur at some time under normal operating conditions
Magnitude	Low	The mitigation measures can help in recovery of the impact
Significance	Minor	Impact can be mitigated and managed

Mitigation Measures

The Investor will develop a health and safety management system. This management system will be enforced throughout the Project including all contractors and sub-contractors. It will include aspects such as identification and provision of PPE, regular training and monitoring as well as ongoing safety checks and safety audits, and others. Part of this management system must be **Occupational Health and Safety Plan.** The Investor must create **Occupational Health and Safety Plan** with implemented grievance mechanism, in compliance with national requirements, as well as with Performance Standards (IFC) and Requirements (EBRD). The grievance mechanism for workers will commit the contractor to receiving and addressing workers' grievances in a fair and reasonable manner.

The **Occupational Health and Safety Plan** will minimize, if not eliminate, all health and safety hazards and the sources of such hazards, for workers. All contractors and subcontractors must be in compliance with requirements set in this plan. The contractor will source all labor, plant and materials from reputable sources, where factors such as quality, reputation, past performance and service are considered along with price.

Residual

No residual impacts are visible if all of the measures are to be implemented.

8.7.3 Decommission Phase

Impact 30: Socio-economic vulnerability of the workers that will lose job with mine closure

There is a potential state of lack of adequate preparation of the affected workers for adaptation to the new condition on job market after mine closure.

The biggest socio-economic vulnerability from mining projects occurs at the end of the operation period of mine and beginning of decommissioning phase. Those workers who will experience mine closure will no long be able to provide regular income for their families. Suddenly their household will stay without income. Since they were working on some other tasks and qualifications, it is very hard for these individuals, in the environment with limited number of employments, to find new appropriate job and to adapt to new state.

Impact 30	Socio-economic vulnerability of the workers that will lose job with mine closure	
Criteria of impact	**Rating**	**Description**
Nature	Negative	Not desirable
Type	Direct	Impacts resulting from a direct interaction between a Project activity and a resource/receptor
Scale	Local area	Impact will influence local area
Duration	Long-term	The impact and its effects will continue or last for the entire operational life of the project
Likelihood	Certain	The impact will occur under normal operating conditions
Magnitude	High	The mitigation measures can help in recovery of the impact, but the potential consequences are crucial for the receptor
Significance	Major	Impact must be mitigated and managed

Mitigation Measures

The Investor must prepare Job exit program for workers, at least year before mine closure. It should prepare and organize trainings in different areas such as agricultural production, farming, money management, potential prequalification for other available deficit job posts in the region, retail trade etc. The program should be tailored to the needs of the workers and must be free of charge. Assistance should be requested from the Employment Agency of RM and other relevant governmental and municipal services.

Residual

Although the measure is to be implemented, the residual impacts are possible.

8.8 Cumulative Impact Assessment

The municipality of Valandovo has recently invested in Industrial zone Rabrovo, an industrial development location for clean industries, where several factories and production facilities have already started with production of canned food, garment and other. The location of the zone is approx. 6 km aerial distance from the mining complex.

Since these two projects have no particular interference it is not expected any cumulative impacts to occur in any of the phases of the Project.

9 Summary of Mitigation Measures

Impact No.	Impact	Mitigation	Residual
Social Management System (Construction and Operation Phase)			
1	Misguidance in realization of Social Management System	An employed person in SARDICH MC must be appointed to manage and follow realization of mitigation measures and monitor programs and to report to highest instances in the company and external stakeholders/shareholders on regular basis	No residual impacts are visible if all of the measures are to be implemented
Stakeholder Engagement (Pre-construction and Construction Phase)			
2	Increased anxiety due to lack of communication with the local settlements and property owners close to the project area	It is advisable SARDICH MC to conduct series of engagement activities with the stakeholders, particularly those who own parcels close to, or use the land under the project footprint. A Grievance mechanism must be created and be publically available in each affected settlement, Company/Project premises, and premises of municipality of Valandovo. The Company must continuously and regularly maintain communication activities with affected residents from Kazandol and those who own or use land nearby the project footprint or the access road to the facilities, from the main road.	Residual impacts will remain, but with significantly lower intensity, since it is very hard to influence people's thoughts, interests and desires
Stakeholder Engagement (Operation Phase)			
3	Decreased stakeholder engagement activities during operation	The company must keep open an ongoing channel with the affected and interested stakeholders in the project area during the operation phase, since not all affected are able or willing to fill a grievance. The company must regularly hold semi-annual meetings with representatives from the local settlements and other affected stakeholders. Strong accent on women participation on these meetings must be in place.	No residual impacts are visible if all of the measures are to be implemented.
Stakeholder Engagement (Decommission Phase)			
4	Improper management of social issues rose during closure of the mine	The Investor must, conduct series of stakeholder engagement activities with the local residents in Kazandol and with operators of the fields and vineyards in order to inform them on the outcomes of the mine closure. Public disclosure and consultation activities are organized in connection to the preparation of project documentation and related strategic and other studies. The company must keep open an ongoing channel with the affected and interested stakeholders in the project area, even when it does not conduct any mining or production activity, and all rehabilitation and restoration ac-	Residual impacts will remain, although all mitigation measures are implemented.

Impact No.	Impact	Mitigation	Residual
		tivities are realized. Usually the person that is responsible for the Social and Environmental Management System and management and monitoring of undertaken obligations by contracts and by following GIIP principles can be the one that will ensure that after closure all grievances that have been submitted have been addressed properly and that there are no unsatisfied and problematic issues that remain to be discussion topic in the forthcoming years after closure of mine.	
Economy and Livelihood (Pre-construction Phase)			
5	Delay in project realization	The procurements must be carefully planned and conducted in a sense that all possible option for engaging subcontractors must be explored before opening tendering procedure. The personal in the Investor must start early consultations with all interested companies that might engage construction works. The company Investor must either allocate staff or engage experienced outsource that will prepare all the necessary procedures and documents before publishing tender	Delays in project realization can always occur, although all procedures and recommendations are followed. After all, this project is complex and requires engagement of different professionals and companies that are not always in a complete shape to accept tasks and ready for team work
6	Loss of small plots used for pastures of livestock	It is necessary to timely inform the livestock owners on the plans to build fence around the mine complex and to reconsider the possibility to take livestock on other free locations within this range.	Residual impacts will significantly decrease with decommission phase, when the area of mine complex is to expected to be rehabilitated and restored to condition close to previous state.
7	Raising expectations of the affected population in a sense of employments	The Investor must, before commencement of any construction activity, come out in public with good Employment Plan, developed together with the local office of Employment Agency of Republic of Macedonia, where it states that there will be job places, but only for those who are qualified and has passed the training and prequalification process. It is not good to raise the expectations in such small social environment (municipality and affected	Although the measure is to be implemented there residual impacts are expected.

Impact No.	Impact	Mitigation	Residual
		settlements), due to the latent negative social consequences that such expectations always carry with it. The company will engage unqualified workforce, but also very qualified profiles since the mine is planning to work with specific environmental friendly production technology. Nevertheless, some people from Kazandol must be employed, and the Investor must enable their training for some of the planned jobs in mine.	
8	Employment of local unemployed workforce	/	/
Economy and Livelihood (Construction Phase)			
9	Changing the livelihood provision of the people of Kazandol	Creation of Livelihood Restoration Plan in order to determine who actually will lose any sort of livelihood with implementation of this project. It is possible some of the local residents of Kazandol to claim loss of livelihood by the project, but actually they did not used this area at all. It is same with the private parcels that are stretched along the access road and near the Production facility. According the IFI these people are qualified to ask for livelihood restoration, but do they actually fall in this category, the Livelihood Restoration Plan should resolve such issues.	Although the measure is to be implemented, the residual impacts are expected.
10	Loss of qualified staff by local companies (Increase of operational costs)	The Investor must, before commencement of any construction activity, come out in public with good Employment Plan, developed together with the local office of Employment Agency of Republic of Macedonia. This plan should analyze the potential local employment market and come with solution that will be minimal loss for each affected side. The employment market in Valandovo is limited, as are the available qualified resources.	Although the measure is to be implemented, the residual impacts are expected
11	Increased operation costs of the local agricultural companies due to the construction activities related to this project	Good communication and coordination of activities of both, and other, companies could mitigate the potential impact. The Investor, within its Social and Environmental Management System will place effort to coordinate construction activities during the period of vintage and gathering of the harvest.	No residual impacts are visible if all of the measures are to be implemented.
12	Increased level of professional engagement for the local companies	/	/
Economy and Livelihood (Operation Phase)			
13	Livestock anxiety due to the operational noise and blasts	The Company will need to engage veterinary service to make a health check to the livestock on annual base, just to ensure farmers that their live-	Although the measure is to be implemented, the

Impact No.	Impact	Mitigation	Residual
	and/or dislocation of the livestock to location far than current, near the village Kazandol	stock is completely health and safe, although there are changes in the environment their livestock lives.	residual impacts are expected.
14	Potential loss of quality of land due to the change in the topography and project activities	It is advisable investor, before commencement of construction activities, to engage skilled and authorized expert /company to make assessment on the quality of the land and plants that are set in radius of 1km from the production facility. This should help to gather information on the current state of the land that is neighboring the production facility and if such need occurs later, to compare with the state in that moment. This should ensure the Investor that some potential further claims that their mine and associated facilities caused pollution or decrease of the quality of the land.	There is a high chance for residual impacts to remain, if such state occurs. But, at least the investor will have starting point for future action, thus not exposing itself to additional costs if this impact occurs.
15	Economic loss due to accidents/	The investor needs to compensate affected people/companies, at replacement, for the induced damage by the accident	Although the measure is to be implemented, the residual impacts will remain since it is premature to make judgments upon something that still haven't happened.
16	Economic benefits from this Project	/	/
Economy and Livelihood (Decommission Phase)			
17	Worsening the economic situation of Kazandol residents	The Investor must take appropriate approach for proportional employment of the residents of Kazandol. This means that when there will be available employments, the Investor must take care of the state to employ just 10-20% of the whole available workforce. Each of the employed individuals from Kazandol must be part of different household (house). Thus the potential risk of impoverishment of the households after mine closure will be dispersed to several different households, and not to small number of households. This method would mitigate the potential socio-economic vulnerability of the Kazandols' residents with the process of mine closure.	Residual impacts are very hard to control since there are also external factors that influence the overall picture, but the role of company in creation of this state will be set to minimum possible extent.
Community Health, Safety, and Security (Construction Phase)			
18	Decreased safety of People and Livestock due to reconstruction	A comprehensive **Traffic Management Plan** accompanied with series of local public awareness campaign, particularly addressed to the local herd-	Although all of the measures are to be im-

Impact No.	Impact	Mitigation	Residual
	of the access road to Kazandol and increased traffic on the same road	ers, children and women must be created and realized. The campaign must be culturally sensitive due to the fact that some people, particularly women and children do not know the Macedonian language, but only Turkish language.	plemented there is still possibility for incidents and accidents to occur.
19	Increased threat for children and livestock due to creation of construction site	The contractor must develop and apply procedures to protect health and safety of the local communities, population and their livestock. They should include familiarization with the security rules of workers and the location, in order to prevent unauthorized access to active construction sites, camps for the workers, transport vehicles, construction machinery and storage facilities. Contractor must create and conduct **Construction Management Plan** in order to respond to incidents and emergencies in a way that is suitable for construction risks. This plan will be based on prior identification of major-accident hazards and will include measures necessary to prevent major accidents and limit their consequences for local communities. Safe pedestrian corridors across construction site must be provided on demand of the local residents and community	Although all of the measures are to be implemented there will always be "interested" parties that will try to find own way to satisfy personal curiosity, and to be present at the construction site at a given moment.
Community Health, Safety, and Security (Operation Phase)			
20	Better and faster access to the health and social institutions in Valandovo	/	/
21	Increased health threat for the residents of Kazandol and their livestock due to the dust emissions and minor fumes from the mining and storage process	The investor must create **Plan for Protection of Public Health** of the Kazandol residents where activities such as blood and respiratory checks for the residents of Kazandol will be main pillar. Medical examinations must be free of charge for the residents and conducted annually. Children and youth must be checked on semiannual base, while pregnant women even frequently. The medical checks must be organized in cooperation with Health center Valandovo and local office of the Institute for Public Health. The livestock must also be regularly examined. Blood and milk samples from the livestock that is grazing in radius of 2 km from the mine complex must be taken, semiannually. In case of proved decline in health of the population and livestock, the Investor must engage in Resettlement and/or Livelihood Restoration of the affected community, according to the GIIP.	Although the measure is to be implemented, the residual impacts are possible.
22	Increased safety threat for the residents of Kazandol and their	Regular, quarterly conducted checks of state of whole fence of the mining area and associated facilities.	No residual impacts are visible if all of the

Impact No.	Impact	Mitigation	Residual
	livestock due to the entering the mine exploration field and associated facilities		measures are to be implemented.
Housing, Communication and Community Services (Construction Phase)			
23	Disruption of daily life caused by limited access to/from village for the Kazandol residents	Appropriate mitigation measures must be imposed. Traffic Management plan must include enabling alternative approach toward/from the village, set of stakeholder engagement activities such as regular informing on the timeline of activities regarding the road and appropriate signage that will inform about the temporary change of the traffic regime. This activity should help not to impede the access of the people to their homes, property and fields, and business property. Traffic Management Plan will be reviewed regularly, together with the relevant authorities, including local authorities, the authorities for road maintenance and police. An important measure of the plan is the implementation of an information program to introduce the local population with planned transport activities of a larger scale. Population will be informed promptly of any potential necessary change in the traffic regime.	No residual impacts are visible if all of the measures are to be implemented.
Housing, Communication and Community Services (Operation Phase)			
24	Anxiety due to the interrupted process of education and learning	An important information channel between the Investor and local government and affected communities should be established at the very beginning of the operational phase and maintained until its very end. The local population in Kazandol, as well as population in Pirava, Valandovo, Brajkovci and Balinci must be informed on a weekly basis on the schedule of planned blasting throughout the working week. If blasting is causing significant problems for the process of education in Kazandol, than as potential mitigation measures should be considered the possible dislocation of the school to Dedeli where working noise from trucks and machinery and blasts would not interrupt classes, and the classes can be followed on native Turkish language. But this issue first should be brought to open discussion with broad range of relevant stakeholders.	Although the measure is to be implemented, the residual impacts are possible.
25	Impacting dwelling structures	In order to protect investor from unpredicted risks, as well as the Kazandol residents from potential negative impact related to damages of the dwelling, it is wise for the investor to make initial screening of the state of all houses in Kazandol. It should check and document the state of all houses in	Although the measure is to be implemented there residual impacts are expected. Sometimes vibra-

Impact No.	Impact	Mitigation	Residual
		the village. If some of the houses, later in the operation phase, report damage due to the shockwaves caused by blasting there will be recorded track of the state of the dwelling prior start of the mine operation.	tion damages to objects are not easy visible.
Cultural Heritage, Religion, Values and Habits (Operation Phase)			
26	Potential destroy and loss of undiscovered archaeological location	During the construction work and activities of the mineral resource exploitation in the zone of open pit mine, the contractor shall develop and implement procedures in case of accidental discovery of archaeological cultural good in order to comply with national legislation for the protection of cultural heritage. Workers should be trained for these procedures. If during the performance of construction and mining works they discover an archaeological site or items of archaeological significance, the contractor shall: • Immediately notify the competent public institution (Museum of Strumica) for protection of cultural heritage discovery • Cease all operations in order to secure the site against possible damage by unauthorized access and Maintain the discovered items in place and in	No residual impacts are visible if all of the measures are to be implemented.
27	Annoyance due to blasting during religious practices	In order to protect Kazandol residents from potential negative impact related to disruption of religious practices and causing certain dispute between the local community and the investor, the Ivnestor must consider and plan Friday as day without blasting. Sunday should also be day without blasting since most of the residents in other affected settlements in the project area are of Orthodox Christianity confession.	No residual impacts are visible if all of the measures are to be implemented.
Labor and Working Conditions (Pre-construction Phase)			
28	Problems related to workforce organization and following procedures	The Investor must Create Employment Plan for the purpose of the mine, in cooperation with local office of the Employment Agency of RM. Regarding the Worker Rights, all workers (including those of contractors and subcontractors) will have contracts which clearly state the terms and conditions of their employment and their legal rights. Contracts will be verbally explained to all workers where this is necessary to ensure that workers understand their rights. Contracts must be in place prior beginning of workers engagement. All workers (including those of contractors and subcontractors) will be able to join unions of their choice and have the right to	Although the measure is to be implemented, the residual impacts are possible.

Impact No.	Impact	Mitigation	Residual
		collective bargaining. Every employed worker, even by subcontractors too, must sign the Code of Conduct. It should be available and visible to anyone, and every worker has to understand the weight of the document and consequences it carries when being violated.	
Labor and Working Conditions (Construction and Operation Phase)			
29	Failure to comply IFI standards related to workers and working conditions	The Investor will develop a health and safety management system. This management system will be enforced throughout the Project including all contractors and sub-contractors. It will include aspects such as identification and provision of PPE, regular training and monitoring as well as ongoing safety checks and safety audits, and others. Part of this management system must be **Occupational Health and Safety Plan.** The Investor must create **Occupational Health and Safety Plan** with implemented grievance mechanism, in compliance with national requirements, as well as with Performance Standards (IFC) and Requirements (EBRD). The grievance mechanism for workers will commit the contractor to receiving and addressing workers' grievances in a fair and reasonable manner. The **Occupational Health and Safety Plan** will minimize, if not eliminate, all health and safety hazards and the sources of such hazards, for workers. All contractors and subcontractors must be in compliance with requirements set in this plan. The contractor will source all labor, plant and materials from reputable sources, where factors such as quality, reputation, past performance and service are considered along with price.	No residual impacts are visible if all of the measures are to be implemented.
Labor and Working Conditions (Decommission Phase)			
30	Socio-economic vulnerability of the workers that will lose job with mine closure	The Investor must prepare Job exit program for workers, at least year before mine closure. It should prepare and organize trainings in different areas such as agricultural production, farming, money management, potential prequalification for other available deficit job posts in the region, retail trade etc. The program should be tailored to the needs of the workers and must be free of charge. Assistance should be requested from the Employment Agency of RM and other relevant governmental and municipal services.	Although the measure is to be implemented, the residual impacts are possible.

10 Social Management Plan

Receptor / Proposed mitigation measures	Target	Responsible institution/s	Timing	Costs
Social Management System				
Appointing SARDICH MC employee that will manage and follow realization of mitigation measures and monitor programs and to report to highest instances in the company and external stakeholders/shareholders on regular basis	Successful organization of the tasks that are not part of the production process and management and monitoring conducted in qualitative manner	SARDICH MC	All Phases	Operational costs of the company
Stakeholder Engagement				
Communication with Stakeholders and Local Communities • Informing the local communities (representatives of affected settlements) on the Timeline of construction activities that will take place in the area and the availability of the procedure of Grievance mechanism. • Public availability of the Timeline of construction activities, separate for each affected settlement. • Creation of Stakeholder Engagement Plan with integrated Complaint Mechanism that will include setting of Information boards in the affected settlements and premises of both municipalities and premises of SARDICH MC and the administrative premises of Contractor at the Construction site, where contact information of the representative persons from the Contractor, SARDICH MC and Local-self Government side will be exposed and be available during the whole period of Construction and Operation phase together with Complaints and Grievances form and information on the Timeline of activities in the project area. • The SEP with Grievance Mechanism procedure should be publically presented to the local residents that are potentially affected by these project activities. • All information for public release must be available on Mace-	Creation of relation of trust between the SARDICH MC and (sub-) Contractors, on one side and local communities, on the other side. Prevention of potential problems between the Community and the Contractor	SARDICH MC and Contractor/s	All phases	1500 € for creation of SEP and 1500 € for organizing events and printed materials Operational costs of the company

Receptor / Proposed mitigation measures	Target	Responsible institution/s	Timing	Costs
donian and Turkish language. • Communication with affected businesses and coordination of construction activities				
Land and assets acquisition				
Creation of Resettlement Action Plan (if such need occur during any of the phases of the project)	Resolving potential issues related to socio-economic vulnerability of affected people/parties	SARDICH MC	All phases	2800 € Creation of RAP Document
Economy and Livelihood				
• Creation of Employment Plan for employments in mining complex	Resolving potential issues related to socio-economic vulnerability of affected people/parties	SARDICH MC	Pre-construction phase	1200 € Creation of Employment Plan
• Creation of **Livelihood Restoration Plan** (LRP) in order to determine who actually will lose any sort of livelihood with implementation of this project.	Resolving potential issues related to socio-economic vulnerability of affected people/parties	SARDICH MC	Construction phase	2500 € Creation of LRP document
• Engage veterinary service to make a health check to the livestock on annual base	Resolving potential issues related to socio-economic vulnerability of affected people/parties	SARDICH MC	Operation phase	Veterinary service 200 € /annually
• Compensate affected people/companies, at replacement, for the induced damage by the accident	Resolving potential issues related to socio-economic vulnerability of affected people/parties	SARDICH MC	All phases	n/a
Community Health, Safety and Security				
Traffic Management Plan • Creation and complete implementation of Traffic Management Plan (TMP) actively communicated with the interested parties from the affected settlements	Minimizing and prevention of potential negative social consequences	Constructor	Pre-Construction Phase	2000 € per Document

Receptor / Proposed mitigation measures	Target	Responsible institution/s	Timing	Costs
• Creation of local awareness raising campaign to the children and women, in Turkish language	Minimizing and prevention from possible incidents and accidents. Minimizing negative consequences to the local residents' health	SARDICH MC	Construction Phase	1000 € for organizing events and printed materials
• Create and conduct **Construction Management Plan** in order to respond to incidents and emergencies in a way that is suitable for construction risks • Safe pedestrian corridors across construction site must be provided on demand of the local residents and community	Minimizing and prevention from possible incidents and accidents. Minimizing possible negative consequences to the local residents' health	Constructor	Construction Phase	1200 € Creation of Document
• Create **Plan for Protection of Public Health** of the Kazandol residents where activities such as blood and respiratory checks for the residents of Kazandol will be main pillar • Medical examinations must be free of charge for the residents from Kazandol and conducted annually. Children and youth must be checked on semiannual base, while pregnant women even frequently • Blood and milk samples from the livestock that is grazing in radius of 2 km from the mine complex must be taken, semiannually	Minimizing and prevention from possible incidents and accidents. Minimizing possible negative consequences to the public health	SARDICH MC	Operation Phase	1200 € Creation of Document 300 € Annually
• Regular, quarterly conducted checks of state of whole fence of the mining area and associated facilities	Minimizing and prevention from possible incidents and accidents. Minimizing possible negative consequences to the local residents' health	SARDICH MC	Operation Phase	Operational costs of the company
Housing, Communication and Community Services				
• Implementation of an information program to introduce the local population with planned construction activities of a larger scale. Population will be informed promptly of any potential necessary change in the traffic regime.	Minimizing and prevention of potential negative social consequences	Constructor	Pre-Construction Phase	Operational costs of the company

Receptor / Proposed mitigation measures	Target	Responsible institution/s	Timing	Costs
• The local population in Kazandol, as well as population in Pirava, Valandovo, Brajkovci and Balinci must be informed on a weekly basis on the schedule of planned blasting throughout the working week	Minimizing and prevention of potential negative social consequences	SARDICH MC	Operation Phase	Operational costs of the company
• The investor must make initial screening of the state of all houses in Kazandol. It should check and document the state of all houses in the village	Minimizing and prevention of potential negative social consequences	SARDICH MC & Contractor	Operation Phase	1200 € for the whole assessment
Cultural Heritage, Religion, Values and Habits				
• Train employee in the potential identification and procedures of chance find	Minimizing and prevention of potential negative consequences to cultural heritage	SARDICH MC & Contractor	Operation Phase	1000 € for training
Labor and Working Conditions				
• Creation of Code of Conduct for employees	Minimizing negative consequences to the workers' and community's health, and safety	SARDICH MC & Contractor	Pre-Construction, Construction and Operation Phase	Operational costs of the company
• Creation of Occupational Health and Safety Plan (OHSP), with implemented Employee Grievance mechanism	Minimizing potential negative consequences to the workers' health and safety	SARDICH MC & Contractor	Pre-Construction and Construction Phase	2500 € Creation of document OHSP with integrated Grievance mechanism
• The Investor must prepare **Job exit program for workers**, at least year before mine closure. It should prepare and organize trainings in different areas such as agricultural production, farming, money management, potential prequalification for other available deficit job posts in the region, retail trade etc. The program should be tailored to the needs of the workers and must be free of charge.	Socio-economic vulnerability of the workers that will lose job with mine closure	SARDICH MC	Operation and Decommission phase	1500 € Creation of document. 50 € per worker per training

11 Social Monitoring Plan

Receptor/Parameter to be monitored	Method of monitoring	Frequency of monitoring	Indicator	Means of verification	Cost (Euros)	Responsibility
Pre-Construction phase						
Creation of Occupational Health and Safety Plan (OHSP) with implemented Employee Grievance mechanism	Document review	Once, before official start of construction activities	Completed document	Proof from independent consultant whether OHSP complies to national laws and IFC/EBRD standards and requirements	n/a	Contractor
Creation of Stakeholder Engagement Plan (SEP) with integrated Complaint Mechanism	Document review	Once, before official start of construction activities	Completed document	Visual contact	n/a	SARDICH MC
Traffic Management Plan (TMP)	Document review	Once, before official start of construction activities	Completed document	Visual contact	n/a	Contractor, in coordination with SARDICH MC, local Police department and Municipality of Valandovo
Informing the representatives of the local communities on the Timeline of construction activities	Document review	Once, before official start of construction activities	Return receipt of the sent letters	Printed Records of taken images must be kept and registered in Projects Monitoring logbook	Operational costs of the company	Contractor
Public availability of the Timeline of construction activities, separate for each settlement.	On site visit	Once, before official start of construction activities	Images taken from the location where Timeline of construction activities is being visible	Printed Records of taken images must be kept and registered in Projects Monitoring logbook	Operational costs of the company	Contractor
Creation of Employment Plan	Document review	Once, before offi-	Completed docu-	Visual contact	n/a	SARDICH MC,

Receptor/Parameter to be monitored	Method of monitoring	Frequency of monitoring	Indicator	Means of verification	Cost (Euros)	Responsibility
for employments		cial start of construction activities	ment			in cooperation with Employment Agency of RM
Monitoring of Grievances (Public, Employees, Other)	Document Review	Semi-annual	Logbook	Registered items in the logbook and their responses	Operational costs of the company	SARDICH MC
Construction Phase						
Creation of Resettlement Action Plan (if such need occur during the operation phase of the mine)	Document review	Once, before official start of operational activities	Completed document	Visual contact	Operational costs of the company	SARDICH MC
Creation of Livelihood Restoration Plan (LRP)	Document review	Once, before official start of operational activities	Completed document	Visual contact	Operational costs of the company	SARDICH MC
Create and conduct Construction Management Plan	Document review	Once, before official start of construction activities	Completed document	Visual contact	Operational costs of the company	Contractor
Secured construction site and visible signs of construction site	Photographs taken from construction site	Monthly	Images taken from the construction sites	Printed Records of taken images must be kept and registered in Projects Monitoring logbook	Operational costs of the company	Contractor
Creation of local awareness raising campaign to the children and women, in Turkish language	Number of held meetings and number of participants that past the campaign	Semi-annual	Signed Presence List from each held meeting	Original lists must be kept and registered in Projects Monitoring logbook	Operational costs of the company	Contractor
Signed Code of Conduct for employees and its public availability with the procedure of Grievance mechanism	Document review	Once, before official start of construction activities	Signed document	Control of register of engaged workforce	Operational costs of the company	Contractor
Monitoring of Grievances (Public, Employees, Other)	Document Review	Semi-annual	Number of received and re-	Registered items in the logbook and their	Operational costs of the	SARDICH MC

Receptor/Parameter to be monitored	Method of monitoring	Frequency of monitoring	Indicator	Means of verification	Cost (Euros)	Responsibility
			sponded grievances in timely manner	responses	company	
Operation Phase						
Engage veterinary service to make a health check to the livestock on annual base	Document review	Annually	Number of livestock examined	Signed Task List	Operational costs of the company	SARDICH MC
Medical examinations must be free of charge for the residents from Kazandol	Document review	Annually	Number of people examined	Signed Task List	Operational costs of the company	SARDICH MC
Regular, quarterly conducted checks of state of whole fence of the mining area and associated facilities	On site visit	Quarterly	Signed task list	Printed Records of taken images must be kept and registered in Projects Monitoring logbook	Operational costs of the company	SARDICH MC
Dissemination of information about blasting schedule with the affected settlements	On site visit	Once, before official start of construction activities	Images taken from the location where schedule is being visible	Printed Records of taken images must be kept and registered in Projects Monitoring logbook	Operational costs of the company	SARDICH MC
Train employee in the potential identification and procedures of chance find	Document Review	Once	Number of workers received training	Signed Presence List of Training	Operational costs of the company	SARDICH MC
Monitoring of Grievances (Public, Employees, Other)	Document Review	Semi-annual	Number of received and responded grievances in timely manner	Registered items in the logbook and their responses	Operational costs of the company	SARDICH MC
Decommission Phase						
Realization vs. Successfulness of Job exit program for workers	Document Review	Semi-annual	Number of people enrolled to the program and their	Signed Presence List of Training	Operational costs of the company	SARDICH MC

12 Conclusions

The Mine Complex Kazandol is a wonderful opportunity not only for the investor, but also for Valandovo municipality and National economy. The proposed production process is clearly based on Best Available Techniques and proposed environmental mitigation measures and closure plan have their perception of positive outcome for all stakeholders.

Further steps made by the investor to reconsider all beneficial and adverse social impacts from this project and propose appropriate mitigation measures is just one step forward toward the excellence of implementing Good International Industry Practice.

Positive impacts that will rose from this project shall have strong positive socio-economic impact on the municipality's income. New jobs shall be created and mainly local resources and services providers will be used. This is a dream to every municipality, not only in Macedonia, but worldwide.

Since all the good things never came alone, but always carry their other undesirable half, it is normally to expect some adverse social impacts to occur during the project lifetime. The most adversely affected community is the one in the village of Kazandol, which actually borders the concession field, and it is some 300-400m far from the mine complex. Their single connection to the world shall be used by both, the project and the residents. Their health and safety, their livestock and their way of life shall be the most affected by this project, but not in a sense to survive unbearable life condition, but in a sense of influences that can significantly change their life, sooner or later. The community is slightly vulnerable and the project might contribute toward intensifying such state. Thus most of the social mitigation measures are concentrated around this community.

Social mitigation measures imposed in this document are balance to the adverse social impacts initiated by this project and they follow international standards required by international financial institutions (IFIs) such as International Finance Corporation and European Bank for Reconstruction and Development. Their (IFIs) standards and requirements are based on personal experience and practice gathered during decades of doing banking business and in their operational policy they implement conventions, beside environmental, that are supporting, promoting and enhancing human rights, such as UN's "The Universal Declaration of Human Rights", ILO conventions and others.

This project needs strong support, but also needs to dedicate particular attention to the social domain, since the affected community is not a branch that you can break and next year it might recover and pull-up again. The community needs attention, patience, and sincere will to help it to overcome the new conditions of existence, at least until the decommission phase ends.

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Appendices

Appendix 1 – Significance of Social Impacts

Impact No.	Impact	
Social Management System (Construction and Operation Phase)		
1	Misguidance in realization of Social Management System	Moderate
Stakeholder Engagement (Pre-construction and Construction Phase)		
2	Increased anxiety due to lack of communication with the local settlements and property owners close to the project area	Moderate
Stakeholder Engagement (Operation Phase)		
3	Decreased stakeholder engagement activities during operation	Moderate
Stakeholder Engagement (Decommission Phase)		
4	Improper management of social issues rose during closure of the mine	Moderate
Economy and Livelihood (Pre-construction Phase)		
5	Delay in project realization	Moderate
6	Loss of small plots used for pastures of livestock	Minor
7	Raising expectations of the affected population in a sense of employments	Moderate
8	Employment of local unemployed workforce	Major
Economy and Livelihood (Construction Phase)		
9	Changing the livelihood provision of the people of Kazandol	Moderate
10	Loss of qualified staff by local companies (Increase of operational costs)	Minor
11	Increased operation costs of the local agricultural companies due to the construction activities related to this project	Negligible
12	Increased level of professional engagement for the local companies	Moderate
Economy and Livelihood (Operation Phase)		
13	Livestock anxiety due to the operational noise and blasts and/or dislocation of the livestock to location far than current, near the village Kazandol	Minor
14	Potential loss of quality of land due to the change in the topography and project activities	Negligible
15	Economic loss due to accidents	Negligible
16	Economic benefits from this Project	Major
Economy and Livelihood (Decommission Phase)		
17	Worsening the economic situation of Kazandol residents	Moderate
Community Health, Safety, and Security (Construction Phase)		
18	Decreased safety of People and Livestock due to reconstruction of the access road to Kazandol and increased traffic on the same road	Moderate
19	Increased threat for children and livestock due to creation of construction site	Moderate
Community Health, Safety, and Security (Operation Phase)		
20	Better and faster access to the health and social institutions in Valandovo	Minor
21	Increased health threat for the residents of Kazandol and their livestock due to the dust emissions and minor fumes from the mining and storage process	Moderate
22	Increased safety threat for the residents of Kazandol and their livestock due to the entering the mine exploration field and associated facilities	Negligible
Housing, Communication and Community Services (Construction Phase)		
23	Disruption of daily life caused by limited access to/from village for the Kazandol residents	Moderate
Housing, Communication and Community Services (Operation Phase)		
24	Anxiety due to the interrupted process of education and learning	Minor
25	Impacting dwelling structures	Negligible
Cultural Heritage, Religion, Values and Habits (Operation Phase)		
26	Potential destroy and loss of undiscovered archaeological location	Negligible
27	Annoyance due to blasting during religious practices	Moderate

Impact No.	Impact	
Labor and Working Conditions (Pre-construction Phase)		
28	Problems related to workforce organization and following procedures	Minor
Labor and Working Conditions (Construction and Operation Phase)		
29	Failure to comply IFI standards related to workers and working conditions	Minor
Labor and Working Conditions (Decommission Phase)		
30	Socio-economic vulnerability of the workers that will lose job with mine closure	Major

Appendix 2 – Land use in the local area around the mine complex