

CONTRIBUTION TO IMPROVEMENT OF THE LEGALIZATION OF THE WORK PROCESS OF SMALL-SCALE MINES IN THE REPUBLIC OF SERBIA

PRILOG UNAPREĐENJU PROCESA LEGALIZACIJE RADA MALIH RUDNIKA U REPUBLICI SRBIJI

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Abstract: In this study we focus our attention on the procedures of obtaining necessary permits for the opening of a mine. Our goal is during those conditionally speaking first steps in the process of activating a mine to point to the attention of the reader to the complexity of that process, as well as excessive administrative work when permits for small-scale mines are in question.

Key words: small scale mines, legal regulations, legalization process

Apstrakt: U ovom radu pažnju fokusiramo na procedure pribavljanja potrebnih odobrenja za otvaranje rudnika. Cilj nam je da na tim, uslovno rečenom, prvim koracima u procesu aktiviranja nekog rudnika, skrenemo pažnju čitaocu na složenost tog procesa, kao i na preveliko administriranje kada su odobrenja za male rudnike u pitanju.

Ključne reči: mali rudnici, zakonska regulativa, proces legalizacije

1. INTRODUCTION

If we take into consideration the position and role of the mining industry in Serbia it is impossible not to notice that it presented one of the fundamental activities in these regions during the historical development, but also a great potential which it has today. Namely, mining industry in a respectable measure participates in the economic life of the country, especially in the energy sector. According to all data and information that are available to the wider expert public, the significance of the mining industry in Serbia could be even greater. According to the findings of the World Bank who financed the 'Study of the Master Plan for the Development of the Mining Industry in Serbia' (Japan International Cooperation Agency, 2007-2008), the mining industry of Serbia participated with about 2% in the gross national income. The

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opinion of the Japanese experts was, and they also published, that participation of the mining industry in the GDP could be about 10%.

One of the directions of the mining industry development in our country could be also the opening and operations of the so-called small-scale mines. Our country has at its disposal potentials for such exploitation. Ore mining in small-scale mines exists all over the world and we think that it could be more present even in Serbia. Of course, we mean that the activity should strictly respect regulations. Since a good institutional and legal framework is necessary in order to proceed with this type of mining, in this study we have given a short review of the place, role, significance as well as the controversies that go with this type of exploitation, as well as the review of the legal solutions foreseen by our legal regulations.

2. REVIEW OF THE SMALL-SCALE MINE ACTIVITIES IN THE WORLD

Trends in world production of mineral raw materials have the tendency of moving in the direction of mass production and large capacities in big deposits which in most cases are very poor. Such orientation cannot completely eliminate certain role and significance of small deposits. Exploitation of small deposits in the world is known as 'small-scale mining' or 'restricted range mining' and it still exists due to several reasons. Main reasons that are in favor of small deposits exploitation are linked on one hand to the genesis itself of these deposits, and on the other hand to exceptionally favorable technical, organizing and financial possibilities in the course of their exploitation. Small deposits require relatively short period of time needed for prospecting and rather small investments in the course of prospecting and exploitation. Possibility of engaging local labor, as well as relatively fast way to secure certain quantities of high quality raw materials have influence on the fact that many countries in the world successfully keep up this kind of exploitation.

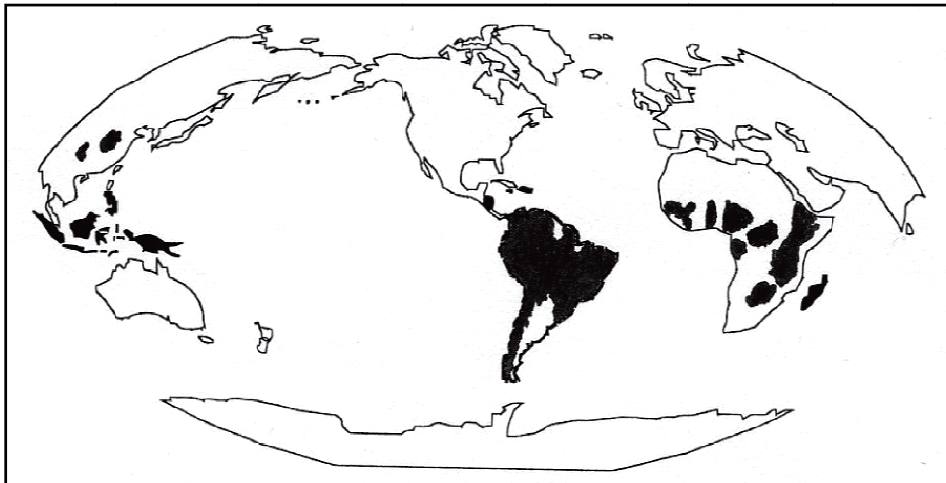


Figure 1 - Location of significant mining regions and locations of small-scale mines (Beljić, 2014)

Production from small deposits provides around 10% of total world production of various mineral raw material, however there is still no strict international classification which defines the idea of 'small deposits' and small mining capacities. These problems are mainly connected with the so called minimal reserves that in the economic sense make possible simple reproduction in concrete exploitation conditions. Minimal reserves are in the function of the kind of raw minerals, type of the deposit within the similar raw mineral, region, and country in which the exploitation is taking place (Glušćević, 2010).

The following Table 1 shows the participation of the production of mineral raw materials from small mines in the total world production.

Table 1 - participation of the production of mineral raw materials

Mineral raw material	Participation percentage in total worl production
METALS	
Antimony	Approximately 25%
Tin	Approximately 15%
Wolfram	Approximately 15%
Mercury	Approximately 15%
Chromium	Approximately 10%
Gold	5% to 10%
NONMETALS	
Semi-precious stones	75% to 80%
Diamonds	10% to 16%
Mica	Approximately 20%
Quartz	15% to 20%
Sulfur	Approximately 10%
Graphite	Approximately 25%
Fluorite	20% to 25%
Gypsum, kaolin, mineral salt	20% to 30%

On the territory of the Republic of Serbia during prospecting up to the present time a large number of various small deposits of mineral materials have been discovered. Those are, first of all, deposits of iron, nickel, tin, copper, antimony, gold, lead and zinc, wolfram, magnesite, dolomite, bentonite, fluorite, quartz materials, disthene, feldspar and especially various kinds of technical stones to be used for building and architecture. Coal deposits should also be mentioned since they would be in this category. A number of deposits are in a certain form of exploitation, but there is a far greater number of them that are partially or completely prospected and with the help of adequate economic analysis could be exploited.

3. CHARACTERISTICS OF 'SMALL-SCALE' MINES

What are the characteristics in question and what criteria are used in order to have a mine places in the group (category) of 'small-scale' mines? There is no simple answer. Many literary sources quote similar or different criteria, however the convention does not exist. Here we shall give some that we think are significant. We

shall point out the specificities of our country and criteria that we use to make the appraisal of domestic situations.

Work in 'small-scale' mines is characterized by:

- Engaging a smaller number of people and equipment;
- More simple and cheaper technical and technological solutions;
- Smaller outputs and consequently smaller quantity of mined ore;
- Smaller profits;
- Work safety in such mines, should not be specially pointed out, as it is on a lower level than in 'large scope mining';
- Economic insecurity;
- Work without adequate permits;
- Absence of care regarding environment;
- Seasonal work.

In the literature in English frequently used terms artisan mines and small mines. Without intention to translate we shall try to give explanation what it is about. Namely these terms are used twofold and that when in question are small illegal mines or legal mines with small physical scope of production. When and for which mine they will be used depends solely on the author.

All negative characteristics are subject to changes for the better by introducing more modern technology, and that mostly depends on economic factors, that is, the value of the mineral material.

In different countries different criteria are applied for defining 'small-scale' mines.

So for instance one of the criteria for the UN is the production of 100,000 t/annually.

In Brazil a 'small-scope' mine is one where individual or collective extraction is carried out by using extensive methods, manually operated equipment or by simple portable machines- for immediate exploitation of raw mineral material deposits, while the deposit itself according to its nature, dimensions, location and economic value, may be mined independently of previous explorations, but in accordance with criteria that have been prescribed by the National Department for mineral production.

In Chile the term that is considered is thus defined: mining operations is executed by the person who directly works in the mine or in the process of preparation of raw mineral materials alone or with support of the family, and that with maximally five paid members, or a legal association which includes six partners at the most.

In Mexico those are the mines whose annual production does not exceed value of 3.0 million \$, under condition that their daily production capacity is less then 200 t (for metal mines) and 300 t (for nonmetal mines).

It is evident that besides all negative things that have been mentioned there are moments that point to possibilities of effective mining in 'small-scale' mines, and if not in all cases then at least in a good number of them.

In our country with the disposition for development of both 'large-scale' and 'small-scale' mining, the latter one, according to our opinion, has not had adequate attention. However this does not mean that these problems have not been considered. On the contrary, it has been, but mostly in the manner which does not completely suits these problems. Without systematic approach there has not been taken into

consideration the difference between big mines, big production systems and mines which according to certain characteristics may be regarded as 'small-scale' mines. The fact is that in our country 'small-scale' mines are 'not recognized' even by legal regulations. On the basis of all that has been presented up to now we think that the place and role of small scale mines in the contemporary raw mineral materials industry may be adequately recognized. We think that we may define that place and role as significant, and not only from the standpoint of the mining production scope (mined quantities) but also from the economic, legal, social, cultural and other points. Small-scale mines present a significant resource of the gross national income in many undeveloped or medium developed economies of the world.

According to the raw mineral materials potential Serbia is the country where such type of mining would be possible. We will not elaborate this standpoint further, since we think that there are numerous publications published in our country and abroad which unambiguously support our point of view. However, we wish to mention that it is enough to look at, for example, individual production of the coal mines that have underground exploitation. That is not all. Numerous deposits of raw building materials satisfy criteria of 'small-scale mines'. Numerous deposits are not being mined although they have certain quantities of certified resources, but are not interesting for big companies. Small-scale mines could offer possibility for opening of new work places, as well as other benefits which the exploitation of raw material complex makes possible. The market would be better supplied with domestic product of the mineral industry and that is the basis for other economic branches and for energy sector. Also, it will have direct influence on restriction of import and more positive economic trends in our country.

In order to have any kind of activity regularly put into effect and socially beneficial it is necessary to have appropriate institutional solutions, as well as solid legal provisions. When we speak here about the possibilities that 'small-scale' mining could offer our country, we mean that these activities would have to be carried out in full accordance with the law and other regulations. Mining would be legally carried out taking care of all standards that are understood in conditions of high developed economies.

And how are small-scale mines and small-scale deposits treated in the current Law on mines and minerals (valid from year 2011)? Simply said, not at all.

In the current Law on mines and geological exploration (Ministry of Mining and Energy, 2011) when the procedure for obtaining all necessary permits is in question, big mining complexes are completely treated equally with small, so to speak manufacture, ones. The only difference is that the Permit for exploitation and the permit for the execution of mining works for certain raw mineral materials may be obtained from the competent authority of the local self-management unit.

Article 56 of this Law literally reads:

Exploitation of the reserves of certain nonmetallic raw mineral materials that are used for obtaining construction materials (building stone: technically cut, cleaved, broken, crushed, ground) and decorative stone (architectural, sculptural, memorial) natural aggregates: sand, gravel, debris for the production of brick-ceramic materials, lime sand others, and for the production of fillers in industry) as well as exploitation of geothermal energy for the needs of physical entities, is done on the basis of the permit

mentioned in paragraph 1. of this Article which is issued by the competent organ of the local self-managing unit, on whose territory that exploitation is done.

And Article 79, paragraph 3 reads:

In case of exploitation that is done on the basis of the permit for exploitation issued in accordance with Article 56 paragraph 3 of this Law, the permit for the execution of mining works is issued by the competent organ of the local self-management unit on whose territory that exploitation is done.

Permit for applied geological exploration that precedes 'mining' permits, and are in the exclusive jurisdiction of the Ministry or the Secretariat of the autonomous province.

This is not sufficient to make legalized the work process of small-scale mines more efficient. For the opening of a small-scale mine it is necessary to make a complex mining investment-technical documentation (Article 57 and Articles 65, ... 84). In that way we arrive at bizarre situations as for instance clay excavation site with three employed workers and with seasonal operation of about 6 months/annually must have a feasibility study, principal mining project, annual operating plans, etc. If we also add to this necessary geological documentation in accordance with this Law (and we have not commented on it here) the conclusion is that it is too much.

We can only hope that new legal solutions that are being announced will be sensitive to the potential that could be valorized through the operation of small-scale mines

4. CONCLUSION

Although there is no strict international classification that defines the term small-scale mines, the significant potential can certainly be found in deposits that are not very interesting for the big mining companies. Also, as previously has been said, in the Republic of Serbia the term 'small-scale mines' is not clearly defined, however the fact that there is a great number of such mines, as well as the potential deposits, means that they could be classified into this category. If we take into account all necessary documentation which the current law demands, we may conclude, that it is not suitable for the scope and significance of different kinds of work that are being carried out in small-scale mines.

With this study we surely focus the attention on the fact that there is a need for defining the term 'small-scale mines', as has been done in a number of other countries, and also the need for new legal solutions so that the existing potential could be introduced into legal framework.

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