

Environmental aspects of the interaction of mining companies with the local community

Irina Verchagina^{1*}, *Irina Kolechkina*¹, and *Svetlana Grigashkina*²

¹T.F. Gorbachev Kuzbass State Technical University, Belovo Branch, 652644, Ilyicha st. 32, Belovo, Russian Federation

²T.F. Gorbachev Kuzbass State Technical University, 28, Vesennyaya st., Kemerovo, 650000, Russian Federation

Abstract. The paper presents the results of a study of the practice of regulating the environmental aspects of the activities of coal mining companies in the world and in Russia, as well as in the largest coal region - the Kemerovo region - Kuzbass. The documents of coal mining enterprises were studied, the main key requirements of the local community for mining companies were formulated, a comparison was made of the leading foreign and Russian coal companies in the field of interaction with the local community.

1 Introduction

Modern society is faced with many challenges, which are accompanied by profound economic, political, socio-cultural changes. The external social environment, in which modern coal mining companies have to work, is no exception. One of such active factors of the external environment is the local community - the inhabitants of those territories in which active mining is carried out. Often, relations between mining companies and the local community acquire a conflicting nature, which negatively affects both the tangible and intangible assets of the company, and the socio-economic and environmental situation in the areas of industrial mining.

Experience of the largest transnational companies in the field mining is evidence of an intense search for new ways for companies to interact with the local community. In 2014, Rachel Davis, Daniel Franks, experts from the Shift International Center for assessing the compliance of the business environment with the UN human rights requirements, prepared an analytical publication dedicated to assessing the costs incurred by extractive companies due to conflicts with local communities. Experts note that in 2000-2010. the period of time required for the launch of projects implemented by the largest international oil companies increases significantly. The main category of non-technical risks for these companies is the risks associated with stakeholders, including conflicts with the local population, preventing the construction of industrial facilities. So, for one of the companies that became the object of the study, non-technical risks led to losses of \$ 6.5 billion [1]. The most common costs are

*Corresponding author: viy.77@mail.ru

due to delays or other disruption to the project schedule. For a world-class mining project, they can be as high as US \$ 20 million per week of delay. [2]

2 Materials and Methods

For the purposes of our research, we use the term “interested party”. This concept belongs to one of the key in international legal acts, including the ISO 14000 series of standards, the central document of which is the ISO 14005: 2019 Environmental management systems standard. In a broad sense, an interested party is a person or organization that can influence the performance of an activity or a decision, be influenced by it, or perceive itself as the latter. The standard categorizes a wide range of stakeholders as stakeholders, including: company employees and their families; regulatory bodies, including local authorities; owners and shareholders; suppliers, contractors and subcontractors; local community; non-governmental organizations (NGOs), etc. [3]. At the same time, we are primarily interested in the practice of interaction of the largest coal mining companies with the local community.

Our analysis of publications in major international mining journals shows a wide variety of problems faced by local communities in industrial mining regions.

3 Results and Discussion

The analysis made it possible to come to the conclusion that the key requirements of the local population are the requirements to ensure environmental safety and socio-economic stability of the territory of mining [4]

First, in regions of intensive mining, conflicts related to environmental requirements are expanding. For example, in South Africa, this struggle is embodied in a legal battle between the Xolobeni community in the Eastern Cape and the government. The community has opposed the creation of a titanium mine in their area since 2007 [1]. Similar situations arise in the United States, Peru, Colombia and other territories [5]. It should be noted that by now in large mining countries a special practice has developed to take into account the interests of the local population when carrying out mining operations and further land reclamation. As a rule, this applies to indigenous peoples living in their ancestral territories [6].

Secondly, along with the growing environmental requirements of the local population to companies in the extractive sector, the requirements for the socially responsible behavior of companies in industrial development areas are also growing. In particular, mining companies are required to reduce the workforce involved in work using the fly in out-of-town workers method, requirements to increase investment in the social infrastructure of their territories. Similar conflicts arise in the USA, Canada, China [7]. To minimize the negative externalities of business activities at the international community level, a number of consistent actions were taken. In 2011, the United Nations prepared Guiding Principles on Business and Human Rights, the main goal of which is to further advance the ideas of sustainable development. Although this document does not belong to the category of legal and does not generate legally significant obligations for companies and governments, on the basis of it, international documents were formed that directly affect the activities of coal mining companies. The guidelines have been incorporated into the revised OECD Guidelines for Multinational Enterprises, and their key elements are reflected in the updated Sustainability Framework and Performance Standards of the International Finance Corporation (IFC), the World Bank's private sector lending arm. The International Organization for Standardization (ISO) has also developed a Guide to the Social Responsibility Standard (ISO26000).

Russia is not in social isolation, therefore international processes are sufficiently reflected in the national economy and politics. In the Russian Federation, the largest coal mining center

is the Kemerovo region-Kuzbass, which faces the same problems mentioned above. So, only recently in Kuzbass there have been several conflict situations in which the local population, on the one hand, and coal enterprises, on the other, acted as interested parties. In 2020, in the village of Cheremza, Kemerovo Region, a confrontation began between local residents and the Kuznetskiy Yuzhny coal mine, which decided to build a coal loading complex. Another significant conflict is unfolding around the Lapichevskaya mine, which from 2021 planned to start mining near the Kemerovo residential area of Lesnaya Polyana. Coal miners are trying to judicially challenge the legality of the creation of municipal specially protected natural areas in the area in order to start coal mining. The next hotbed of confrontation between local residents and representatives of the coal business is the territory of the Tersinsky mineral water deposit. In 2018, the court sided with the residents of the village of Mencherep, who objected to the alienation of their land plots for the needs of the coal mining company. In 2019, the protest action of the residents of Kiselevsk, who demanded resettlement from underworked territories, asked for asylum in Canada, and even filed a lawsuit in the international court in The Hague over barbaric methods of coal mining, gained all-Russian fame. This list of conflicts can be continued. In almost all of these cases, the local population comes up with demands that reflect both environmental and socio-economic problems of the territory.

Thus, the coal enterprises of Kuzbass face the same problems and tasks that face the largest international companies in the mining sector. Firstly, it is the need to comply with international standards and norms and, secondly, the need to respect the environmental and socio-economic rights of the local population. In this regard, the purpose of our analysis was the policy of the largest coal mining companies, focused on interaction with local communities. Three largest international coal mining companies and three largest Russian coal mining companies in Russia were selected as the objects of analysis. The valuation of international companies was carried out on the basis of financial data presented on the website of the financial publication Value.today. The world's leading coal mining companies include: BHP GROUP (company headquarters in Australia), RIO TINTO GROUP; CONOCOPHILLIPS COMPANY (US headquarters, Texas). The largest Russian coal companies were identified based on the 2020 RAEX-600 rating. These include: SUEK, Kuzbassrazrezugol Coal Company, Sibanthracite Group. The territory of presence of all three largest coal mining companies in Russia is the Kemerovo region-Kuzbass.

The analysis of corporate regulations governing the activities of companies was carried out on the basis of information provided on the official websites of the campaigns. Since the territories where the company operates may fall under the jurisdiction of various national legal systems (a company can conduct production in several countries at the same time), it is the corporate policy that most fully reflects the company's approach to the problem of interaction with stakeholders. On the websites of all three major international companies (BHP GROUP, RIO TINTO GROUP, CONOCOPHILLIPS COMPANY), special sections "Sustainability" are presented.

The BHP GROUP in the Sustainability section separately highlights such an area of activity as interaction with the local community. The most impressive areas of the BHP GROUP are, for example, the local procurement program. The BHP Local Sourcing Program in Australia is a complete procurement-to-pay program that allows small local businesses to work with BHP to obtain direct contracts. These enterprises receive more favorable conditions for working with the enterprises of the BHP GROUP. BHP supports the growth of local businesses in the regions where it operates by sourcing and promoting local products and services. During 2020, 12% of the company's external costs were attributed to local suppliers. Another 84% of procurement costs are in the regions where the company operates. Of the \$ 16 billion paid to more than 9,000 suppliers worldwide, \$ 1.9 billion was paid to local suppliers in communities to support their further development. [8]

Another area of the company's activities is the implementation of educational programs for the local, first of all, the indigenous population. Developed by CSIRO in partnership with the BHP Foundation, Australia is implementing an innovative education program designed to transform the way math and science is taught to Indigenous students. Through a dedicated project, the 2020 Reconciliation Action Plan, BHP is also working to increase indigenous representation and create more inclusive jobs by implementing the Indigenous Peoples Development Program across Australia. BHP currently employs 403 Aboriginal women directly, representing 29% of the BHP Aboriginal workforce, and an additional 131 Aboriginal women are employed by the company. [9].

Charitable activities and a social investment program are no less significant areas of the company's activities. Voluntary social investments of the company in 2020 amounted to USD 149.63 million, including USD 113.83 million in direct projects and donations in the field of development of local communities and the environment, USD 12.03 million in the form of equity participation in social investment programs unmanaged joint ventures, \$ 12 million donation to the BHP fund and \$ 1.85 million through the coordinated donation program. Administrative expenses to support direct social investment activities amounted to US \$ 8.58 million, and US \$ 1.33 million supported the activities of the BHP Foundation. [9]

The industrial group RIO TINTO GROUP is also implementing various activities under the program sustainable development. Special attention is paid to interaction with the local community. An analysis of the company's reports allows us to conclude that the RIO TINTO GROUP is working in the same main areas as the BHP GROUP. In 2020, the dig's work was carried out in the following areas: 1. compensation payments made by the company under agreements on access to land, mine development, land law, benefits and other legally binding compensation agreements (165.9 million US dollars in payments to landowners) , 2.investing in the community (\$ 47 million), 3.providing social, economic and / or environmental benefits to the community (\$ 12.8 million), 4.programs to create jobs for local residents and new opportunities for local business, including the ability to supply goods and services to the RIO TINTO GROUP. In 2020, the company spent \$ 15.5 billion on suppliers worldwide [10]. The company also takes part in financing educational programs for the local population.

Analysis of the corporate policy of CONOCOPHILLIPS COMPANY indicates a slightly different format of interaction with stakeholders. This company pays considerable attention to the procedure for approving its industrial facilities with the local population. The company has developed a specialized procedure - values and interest assessments (VIA), the purpose of which is the interaction of the company's specialists in working with local communities to "achieve positive and sustainable results" [10]. Thus, in Indonesia, one of the industrial development territories of CONOCOPHILLIPS COMPANY, in 2019 the company conducted 12 safety trainings for almost 600 people living near the enterprises. Participants gained knowledge about pipeline and traffic safety, forest fires, and how to report problems so that they can be resolved in a timely manner. In the regions where it operates, the company is focused on supporting local producers. For example, in Indonesia, CONOCOPHILLIPS COMPANY has provided local farmers with direct access to rubber factories and bidding support, which has increased their income.

The second part of analysis was the analysis of the official websites of the largest coal mining companies in Russia: SUEK, Kuzbassrazrezugol Coal Company, Sibanthracite Group.

On the SUEK website in the section "Sustainable Development", information on interaction with local communities is presented. In total, during 2019 SUEK implemented more than 250 social and charitable projects in 11 regions. In 2019, the company donated \$ 26 million to social and charitable projects. The main instruments for the implementation of the company's social policy are the non-profit organization Fund for Socio-Economic Support to Regions SUEK - REGIONS and the SGK - Warming Hearts Charitable

Foundation. In 2019, the approximate coverage of beneficiaries of SUEK social programs amounted to 70,100 people, the number of created “points of growth” - 84.

The Kuzbassrazrezugol Coal Company also declares about active social activities in the region of presence - Kemerovo Region, indicating, that the company allocates an average of more than 200 million rubles a year to support state and regional programs. However, the document of JSC “MC“ Kuzbassrazrezugol ” “ Policy in the field of quality, ecology and labor protection ”, approved on October 25, 2019, does not mention interaction with the local community at all.

The Social Responsibility section is presented on the official site of the Sibanthracite Group. The company implements several areas of interaction with local communities in the regions of industrial development. On the territory of the Myskovsky urban district, the Kiyzassky open pit mine is implementing a program of interaction with the Shors - an indigenous small people, providing them with support. In 2018-2021 the company plans to allocate 3.2 million rubles. within the framework of cooperation with the Shoria Association, 7.7 mln.rub. was sent within the framework of cooperation with the Development of Gornaya Shoria Foundation in 2015-2019. In the Novosibirsk region, the Sibanthracite group supports the development of hockey. Since 2017, JSC Siberian Anthracite has been implementing a project to train personnel for the mining industry in the region. In 2019, Siberian Anthracite became the only industrial partner of the Altair Regional Educational Center for the Identification and Development of Talented Children - the Siberian branch of the Sirius educational center.

4 Conclusion

Analysis of the policy of interaction of the largest coal mining companies with local communities revealed several key areas of work, which, on the one hand, make it possible to somewhat smooth out the negative external effects of mining enterprises for the local population, and, on the other hand, reduce non-technical risks for business due to conflicts with local population.

At the same time, conflicts related to environmental requirements, as well as expectations from the local community of socially active actions from mining companies, are expanding in regions of intensive mining. Large coal mining enterprises abroad and in the Russian Federation use various measures of interaction with the local community since this allows them to agree on the goals of the companies' activities and avoid conflicts.

References

1. R. Davis and D. Franks, Costs of Company-Community Conflict in the Extractive Sector, 11 (2014)
2. M. Conde & P. Le Billon, Why do some communities resist mining projects while others do not? (The Extractive Industries, 2017)
3. Understanding the needs and expectations of interested parties in ISO 14001:2015 EMS (2020)
4. S. Zhuwarara. The relationship between the mining industry and communities (2019)
5. Social Management Practices in the Peruvian Mining Industry: Key Findings from the National Society of Mining, Oil and Energy (SNMPE) Member Company Survey (2018)
6. Sustainable and socially responsible mining needs radical transformation Mining.com (2021)

7. R. Davis. Mining Companies and Local Communities. Moving from Paternalism to Respect (2014)
8. Changing the landscape of BHP (2021)
9. Rio tinto group (2021)
10. Listening to Understand Our Stakeholders. CONOCOPHILLIPS COMPANY (2021)