GOLD MINING SECTOR OF THE KYRGYZ REPUBLIC: THE CASE OF *DE FACTO* VIOLATION OF THE RIGHT TO HEALTH

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This paper focuses on two different issues: the right to health and the Kyrgyz mining industry, with special attention to gold mining sector. The main goals of this paper are (1) to identify and examine existing level of intersection between these two large areas; (2) how this intersection is addressed and regulated at international and domestic levels; as well as (3) to explore the extent to which Kyrgyzstan is meeting its legal obligations to respect, protect and fulfil the right to health. In order to address the questions raised, this paper employs a comparative method on the subject, i.e. evaluates internationally recognized standards of protection of the right to health and Kyrgyzstan’s principal environmental, health and safety laws that apply to mining activities.

The core idea that this paper raises is that the passive adoption of laws and regulations that comply with international human rights standards does not demonstrate state’s strong adherence to human rights. In other words, Kyrgyzstan’s failure to enforce national mining and environmental laws that properly address health rights amounts to gross violation of basic human rights.
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INTRODUCTION

The 20th and 21st centuries can be distinguished by the unprecedented use of natural resources\(^1\). Intensive industrialization and urbanization of modern society as well as the continuous growth of the world’s population have significantly boosted the consumption of natural resources. In particular, an important component of this growth has involved the immense extraction of minerals from the earth (i.e. metals, fuel, industrial and construction minerals).\(^2\) According to the research jointly undertaken by Blacksmith Institute and Green Cross Switzerland, mining activities is considered to be one of the world’s top ten most destructive human activities, having regard to (1) severity and toxicity of the pollutants extracted; (2) ways of transferring of pollutants to the population\(^3\); and (3) overall number of people potentially affected by the pollutants globally.\(^4\)

Though mineral extraction creates significant amounts of waste and toxins, ruins entire landscapes, disturbs existing ecosystems, pollutes water, and poisons people\(^5\) it has become a great attraction for investments. Mineral extraction is generally considered to be a key resource for economic growth and development in countries with weak economies that also happen to be rich with mineral resources. Fuelled by immediate financial benefits many national governments tend to neglect their immediate social commitments, such as ensuring the full realization of the right to health, to safe environment, to safe potable water, resource

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3 Pollutants can enter the body in various ways such as inhalation, ingestion of contaminated food and water, by bathing in contaminated water, or through direct skin contact (see above n.3)  
5 Blacksmith Institute and Green Cross Switzerland, above n. 4
preservation and other public goods. The Kyrgyz Republic (aka “Kyrgyzstan”)\(^6\) can be a good example of this assumption.

Kyrgyzstan is a mountainous country – about 75 per cent of the territory is covered with mountains rich for mineral resources. Its enormous mineral potential was discovered during its membership in the Soviet Union, which later resulted in rapid development of mining industry throughout the country. At present gold mining is the main area of interest for foreign investors and country’s main source of export income. According to the assessment of foreign experts Kyrgyzstan has a great potential for extensive exploration of gold deposits. Unfortunately, the mining companies’ little or no appreciation of environmental standards, sanitation and health issues as well as the Kyrgyz government’s corruptness, ignorance and indifference to mining-related health issues are the main problems of the Kyrgyz people. At present the viability of the Kyrgyz mining industry can be strongly questioned from the human rights perspective, i.e. Kyrgyzstan’s commitment to ensure and protect people’s rights to safe environment, to safe water, to adequate housing, to access to information, to public participation, and most importantly to the highest attainable standard of health.

In this regard, this paper focuses on two different issues: the right to health and the Kyrgyz mining industry, with special attention to gold mining sector. The main goals of this paper are (1) to identify and examine existing level of intersection between these two large areas; (2) how this intersection is addressed and regulated at international and domestic levels; as well as (3) to explore to what extent Kyrgyzstan is meeting its legal obligations to respect, protect and fulfil the right to health. In order to address the questions raised, this paper employs a comparative method on the subject, i.e. evaluates internationally recognized standards of protection of the right to health and Kyrgyzstan’s principal environmental, health and safety laws that apply to mining activities.

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\(^6\) The “Kyrgyz Republic” is an official name of the country, i.e. approved and used in all official documents and events, while the “Kyrgyzstan” is an unofficial but commonly used name. In this paper I will mostly use the second version of the name, i.e. “Kyrgyzstan”
The core idea that this paper raises is that the passive adoption of laws and regulations that comply with international human rights standards does not demonstrate state’s strong adherence to human rights. In other words, Kyrgyzstan’s failure to enforce national mining and environmental laws that properly address health rights amounts to gross violation of basic human rights.

The research in this paper mostly reflects an analysis of the international human rights treaties and documents related the right to health, relevant Kyrgyz legislation, and a wide range of relevant legal articles, studies, researches and reports of international and local authors.

The structure of this paper is as follows. Chapter I briefly presents general facts about Kyrgyzstan which can be useful for better understanding of the issues raised in this paper, such as current political and economic situation, geography, as well as legal and institutional framework. Chapter II provides general information about mining industry of Kyrgyzstan, with special focus on gold mining sector, e.g. historical background of the formation of Kyrgyz mining industry and its current status. Chapter III discusses international human rights norms related to the right to health, and is divided into two parts. The first part defines the scope of the right to health, history of emergence of human rights approach to health and main elements of the right to health. The second part examines a linkage between the right to health and other human rights that are mostly affected by mining activities, such as the right to safe environment, to potable water, the right to occupational health, to participation and to access to information. Chapter IV explores both the extent to which Kyrgyz mining legislation ensures the full realization of the right to health and the extent to which the right to health is linked to other human rights that are mostly affected by mining activities under the Kyrgyz legislation. Final part of the paper draws conclusions from preceding chapters and provides concrete recommendations.
CHAPTER I. COUNTRY PROFILE: THE KYRGYZ REPUBLIC

The present chapter briefly presents general facts about Kyrgyzstan which can be useful for better understanding of the issues raised in this paper, such as historical background, current political and economic situation, geography, population, as well as legal and institutional frameworks.

1.1 General country background

The Kyrgyz Republic (also known as the “Kyrgyzstan”) is the second-smallest of the five Central Asian countries after the Tajikistan which is located in the north-eastern part of the Central Asia. The country is bordered on the east and southeast by China (858 km), on the west by Uzbekistan (1,099 km), on the north by Kazakhstan (1,224 km), and on the south by Tajikistan (870 km). Administratively the Kyrgyzstan is divided into seven oblasts (regions); and the capital of the country is Bishkek.

Historical Background. The history of the Kyrgyzstan can be divided into three periods: pre-Soviet era (before the October Revolution of 1917), the Soviet era (before August 1991), and current post-Soviet era (i.e. transitional period).

Geography. The territory of the Kyrgyzstan is mountainous, and occupies an area of 199,951 sq km which is almost equal to the combined area of the Netherlands, Belgium, Portugal and Switzerland. It stretches 425 km from north to south, and 900 km from west to east. Almost 94 per cent of the country’s territory is covered with the mountains.

9 K.Moldogazieva and M.Spoor, Human Ecology in Kyrgyzstan: the Soviet Legacy or Dynamics of Transition, Institute of Social Studies, Working Paper Series No.239, February 1997. According to the data provided at CIA World Factbook webpage the territory of the Netherlands is 41,543 sq km, Belgium – 30,528 sq km, Portugal – 92,090 sq km, and Switzerland – 41,277 sq km; in total – 205,438 sq km. However, the total amount of the
Population. According to the United States Census Bureau as of 2012 the population of the Kyrgyzstan is about 5,668 thousand people.\(^{11}\) According to a 2007 census the main ethnical groups represented in the Kyrgyzstan are Kyrgyz (69%), Uzbek (14.5%) and Russian (9.0%).

A tension between two major ethnic groups (Kyrgyz and Uzbeks), initially based on a land dispute, has existed for a long period of time. Particularly, this tension resulted in serious inter-ethnic violence between Kyrgyz and Uzbeks in 1990 and 2010. In June 1990 an open ethnic conflict in the form of mass riot erupted in the southern regions; the outcome of the conflict was tragic - during one week 120 Uzbeks and 50 Kyrgyz people were killed, more than 5,000 crimes were committed (rape, murder, assault and pillage).\(^{12}\) In June 2010 another serious ethnic clash had flared in the southern regions that resulted in at least 470 deaths\(^ {13}\) and over 1,900 wounded. The conflict accompanied with massive crimes had a devastating effect on thousands of people: according to the information of the UNHCR about 300,000 individuals had been internally displaced as a result of this conflict, while 75,000 people found temporary refuge in Uzbekistan.\(^ {14}\)

Political context. Kyrgyzstan went through a period of political upheavals since the establishment of its independency. Specifically in March 2005 a national protests, which later came to be known as a Tulip Revolution, had overthrown the first President of the Kyrgyzstan Askar Akaev whose 15 years long regime was significantly bypassing democratic developments. Later a large-scale riots and demonstrations in April 2010, mainly spurred by public anger over corruption, rising energy prices and the closure of several media outlets, population of these countries (about 45,606 thousand people) is nine times higher than population size of the Kyrgyzstan.

\(^{10}\) See, e.g., http://www.welcome.kg/ru/kyrgyzstan/region/development/191.html

\(^{11}\) http://www.census.gov/population/international/data/idb/country.php


\(^{13}\) Open Society Justice Initiative, Imprisoned Rights Defender in Kyrgyzstan Needs Immediate Medical Treatment, January 2012

\(^{14}\) United Nations High Commissioner for Refugees (UNHCR), Global Appeal 2012-2013: Regional Operations Profile – Central Asia.
had led to the second tulip revolution which resulted in ousting of Kyrgyzstan’s second President Kurmanbek Bakiev and subsequent inter-ethnic violence in the south of the country in June 2010. After seizure of power by the opposition then acting Parliament was dissolved and an interim government was formed. The interim government was led by interim President At present the president of the country is Almazbek Atambaev who was nationally elected on October 30, 2011. It shall be noted that one of the main outcomes of the second revolution is the reduction of the presidential power by transforming from presidential republic into parliamentary republic.

Economy. Before the collapse of the Soviet Union, Kyrgyzstan’s economy was highly dependent on the economy of other Soviet countries. Accordingly the collapse of the Union had a devastating effect on the country’s economy, which subsequently resulted in immediate reforms towards the establishment of the democratic system of governance and a market economy. At present an agricultural and mining sectors are the main parts of the Kyrgyz economy. Tobacco, cotton, wool, and meat are the main agricultural products. Industrial products include gold, uranium, mercury, natural gas, electricity, and textile. However, the economy depends heavily on gold exports - mainly from output at the Kumtor gold mine. Unfortunately, to date the economy of the Kyrgyzstan is in a poor state. According to the estimation of the World Bank the Kyrgyzstan is a low-income country: in 2010 amongst 180 countries it ranked 135th with its GDP (PPP) per capita. As of 2011, 33,7 per cent of the population lives below poverty line. In this regard it is important to mention that in 2006 the Kyrgyz Government was seriously considering joining to the International Monetary Fund

15 OSCE Office for Democratic Institutions and Human Rights, Observation of Presidential Election in Kyrgyzstan, 30 October 2011
16 World Bank’s Report on Gross Domestic Product 2010, PPP available at http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP_PPP.pdf GDP (PPP) per capita is the most commonly used method of determining the wealth of countries and comparing living standards across these countries.
(IMF) and World Bank’s joint program “Highly Indebted Poor Countries” (HIPC). However, the national protests had restrained the Government from entry into this program. Furthermore, the Kyrgyzstan has high external debts which significantly hinder the sustainable development of the country: at the end of 2011 its total external debts has reached US$3 billion. The country’s largest official creditors are the Asian Development Bank (ADB), IMF, European Bank for Reconstruction and Development (EBRD), World Bank, and Paris Club of Western creditors.

1.2 Legal framework

Kyrgyzstan is a member of the following international organizations: United Nations, Commonwealth of Independent States (CIS), International Labour Organization, World Health Organization, World Trade Organization, World Customs Organization, IMF, ADB, EBRD, Organization for Security and Co-operation in Europe (OSCE) and many others.


\[18\] Ministry of Finance of the Kyrgyz Republic, Отчет о структуре государственного долга КР на 31.12.2011, December 2011
Declaration (1978), The Ottawa Charter for Health Promotion, Declaration on the Right to Development and many others.

According to the Kyrgyz Constitution the international treaties to which the Kyrgyzstan is a party, and which have entered into force under the established legal procedure, as well as the universally recognized principles and norms of international law are the constituent part of the Kyrgyz legal system. Moreover, it is determined that the provisions of international treaties on human rights have direct action on the territory of Kyrgyzstan and are of priority in respect of provisions of other international treaties.19

The legal system of Kyrgyzstan is based on a civil law system, which consists of the Constitution, legislature and customary law. The constitution has a supreme legal force and direct application in Kyrgyzstan. Precedents are not a source of law. The legal acts are adopted in a form of laws by the Parliament, governmental regulations, presidential orders and decrees. Most of the Kyrgyzstan’s principal environmental, health and safety laws that apply to mining activities are reflected in the Chapter IV of this paper.

1.3 Institutional framework

In Kyrgyzstan more than ten state bodies conduct control over mining activities, health and environmental issues. Below is the list of main state bodies only.

The Ministry of Health of the Kyrgyz Republic is the main regulatory state body which coordinates overall state policy on protection of public health. The Ministry develops and implements national and special health promotion and protection programs, and monitors and evaluates their implementation; prepares legal acts in the field of health and submits them to the government for further consideration; monitors and assesses the activity of health care institutions and pharmaceutical companies; participates in the development and

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19 The Constitution of the Kyrgyz Republic adopted in a referendum held on 27 June 2010, Article 6 (3)
implementation of international agreements, ensures a proper implementation of international health projects and programs; coordinates overall policy on chemical safety and manages the National Registry of Potentially Toxic Chemicals, and many others.

The State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic is the main state body on environmental protection. The Agency conducts control over the compliance of economic and other activities with environmental laws; effective and rational use of natural resources; responsible for protection of the population and environment against toxic contamination; monitors the implementation of existing laws on chemical and waste management with aim to prevent possible negative effects on the environment, and others.

State Agency for Geology and Mineral Resources under the Government of the Kyrgyz Republic is the main state body which conducts control over rational use and preservation of natural resources. The Agency issues or cancels licenses for subsoil use; executes license agreements; maintains a geological information fund, containing information and documents (various maps, reports, feasibility studies, etc.); responsible for protection of the population and environment against toxic contamination, and others.

The Ministry of Emergency Situations of the Kyrgyz Republic is the main state body which is responsible for conducting control and management of tailing dams and mining dumps of closed mining activities in order to prevent any possible threat to the safety of people’s health and the environment; and rehabilitation and recultivation of tailing dams and mining dumps.
CHAPTER II. THE KYRGYZ GOLD MINING SECTOR

The present chapter provides general information about mining industry of Kyrgyzstan, with special focus on gold mining sector. In particular, the first section of this chapter briefly explains the reasons that make mining industry a key source of Kyrgyzstan’s social and economic progress. The second section gives historical background of the formation of Kyrgyz mining industry, while the third section reflects its current status mainly by focusing on the Kumtor mine project, the largest currently operating gold mine. The criticism of Kumtor project, as well as the dangerous legacy inherited by Kyrgyzstan from Soviet mining operations, will be discussed in the forth section.

2.1 Gold mining and mineral resource extraction as a major driver of Kyrgyz economic and social development

The Kyrgyz land is rich for mineral resources such as gold, mercury, antimony, rare-earth materials, silver, copper, coal, oxides, uranium oxide, tin, molybdenum, arsenic, and many other minerals. Development and promotion of resource extraction industry thus have been a priority for country’s economy for the last eighty years. Specifically 6 out of 22 towns and 14 out of 29 urban-type communities were founded in the areas of mineral extraction. During the Soviet era, when actually a real potential of the Kyrgyz land was discovered, Kyrgyzstan had a solid position of a mineral raw materials supplier in the overall Soviet economic strategy. Nowadays mineral extraction is the main area of interest for foreign investors, having regard to the country’s geographic and financial characteristics, i.e. landlocked, mountainous and small domestic market. Mining industry now contributes over

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24 % of total tax payments,\textsuperscript{22} however nearly all of the growth in the sector is due to gold extraction from Kumtor gold deposit.\textsuperscript{23}

After the collapse of the Soviet Union, when the country’s economy was in the most devastating state, many international financial institutions identified mining sector, especially gold mining as having a great potential for promoting economic and social development in Kyrgyzstan. Most of the potential gold deposits were regarded as underestimated and underdeveloped, and thus highly profitable.\textsuperscript{24} Since the amount of capital required for undertaking mining activities, esp. exploration and construction of mineral deposits, and the risk of failure were found to be very high, the attraction of foreign investments was defined as the only optimal solution for effective mining promotion. Additionally it was well-known that the foreign investors could bring not only capital to mining sector but also operating and management expertise, new technologies, and well established international marketing network. Hence, from then on in the attempts to attract and retain as much investments to mining industry as possible the Kyrgyz government has tried to comply with the specific criteria used by the investors to evaluate potential investment projects in emerging economies, jointly determined by the United Nations and the World Bank in 1991.\textsuperscript{25} Among these criteria are availability of infrastructure; good geological prospectivity and mining tradition and potential; attractive and competitive fiscal conditions; clear mining rights and mining legislation; ownership and control of operations; political stability and transparency of governance.\textsuperscript{26} Unfortunately, in zealous pursuit of economic indices the government has neglected very important social and environmental effects of the mining activities. At present we can witness a poor performance of the Kyrgyz mining sector in reaching sustainability

\textsuperscript{22} Minister of Economy and Antitrust Policy of the Kyrgyz Republic, \textit{Report on the State of the Kyrgyz Mining industry: Problems and Ways of Improvement}, September 2012  
\textsuperscript{23} Ibid.  
\textsuperscript{24} World Bank Country Study, \textit{Kyrgyzstan: The Transition to a Market Economy}, 1993  
\textsuperscript{25} In 1991 under the auspices of the World Bank and UN a survey of major international mining companies was conducted which aimed at determining concrete criteria used by such companies to evaluate potential investment projects in emerging economies.  
\textsuperscript{26} World Bank Report No. 24709-KY “Kyrgyz Republic: Update on the Mining Sector”, September 2002
goals – in particular, the viability of mining industry can now be strongly questioned from the human rights perspective, i.e. Kyrgyzstan’s ability to respect, protect and fulfil people’s rights to safe environment, safe water, adequate housing, and most importantly to the highest attainable standard of health.

2.2 Soviet exploitation of the Kyrgyz resources.

As it was mentioned earlier, Kyrgyzstan has strong mining traditions. Active exploration activities in Kyrgyzstan started in 1930’s\(^27\) and led to rapid development of industries of coal, mercury, lead, copper, and oil in the country. During the World War II more than 20 companies were operating and extracting various minerals mostly required for production of military-related goods.\(^28\) For example, Soviet Union’s first atomic bomb was mainly made from the uranium mined in a small Kyrgyz town Mailuu-Suu.\(^29\)

Later, in the Soviet economic structure Kyrgyzstan was regarded as a major supplier of certain mineral raw materials. Its share in Soviet Union’s total production of minerals in certain periods constituted 100% of antimony, 40-100% of mercury, 30-64% of rare-earth metals, 15-18% of lead, and 15% of uranium production.\(^30\) Only a few processing plants were constructed in Kyrgyzstan because almost all minerals extracted in its terrain were processed in the specialized plants located in the other Soviet countries. Remarkably, at present the big mining companies are mainly those established during Soviet era (so far the only big mining company which was created after acquiring independence is Kumtor\(^31\)).

Since the Soviet mineral extraction was a key sector in Kyrgyzstan it had a significant impact on social life of the local communities. The most accurate description of the industry’s

\(^{27}\) World Bank Report No. 13024-KG “Kyrgyz Republic: Mining Sector Review”, May 1994
\(^{28}\) V. Bogdetsky, K. Ibraev and J. Abdyrakhmanova, *Mining as a source of economic growth in Kyrgyzstan*, developed under Project Implementation Unit of World Bank IDF Grant for Building Capacity in Governance and Revenues Streams Management for Mining and Natural Resources, Bishkek 2005
\(^{29}\) Sarah MacGregor, *Finding a solution for uranium waste in Kyrgyzstan*, OSCE, February 2004
\(^{30}\) V. Bogdetsky, K. Ibraev and J. Abdyrakhmanova, above n. 28, p.13
\(^{31}\) Ibid., p.21
impacts during the Soviet time, in my opinion, is given in the Report on Mining Industry and Sustainable Development in Kyrgyzstan, developed by the Mining, Minerals and Sustainable Development (MMSD) project of International Institute for Environment and Development (IIED). Below is reflected one of the most exhaustive parts of this report:

“In the Soviet time, when the mining industry went through rapid development, companies of the sector and attendant enterprises overlapped in areas of activity. Most of the time income exceeded that previously received by local communities of the area. Towns were built, infrastructure developed, and the supply of goods and services improved. This was largely the result of the creation of new jobs and incomparably high salaries, the opportunity for education and a relatively well developed service sector. The network of schools, day nurseries and kindergartens, specialised secondary education schools, health care, cultural institutions, and the provision of public transport and communication were all included in the construction and development plans of mining companies. The high purchasing capacity of the population in mining enclaves stimulated production and the sale of agricultural and other goods produced in the country. Thus the mining industry, in addition to its direct contribution, stimulated the development of other sectors of the economy.

Unlike other countries where the mining industry resulted in the expropriation of lands of local people and forced re-settlement, the situation in Kyrgyzstan was different. The expropriation of pastures was limited, and was compensated by benefits resulting from the mining industry, and by the allocation of alternative lands…”

It shall also be noted that at that time it was common practice for mining companies to provide their employees and their children with vouchers to the rest-homes and sanatoriums as a method of prevention or treatment of various health-related effects of mining operations. Nevertheless almost all improvements in the people’s life accompanied with the development of mining industry were essentially diminished by the fact that the environmental considerations had been largely neglected over the period of mining activities; moreover the information on environmental and health impacts of mining activities was kept in secret and was not accessible to lay people. Accordingly, in such conditions the Soviet mining activities were regarded by the people as flawless, and thus did not cause any conflict between the interests of the local communities and state. Unfortunately, after the Soviet Union ceased to exist almost all destructive sides of these mining operations were revealed to the public.

32 V. Bogdetsky, V.Stavinskiy, E.Shukurov, M.Suyunbaev, above n. 21, p.77
33 Ibid., pp.77-78
34 World Bank Report No. 13024-KG, above n.27
35 V. Bogdetsky, V.Stavinskiy, E.Shukurov, M.Suyunbaev, above n. 21, p.70
2.3 Modern status of Kyrgyz mining sector

The next wave of the Kyrgyz resource extraction started after the collapse of the Soviet Union. After Kyrgyzstan obtained its independence, an international community had demonstrated its readiness in assisting and supporting Kyrgyzstan in its way to the democracy and sustainable development. In particular, the World Bank, IMF, IFC, EBRD and other international organizations have been active in dealing with these tasks from then onwards. For example, within 2-3 years after acquiring independence the World Bank had prepared a number of reports aimed at identifying economic sectors that were capable of promoting country’s development. One of these reports directly dealt with restructuring the mining sector in Kyrgyzstan, namely World Bank Report No. 13024-KG “Kyrgyz Republic: Mining Sector Review” (1994). The World Bank experts, having thoroughly studied and analyzed country’s geology database that contained detailed geological maps, maps of geophysical and geochemical fields, various technical information and other regional researches well-developed during the Soviet-extraction period, came to conclusion that the territory of Kyrgyzstan had a great potential for extensive exploration of gold deposits - gold reserves were estimated at more than 2,000 tons.36 Most of other mineral resources were defined to be completely exhausted by Soviets, or of insufficient amounts, or otherwise commercially nonviable37 (e.g. current low market price or low quality) while a gold mining was relatively new for Kyrgyzstan (the history of industrial gold-production in Kyrgyzstan started only in 1986 when the Makmal Gold Mining Enterprise was built38). Moreover, gold mining was defined as highly profitable since it produces the largest profit in comparison to the sources invested.

36 World Bank Report No. 13024-KG, above n. 27
37 Ibid., p.1
38 V. Bogdetsky, K. Ibraev and J. Abdyrakhmanova, above n. 28, p.13
On the basis of the Soviet geology database 65 gold prospects were identified and considered to be potentially profitable.\textsuperscript{39} Dzherui and Kumtor gold deposits were identified by the World Bank as the most attractive mining projects that could be of interest to Kyrgyz Government and foreign investors. Specifically, the \textit{Dzherui gold deposit} is located in northwestern Kyrgyzstan, and much smaller than Kumtor. The deposit was discovered in 1969 and had been actively explored during the period 1975 to 1984 at a total cost of US$12.4 million.\textsuperscript{40} It contains considerable gold reserves both for the open-pit and underground extractions. To date the mine is being developed by Dzherui Mining Company, where Kyrgyzstan owns 33% equity. However the mine is not actively working at the moment since it requires significant investments for bringing it into production, the estimated amount is around US$118 million.\textsuperscript{41}

The \textit{Kumtor gold deposit} is located in southeastern part of the country at an altitude of 4,000 meters above sea level in a permafrost zone and glaciers of the Tien-Shan mountains.\textsuperscript{42} Kumtor is a world-class gold mine, reportedly the eighth largest known gold deposit in the world.\textsuperscript{43} The deposit was discovered in 1978 and had been explored during the period of 1978 to 1990 at a total cost of US$12.2 million.\textsuperscript{44} In 1991, its total gold reserves and resources were estimated by Soviet experts at approximately 700 tons, including 316.5 tons that can be mined by an open-pit mining method.\textsuperscript{45} By the decision of the Soviet authorities a further development of the deposit was postponed until 2005 due to the high production cost of the project tentatively estimated at US$1.46 billion.\textsuperscript{46} However, after the collapse of the Soviet Union, in 1992 a new independent Kyrgyz government entered into

\textsuperscript{39} World Bank Report No. 13024-KG, above n.27, p.ii
\textsuperscript{40} World Bank Report No.24709-KY, above n.26, p.33
\textsuperscript{41} Ibid., p.33
\textsuperscript{42} See official website of the Ministry of Natural Resources of the Kyrgyz Republic [www.geo.gov.kg](http://www.geo.gov.kg)
\textsuperscript{43} Ibid., World Bank Report No.24709-KY, above n.26, p.28
\textsuperscript{44} World Bank Report No. 13024-KG, above n.27, p.15
\textsuperscript{45} See official website of the Kumtor Gold Company [http://www.kumtor.kg/en](http://www.kumtor.kg/en)
\textsuperscript{46} See official website of the Ministry of Natural Resources of the Kyrgyz Republic [www.geo.gov.kg](http://www.geo.gov.kg)
agreement with Canadian mining company Cameco Gold Inc. to evaluate the Kumtor gold project. A final investment agreement for project development between Cameco Gold Inc. and JSC Kyrgyzaltyn, a state-owned company which is in charge of the country’s whole gold mining sector, was concluded in 1994.

Under this agreement was created a joint venture Closed Joint Stock Company (CJSC) “Kumtor Gold Company” which has developed and brought the mine into commercial production in 1997. In 2004 as a result of reconstruction of Cameco Gold Inc. Kumtor Gold Company was reassigned to the new Canadian company called Centerra Gold Inc. At present Kumtor mine is being operated by separate company CJSC Kumtor Operating Company, wholly-owned subsidiary of Centerra Gold Inc. registered in Kyrgyzstan. At different times the interest of Kyrgyzstan in the Kumtor project varied from 15.6% to 66.6%; at the initial stage it had 66.6% equity in the Kumtor Gold Company, while at present it has 33% equity in Centerra Gold Inc. However, in the former case Kyrgyzstan was a shareholder of the domestic company which represented only one investment project of the Cameco Gold Inc., while in the latter case Kyrgyzstan is a shareholder of the main “mother” company which has other investment projects outside the Kyrgyzstan’s territory, namely Boroo and Gatsuurt mines located in Mongolia, as well as interest in promising exploration projects in Turkey, Russia and China.

Throughout the life cycle of Kumtor mine, the funding of the project in the total amount of US$452 million was provided by Cameco Corporation, EBRD, IFC, the Chase Manhattan Bank, and the Canadian Export Development Agency. To date, this is the largest

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47 World Bank Report No.24709-KY, above n.26, p.28
48 See official website of the JSC Kyrgyzaltyn [http://www.kyrgyzaltyn.kg/invest-proekti/46-proekt-kumtor]
50 See official website of Kumtor Gold Company, [http://www.kumtor.kg/en/about/centerra-gold-inc/]
51 World Bank Report No.24709-KY, above n.26, p.28
investment in Kyrgyzstan as well as one of the main contributors to the Kyrgyz economy.\textsuperscript{52} Between the period 1997 and the end of 2011 the mine has produced more than 8.4 million ounces of gold.\textsuperscript{53} According to the official data provided by the National Statistic Committee of the Kyrgyz Republic, in 2011 Kumtor contributed 11.7\% of the total GDP of the country, 26.1\% of the total industrial production and 51.1\% of the total export income.\textsuperscript{54} Moreover, Centerra Gold Inc. asserts that during the period between 1994 and 2011 (i.e. 17 years) the Kumtor project has made various payments to Kyrgyzstan which is accounted for US$1.852 billion, including payments to the state budget in the form of pollution taxes and payments to the Environment Protection Agency – over US$3.4 million; sanatoria treatment – about US$ 0.6 million; regional Sustainable Development Program – about US$ 2.2 million; payments to communities – around US$ 4.5 million (as a chemical spill compensations); and payments on many other indices.\textsuperscript{55}

In general, according to the assertion of the Kyrgyz Minister of Economy, Temir Sariyev, except for Kumtor gold deposit there were not made any serious advances in exploration and processing of mineral deposits in Kyrgyzstan over the past 20 years.\textsuperscript{56} Major obstacles for improvement of the situation, he points out, are the problems associated with licensing and constant conflicts with local communities. As for licensing, the problem is that the licensing procedures are non-transparent and highly corrupted which is greatly affecting potential investors’ intentions to work in Kyrgyzstan. In particular, the Minister states that for the last 20 years in total 2015 licenses have been cancelled on various vague and minor grounds.\textsuperscript{57} At present 906 licenses are issued and valid, among them: 223 – for exploration

\textsuperscript{52} Ibid., p.29
\textsuperscript{53} See official website of Centerra Gold Inc., available at http://www.centerragold.com/operations/kumtor
\textsuperscript{55} Ibid.
\textsuperscript{56} Minister of Economy and Antitrust Policy of the Kyrgyz Republic, above n.22
\textsuperscript{57} Ibid.
activities, 137 – for prospecting activities, and 546 – for processing of mineral resources; however because of vague and non-transparent licensing procedures, which can lead to various corruption schemes, many licensees are not reluctant to actively develop their mineral deposits. As for the conflicts with local communities, the Minister states that this problem is posing a serious threat to progress of the Kyrgyz mining sector. At present the conflicts between local communities and mining companies are becoming more and more frequent, and main reason is a lack of harmony of interests of different stakeholders: state, investor and local communities. In fact, the Kyrgyz government has failed to guarantee proper protection of rights and interests of local communities, as well as investors’. As a result the current poor economic, environmental and social indicators of Kyrgyzstan create uncertainties about the positive role of the mining sector in the overall economic and social development of the country.

2.4 The Kumtor project: blessing or evil?

There is no doubt that the Kumtor project significantly contributes to country’s economy – indeed annual macroeconomic indices of Kyrgyzstan show us economic viability of the project. However many local experts and politicians claim that Kyrgyzstan could have earned much more money from Kumtor mine if not various corruption schemes. Anyway since it is one of the country’s largest business projects there are always plenty of heated debates and discussions around it. Actually there is a lot of criticism of project. In particular, an adherence of Kumtor Operating Company to environmental, health and safety regulations, principles and practices has been heavily questioned recently.

58 Ibid.  
59 Kubanychbek Isabekov, «Золотая» мафия в Кумторе, Achyk Sayasat Plus (2011)
In my opinion, the most extensive and detailed research on environmental impacts of the Kumtor mining operations was conducted by Dr. Robert E. Moran. In his report he points out concrete facts of violations of internationally recognized environmental standards, as well as deviations from widely accepted mining practices. Specifically he argues that mining activities at Kumtor mine are:

- releasing elevated amount of contaminants into the environment, some of which exceed international water quality standards and aquatic life criteria. As one of the indicators can be reflected the fact that fish population in the Barskoon River downstream of the mine has significantly decreased since the operations begin;
- these contaminants travel far from the Kumtor mine site: a) flow downstream into the Barskoon and Naryn rivers, b) flow into various groundwater reservoirs, and c) flow into neighboring Uzbekistan;
- accelerating and aggravating melting of local glaciers (which are the ultimate source of entire local hydrologic system) by placing mining wastes on the glaciers, use of heavy mine equipments and explosives that generate vibrations;
- extracting about 4.38 billion liters of fresh water per year, this inevitably reduces the supplies available to downstream users, impacts aquatic life and increases competition for water downstream;
- using about 8-10 tons of cyanide per day to remove gold from the ores, that roughly amounts to 3650 tons of cyanide per year.
- producing approximately 981,354,000 tons of toxic waste rock and about 53 million cubic meters (about 89 million tons) of toxic tailings. Moreover the tailing dam and mining dump at the Kumtor mine site are extremely unstable and unsafe since they are placed on the glaciers and permafrost, which is now actively melting, thus any significant earthquake may cause a collapse of these constructions. The other essential point in this regard is that the Kumtor Reclamation Trust Fund contains inadequate funds necessary to truly remediate and maintain the Kumtor site after its closure;

Dr. Robert E. Moran an American specialist with forty years of domestic and international experience in conducting and managing water quality, geochemical and hydrogeologic work. In 2011 he was invited by the Kyrgyz NGOs to be a member of a team of experts who were granted by the Kyrgyz government a permission to enter the Kumtor site and conduct an independent technical audit of the Kumtor Mine. However the administration of Kumtor Operating Company had objected to Dr. Moran’s participation in the audit. As a result he had to conduct his own research on environmental impacts of Kumtor mining site.

Robert E. Moran, Kumtor Gold facilities, Kyrgyzstan: Comments on Water, Environmental and Related Issues, September 2011
not transparent, i.e. an information about the activities of the Kumtor Operating Company is not publicly open and transparent, e.g. most of the detailed technical reports (hydrogeology, aquatic resources, water quality, geochemical and metallurgical testing, etc.) are not publicly available. The only exception is the annual Environmental Protection Report which is available in English and Russian languages, but not in Kyrgyz (though most of the local population speaks only Kyrgyz language).

Many other discouraging facts about Kumtor mine are reflected in Dr. Moran’s report. One of the crucial issues raised by Dr. Moran is that the Kyrgyz government failed to collect all necessary, statistically-reliable and detailed databases, esp. on water quality, surface and groundwater quantities, stream and spring flows, aquatic biology, spring locations, soil chemistry existed around the Kumtor site before the operations begin. As a result the absence of such baseline data leaves no opportunity to make truly correct assessment of the impacts of Kumtor Operating Company’s mining activities on surrounding environment, and accordingly on health of the local population. Besides, it also gives Kumtor Operating Company and Centerra Gold Inc a chance to refer to natural factors/events anytime when there is a debate about the environmental degradation and pollution around the mine site, for instance to claim that active melting of glaciers took place long before the operations begin, i.e. the mining operations have not triggered this process at all.

In December 2011 Interagency Governmental Commission of Kyrgyzstan, comprised of parliamentarians, state officials, NGO representatives and international environmental experts, presented its report on Kumtor gold mine. The report mostly supports findings of Dr. Moran. Another Parliamentarian Commission, established by the resolution of the Kyrgyz Parliament, prepared and publicly presented another report in July 2012. Main goal of the Parliamentarian Commission was to define whether Kumtor Operating Company is

62 Ibid.
63 Interagency Governmental Commission of Kyrgyz Republic, Evaluation of Compliance with Environmental and Industrial Safety Standards at Kumtor Gold Mine, December 28, 2011
complying with standards and requirements on rational use of mineral resources, environmental and operational safety, and community social protection in the mine impact area as well as government control status.\textsuperscript{64} This report also revealed many gross violations at Kumtor gold mine. In response to the abovementioned reports and Dr. Moran’s research, Kumtor Operating Company and Centerra Gold, Inc have invited international independent experts to comment on serious allegations and arguments raised in these reports. Eventually the experts have refuted an essential part of the allegations and arguments reflected in the mentioned reports mainly stating that those arguments and allegations are unfounded, groundless or misleading.\textsuperscript{65} However their opinion was formed mostly on the basis of materials presented by Kumtor Operating Company and Centerra Gold, Inc, and discussions with Kumtor’s and Centerra’s senior management and staff. Probably because of this reason they came to such conclusion. And again if Kyrgyzstan had detailed and reliable baseline data on Kumtor mine site an analysis of the Commissions and Dr. Moran could have been better well-grounded, as well as international experts’ opinion could have been opposite.

Mining scandal occurred in 1998 around the cyanide spill into the local river has exposed another side effect of mining operations at the Kumtor mine. In May 1998, a truck transporting cyanide to Kumtor mine site plunged into the Barskoon river, spilling over 1,700 tons of cyanide into the river which local communities uses as a main source of drinking water and irrigation.\textsuperscript{66} Local population was notified only five hours after the accident. During this time sodium hypochlorite was applied to areas near the spill site to break down

\textsuperscript{64} Parliamentarian Commission of the Kyrgyz Republic, Отчет по проверке и изучению соблюдения ЗАО «Кумтор Оперейтинг Компани» норм и требований по рациональному использованию природных ресурсов, охране окружающей среды, безопасности производственных процессов и социальной защиты населения в районе воздействия деятельности золотодобывающего рудника, а также состояния осуществляемого государственного контроля, July 2012

\textsuperscript{65} See Report of Prizma LLC, Independent Assessment of the Parliamentarian Commission Report (September 2012); and other relevant reports are available at http://kumtor.kg/en

\textsuperscript{66} CEE Bankwatch Network, Mountains of Gold: Kumtor Gold Mine in Kyrgyz Republic, Hungary, May 2002
the cyanide - which made the impacts of the accident even worse.\textsuperscript{67} According to the Dr. Robert Moran application of sodium hypochlorite may result in formation of cyanide-related toxic compounds which can travel long distances from the spill area and cause various health problems to people.\textsuperscript{68} As a result, over 2,500 people were found poisoned, 850 people were hospitalized, and at least four patients died – two were poisoned with cyanic acid, and two died of acute complications of chronic diseases caused by the cyanide.\textsuperscript{69}

The impact of this accident on people’s health and safety was subject of heated debates among the whole population. Kumtor Gold Company and the Kyrgyz government, on the one hand, were arguing that the panel of international experts specially invited to undertake thorough investigation of the incident found only a few side effects on public health from the cyanide spill. Moreover, they were highlighting the World Health Organization’s research that affirmed the panel’s conclusion.\textsuperscript{70} The results of these researches were challenged by the local NGOs and population, on the other hand, by stating that international experts “only looked for ‘general’ and ‘total’ cyanide; thiocyanates were not included in the research, nor were chemicals used to treat the spill, which are toxic in their own.”\textsuperscript{71} Besides, another problem associated with the accident was an uncertainty with under whose order and how much sodium hypochlorite was used to clean-up the cyanide spill into the river.\textsuperscript{72}

Though estimates of the total damage resulting from the spill ranged from US $20 to 42 million, Kumtor Gold Company had reached an agreement with the Kyrgyz government to pay only US $4.5 million for all damages, i.e. harm caused to surrounding environment, people’s health, agriculture and tourist organizations which had recreational facilities at Issyk-

\textsuperscript{68} Ibid., at p.12
\textsuperscript{69} CEE Bankwatch Network, above n. 66, at p.36
\textsuperscript{70} World Bank Report No.24709-KY, above n. 26, p.29
\textsuperscript{71} Mining Watch Canada, \textit{Written Presentation to the Standing Committee on Foreign Affairs and International Trade}, May 2004
\textsuperscript{72} CEE Bankwatch Network, \textit{KUMTOR GOLD MINE: TWO YEARS AFTER THE ACCIDENT. WHAT IS POISONED?}, NGOs Issue Paper, EBRD Annual Meeting, Riga, May 2000
Kul lake.\textsuperscript{73} In this case the most disturbing fact is that only nine years after the accident, i.e. in 2007 could residents of the affected villages receive compensation for damages caused by cyanide spill incident in the amount of about USD 840 to each family,\textsuperscript{74} this sum is definitely incomparable with the sufferings and losses of those people. It should also be mentioned that since the cyanide spill incident there have been two more reported spills of toxic materials on the road caused by Kumtor Gold Company: (1) July 1998 – spill of 70 liters of nitric acid, and (2) January 2000 – spill of 1500 kg of ammonium nitrate.\textsuperscript{75}

In summary, a thorough analysis of the long tradition of extensive and immense extraction of mineral resources in Kyrgyzstan reveals quite discouraging results. Extended Soviet resource extractions left Kyrgyzstan with plenty of irresponsibly maintained mining dumps and tailings that pose grave risk to the human health. According to the State Registry of Tailings and Mining Dumps, there are 92 locations where toxic and radioactive mining waste has accumulated (36 tailing dams, 25 mine dumps, and 31 radioactive waste dumps),\textsuperscript{76} totaling 250 million cubic meters in the country.\textsuperscript{77} Ministry of Emergency Situations of Kyrgyzstan, which is in charge of monitoring and rehabilitation of tailing dams, informs that 28 tailing dams contain radioactive waste totaling 13 million cubic meters of mostly liquid or slurry suspension of crushed rock, that have remained derelict since the Soviet times.\textsuperscript{78} These tailing sites are located close to communities and have not been designed to cope with negative long-term effects of mining wastes, in particular exposure to natural processes (e.g. mudflows, flooding and landslides.), nor have they been protected against unauthorized

\textsuperscript{73} EARTHWORKS, Issyk-Kul, Kyrgyzstan (2010), available at http://nodirtygold.org/issykkul_kyrgyzstan.cfm
\textsuperscript{74} Kalia Moldogazieva, “Gold” future or sustainable development?, September 2007
\textsuperscript{75} Mining Watch Canada, above n. 71
\textsuperscript{76} UN Development Program (UNDP), The Kyrgyz Republic: the Second Progress Report on the Millennium Goals, Bishkek (2010), p.64
\textsuperscript{77} Committee on Environmental Policy of the Economic Comission for Europe, SECOND ENVIRONMENTAL PERFORMANCE REVIEWS No.28 of KYRGYZSTAN, United Nations, New York & Geneva, 2009
\textsuperscript{78} Official website of the Ministry of Emergency Situations of the Kyrgyz Republic, available at http://mes.kg/?p=12716
access by people. Unfortunately, vital characteristics of the Kyrgyz mountains were also grossly neglected during construction of these tailing dams: in particular such crucial feature that the whole territory of the country is located in a seismically active zone (7-9 points on Richter scale). As a result the tailing dams were created in the areas prone to dangerous natural disasters such as earthquakes and landslides which can significantly weaken the structural integrity and safety of these dams, and thus may eventually cause catastrophic collapse of dams. Tailing dam failure is one of the most dangerous problems of mining – it may cause enormous damages to the environment and health of the population of Kyrgyzstan and neighboring countries; and the liquidation of the damages caused may require many years, efforts and sources.

A gross environmental violations, as well as cyanide spill accident, clearly demonstrates the real attitude of the Kyrgyz government and Kumtor Gold Company to the observance and respect for the basic human rights. In general, the problems associated with the environmental degradation, radioactive mining wastes as well as mining-related catastrophes have questioned the viability of mining sector, especially from the public health perspective. Moreover, these cases, as well as the history of Kyrgyz mining industry, have revealed many other crucial issues such as State’s and mining companies’ inability to comply with internationally adopted environmental management and protection standards; weakness of the State’s and investment projects’ environmental and social performance; operation of mining activities with reclamation funds that does not meet the costs of post-mining cleanup works and further management of mining wastes; no public disclosure of the troublesome mining and health-related issues and so on. Probably, one of the problems (except high corruption and poverty level) of Kyrgyzstan’s proper promotion and implementation of its commitments

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79 Committee on Environmental Policy of the Economic Commission for Europe, above n.77, p.117
80 V. Bogdetsky, V.Stavinskiy, E.Shukurov, M.Suyunbaev, above n. 21, p.8
toward the protection of people’s basic rights and interests vis-à-vis those of mining companies is, *inter alia*, existence of ownership interests in mining ventures.
CHAPTER III. HEALTH AND HUMAN RIGHTS

Chapter III discusses international human rights norms related to the right to health, and is divided into two parts. Part 3.1 defines the scope of the right to health, history of emergence of human rights approach to health and main elements of the right to health. Part 3.2 examines a linkage between the right to health and other human rights that are mostly affected by mining activities, such as the right to safe environment, to potable water, the right to occupational health, to participation and to access to information.

3.1 Health as a Human Right

There are many people in the world who think that health is a mere state of being free from any physical or mental illness or injury. It only becomes a real concern in the presence of dramatic symptoms or consequences. Unfortunately, until then health is not perceived as a top priority as opposed to other issues such as financial or housing. Such misconception and attitude must be changed. Foremost health shall be considered as a fundamental human right, i.e. not as just a medical or economic concern but as a matter of social justice.

The main idea of human rights is that these rights are rights of individuals in society; they are not merely assertion of the benefits, but the legitimate, valid, justified claims of individuals to enjoy those benefits\textsuperscript{81}, i.e. to achieve so desired human well-being. The universal, inalienable and imprescriptible nature of those rights makes human rights unique\textsuperscript{82}. The other important characteristic of the human rights is that for enjoyment of these rights there is no need for providing justification, i.e. they need not to be earned or deserved - they

\textsuperscript{81} Louis Henkin, \textit{The Age of Rights} and \textit{The Triumph of Human Rights after the Second World War}, The Human Rights Idea (1990)

belong to people by virtue of their humanity.\textsuperscript{83} Thus linking health and human rights is of high importance. First, this would make states that ratified human rights treaties publicly accountable for issues related to health and well-being of individuals\textsuperscript{84}; second, it would provide the guidelines “on what individuals and groups are entitled to receive, or to be protected from, in order to achieve the highest attainable standard of health”\textsuperscript{85}; third, it would place the individual at the center of concern, empower and enable the individual to make a right-based claims; fourth, it would provide affected individuals and other stakeholders with monitoring and enforcement mechanisms needed for proper protection of health-related rights; fifth, it would broaden health issues beyond medical services, goods and facilities by addressing underlying social and economic determinants of health, such as access to safe and potable water, food and nutrition, safe and healthy working conditions, and healthy environment.\textsuperscript{86}

3.1.1 What is Health?

The right to health is one of the most complex and extensive human rights. First of all the right to health must be analyzed with the reference to the definition of “health” given in the preamble of the WHO Constitution:

Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.\textsuperscript{87}

A major contribution that this definition had made is that health was no longer defined simply in physical and/or mental terms, but now included social dimension of health. At the time when WHO definition was developed, i.e. right after the end of the World War II, widening

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{83} Ibid.
\item \textsuperscript{84} Sofia Gruskin and Daniel Tarantola (2005), \textit{Health and Human Rights}, in Gruskin, Michael A.Grodin, George J.Annas, Stephen P.Marks (eds), \textit{Perspectives on Health and Human Rights}, New York: Routledge, p.4
\item \textsuperscript{85} Judith Asher, \textit{The Right to Health: A resource Manual for NGOs}, International Federation of Health and Human Rights Organisations (IFHHRO), London, August 2004
\item \textsuperscript{86} Ibid.
\item \textsuperscript{87} WHO, Preamble to the Constitution of the World Health Organization, as adopted by the International Health Conference, New York, 19-22 June 1946, and entered into force on 7 April 1948.
\end{itemize}
\end{footnotesize}
health to social dimension was conceptually important. Specifically it was a political statement of the member states to have “not only healthy individuals but also healthy societies, which eschewed nationalism, racism, and narrow parochial interests”\(^8\) However critics argue that this WHO definition of health is unrealistic, utopian and idealistic from a public health point of view, particularly most criticism relates to the absoluteness of the word “complete”. Critics argue that it is almost practically impossible to achieve simultaneously complete physical, mental and social well-being, which in addition could last for a long period of time. Hence, most of the people should be regarded as unhealthy most of the time.\(^9\)

Another argument against the WHO definition was brought by Sarrachi, who asserts that a state of complete physical, mental and social well-being corresponds much more to happiness than to health.\(^10\) He claims that it is crucial to distinguish happiness from health since any disturbance to happiness, even minimal, may come to be regarded as a health problem.\(^11\)

Nonetheless the advocates of the WHO definition of health argue that this definition sets an ultimate goal rather than a guide for concrete actions. Specifically Gruskin and Tarantola mention that “the WHO definition projects a vision of the ideal state of health as an eternal and universal goal to strive constantly towards, and has as its main purpose defining directions for the work of the Organization and its member states”\(^12\) (emphasis added). In 1986, the WHO definition of health was amended in the Ottawa Charter for Health Promotion adopted at the International Conference on Health Promotion, which determined that the health is not only a state of being, but also:

“a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities.”\(^13\)


\(^11\) Ibid., 1409 p.

\(^12\) Sofia Gruskin and Daniel Tarantola (2005), *above n. 84, p.13*

\(^13\) WHO, *The 1986 Ottawa Charter for Health Promotion*
WHO’s characterization of health in the Ottawa Charter as “a resource of living” not as “a complete state of well-being” was one of the major inputs of the overall health promotion.94

3.1.2 Health and Human Rights Movement

A number of international treaties and documents use the language of human rights in referring to health issues. Particularly, the first association between health and human rights was introduced in 1946 in the Constitution of WHO:

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic and social condition. 95

Later a link between health and human rights was reaffirmed in a numerous international instruments. It was reiterated, for instance, in the Article 25 of the Universal Declaration of Human Rights (1948), which as a result set a strong foundation for the international legal framework for the right to health:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

The most detailed norm on the right to health was given in the Article 12 of ICESCR which was adopted in 1966 and entered into force in 1976. ICESCR clarified that the right to health is not merely right to be healthy, i.e. does not mean the same state of health for everyone, but rather refers to enabling all people, without discrimination and distinction, with the same opportunities so they can take full advantage of their health. Provisions established by ICESCR are legally binding that apply to all its member states and recognize that some of the essential preconditions for full realization of the right to health are reduction of infant mortality.

95 Preamble of the WHO Constitution
mortality; the prevention, treatment and control of epidemic, endemic, occupational and other
diseases; improvement of environmental and industrial hygiene; as well as creation of
conditions that would assure to all individuals medical services and medical assistance in the
event of sickness.\footnote{ICESCR, Article 12 (2)} ICESCR also confirms that the right to health is not limited just to the
right to have access to health/medical care but embraces a number of socio-economic factors
that may favour health or be harmful to it, such as poverty, discrimination, healthy
environment, access to safe and potable water, proper food, nutrition, and housing, safe and
healthy working conditions, access to information.\footnote{CESCR, General Comment No.14 on the Right to the highest attainable standard of health (ICESCR Art.12), August 2000, para 4.}

The status of health as a human right was also reaffirmed, \textit{inter alia}, in the 1965
International Convention on the Elimination of All Forms of Racial Discrimination (art. 5(e)(iv)); the 1979 Convention on the Elimination of All Forms of Discrimination against
Women (arts. 11 (1)(f), 12 and 14(2)(b)); the 1989 Convention on the Rights of the Child
(Article 24); the 1990 International Convention on the Protection of the Rights of All Migrant
Workers and Members of Their Families (art.28, 43 (e) and 45(c)); the 2006 Convention on
the Rights of Persons with Disabilities (art.25).

Far-reaching commitments related to the right to health had also been made in the
outcome documents of WHO’s various international conferences. In 1978, WHO jointly with
the United Nations Children’s Fund (UNICEF) held the World Conference on Primary Health
Care in Alma-Ata (USSR), which resulted in adoption of the Alma-Ata Declaration and
introducing of “Health for All by the Year 2000” slogan.\footnote{Fran Baum, \textit{Health for All Now! Reviving the spirit of Alma-Ata in the Twenty-first century: An Introduction to
the Alma-Ata Declaration}, Social Medicine, Volume 2, No.1(2007), 34-41} Under this slogan WHO called for
introducing, promotion and maintaining primary health care throughout the world, especially
in developing countries.\footnote{WHO, The 1978 Declaration of Alma Ata on Primary Health Care} It also defined that recognition of the importance of primary health
care was crucial for proper observance of and respect for people’s right to the highest attainable standard of health. Moreover, the authors of the Alma-Ata Declaration acknowledged the need for multi-sectoral approach to primary health care: that health did not depend solely on health care services, but also on a range of other resources (i.e. underlying health determinants) that contribute to a person’s health and well-being. The Declaration contained many other messages, such as the need for a coherent joint actions of all states towards reduction of the wide disparities in health care between poor and rich countries; the importance of people’s participation in planning health care policies; the need for provision of “promotive, preventive, curative and rehabilitative services”; the importance of mobilization of country resources for developing primary health care.  

The next significant WHO’s world conference on the right to health was the First International Conference on Health Promotion held in Ottawa (Canada) in 1986, which led to the Ottawa Charter for Health Promotion (the Ottawa Charter). By the time of this conference the Alma-Ata Declaration was widely criticized for being purely of inspirational and laudable character but not of practical, thus the authors of the Ottawa Charter were chiefly aimed at developing a comprehensible and workable international framework which would be pertinent to the proper promotion of health issues. As a result the Ottawa Charter presented the clear tools and mechanisms for implementation, analysis and assessment of health promotion, and provided a guide for concrete actions. One of the main findings that the Charter had made was that it determined that the responsibility for health promotion was shared throughout the community, i.e. no single person or institution should be solely responsible for promotion of health issues – they all must work collectively towards a health system which would contribute to the pursuit of better health. In general, the Ottawa Charter reaffirmed the conditions and resources required for health such as peace, social justice, equity, stable eco-

100 Ibid.
101 Bob Williams, The Ottawa Charter, 1p.
102 WHO, The 1986 Ottawa Charter for Health Promotion, above n.93
system, sustainable resources; and identified key actions and basic strategies to pursue the WHO initiative “Health for All by the Year 2000”, such as the need for education and development of personal skills, the importance of individual behaviors and capacities in creating opportunities and conditions for better health, prevention of resource depletion, unhealthy living conditions and environments, pollution and occupational hazards and many others.\textsuperscript{103} The Ottawa conference was later followed by WHO’s further global health promotion conferences.

Unfortunately despite the worldwide active recognition of the right to health in the first half of the twentieth century it remained to be ineffective formal notion till the late part of the twentieth century, mainly because, as critics argue, the right to health was formulated too broadly and abstractly.\textsuperscript{104} Particularly, it was unclear “whose responsibility it was to realize this right, how the right would be realized and when the right to health had been satisfied.”\textsuperscript{105} As Paul Hunt, a former Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health (hereinafter “Special Rapporteur on right to health”), mentions in his Report A/HRC/4/28 on the health and human right movement (2007) one of the first most serious discourses on the right to health was initiated by Dr. Jonathan Mann and his colleagues at the Harvard School of Public Health and the François-Xavier Bagnoud Center for Health and Human Rights in the context of HIV/AIDS.

In the 1980s the worldwide spread of HIV/AIDS put at risk the international stability and security. Mann et al. had defined that people who were initially marginalized, stigmatized and discriminated were mainly exposed to the infection with HIV/AIDS which as a result

\textsuperscript{103} Ibid.
\textsuperscript{104} UN Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Report A/HRC/4/28 (Main focus: The health and human rights movement), January 2007, para 7-9
\textsuperscript{105} Sara E. Davies, Global Politics of Health (2010), at p.66
entailed a gross violation of their basic rights, and thus made them more vulnerable. Such finding boosted Dr. Mann and his colleagues to start a research of global health problems in conjunction with the human rights, i.e. by using the language of human rights to draw attention to a problem and advocate for changes in the actions of the governments and other actors. As a result, immediate linking human rights to HIV/AIDS prevention campaign revealed a certain group of basic rights whose violation could significantly hinder the global efforts against the spread of decese such as the right to medical care, the right to information, the right to non-discrimination, the right to equality as well as the right to privacy. Another attempt in enhancing the connection between the human rights and health was made when women’s reproductive rights were under consideration of the international community in the 1990s. Specifically, a discourse on women’s right to reproductive health revealed a necessity to distinguish and elaborate two key aspects of the right to health: access – “the obligation not to deny access to basic health care” - and provision – “the obligation to provide basic health care”, i.e. in a legal terminology referred as negative and positive rights respectively. The discourse resulted in determining that these two notions (i.e. access and provision of the right to health) differ in regulation and determination of the scope of the health-related rights and responsibility of fulfillment of the obligation derived from the right to health, as well as define who shall be accountable for proper realization of those obligations.

Many scholars agree that an essential progress in human-rights based approach to health has been made during the global HIV/AIDS prevention campaign and establishment of women’s reproductive rights. It is indeed beyond any doubts that Mann and his colleagues have made a significant contribution to advance the human rights approach to health issues.

107 Ibid.
108 Sara E. Davies, above n.105, pp. 64-86
109 Ibid., pp. 64-86
However it shall be constituted that linking HIV/AIDS to human rights did not work out as expected- actually it did not reduce the spread of the decease as well as it did not reduced the vulnerability of the affected groups.\textsuperscript{110} The same situation happened with the women’s reproductive rights.\textsuperscript{111} Paul Hunt points out that the failure of human-rights approach to health in the 1990s happened because of the context and legal status of the certain major international instruments that envisaged the right to health;\textsuperscript{112} particularly, ICESCR imposed on its member states an obligation to improve and promote the right to health, but it did not establish remedies for non-compliance of undertaken obligations; it was also unclear to what extent states were obliged to respect, protect and fulfill the right to health.\textsuperscript{113}

Another stoppage of development of rights-based approach to health issues in the 1990s was the failure of numerous WHO global conferences such as Alma-Ata, Ottawa and other health-related conferences to fully achieve their goals.\textsuperscript{114} The health programs and initiatives launched to implement the tasks set by these conferences and their outcome documents required huge investments: initially it was a member states’ obligation to provide proper funding but by the early 1980s most of them were suffering global recession, therefore they were not able to provide proper financial support to WHO’s initiatives and programs aimed at promotion of the right to health throughout the world.\textsuperscript{115}

Only in 2000 an authorititative interpretation of the right to health emerged when Committee on Economic, Social and Cultural Rights (CESCR) adopted General Comment No.14 on the Right to the highest attainable standard of health\textsuperscript{116} (hereinafter “the General Comment No.14”) which expands upon Article 12 of the ICESCR. This document, though not binding, provides a thorough explanation of various dimensions of the right to health, and

\textsuperscript{110} Ibid., at pp.83-86 \\
\textsuperscript{111} Ibid, at pp.83-86 \\
\textsuperscript{112} Report of the UN Special Rapporteur on the right to health, above n.104 \\
\textsuperscript{113} Sara E. Davies, above n.105, pp.64-86 \\
\textsuperscript{114} Ibid., pp.33-45 \\
\textsuperscript{115} Ibid., pp.33-45 \\
\textsuperscript{116} Report of the UN Special Rapporteur on the right to health, above n.104, para 8
thus serves as a guideline for effective provision and promoting of the right to health. In particular, the General Comment No.14 provides the most detailed explanation to date of state obligations in the context of the right to health, as well as internationally recognized and accepted principles, standards and norms applied to the right to health. Among other essential points, the General Comment No.14 emphasizes that the right to health, as a broad concept, encompasses both freedoms and entitlements.\textsuperscript{117} Specifically, it reiterates that the right to health is not a right to be healthy, but is an entitlement to facilities, goods, services and conditions that are crucial for attainment of highest standard of health; for instance, it is an entitlement to health care, underlying determinants of health (adequate sanitation and nutrition, safe water, etc.), and equality of opportunities for everyone. In addition to entitlement the right to health includes certain freedoms that enable all individuals to make decisions about their own health, such as sexual and reproductive freedom, freedom from discrimination, freedom from nonconsensual medical treatment, freedom from inhuman and degrading treatment. The General Comment No.14 establishes that these entitlements and freedoms are universal, thus must be enjoyed by everyone everywhere.\textsuperscript{118} The General Comment No.14 presents comprehensive interpretations and clarifications on many other important elements of the right to health which will be discussed in appropriate parts of this paper.

Accordingly after the adoption of the General Comment No.14 the development of the health and human rights movement has quickened.\textsuperscript{119} In 2002, a position of the UN Special Rapporteur on the right to health was introduced by the Commission on Human Rights, later replaced by the Human Rights Council (HRC) in 2006. The Special Rapporteur is an independent expert, whose main task is to make the right to health enshrined in many international treaties and declarations, including the General Comment No.14, more specific,

\textsuperscript{117} Judith Asher, above n.85, pp.18-19
\textsuperscript{118} Ibid.
\textsuperscript{119} Report of the UN Special Rapporteur on the right to health, above n.104
practical, operational and accessible. The scope of the mandate of the Special Rapporteur includes such activities as to examine and monitor the situation of the right to health worldwide; to gather, request, and exchange information from all relevant sources on the realization of the right to health; to make recommendations on appropriate measures to promote and protect the realization of this right; to report on the status, throughout the world, of the realization of the right to health; to submit an annual report to the HRC and an interim report to the General Assembly on its activities, findings, conclusions and recommendations.\textsuperscript{120} Since its establishment the Special Rapporteur has made significant contribution to the progress in the health and human rights movement.

Another crucial moment in analyzing the development of rights-based approach to health is that the world has fundamentally changed since the right to health was first recognized by the international community – live is changing and so does our needs and understandings of human rights. Thus, bringing the shape and content of human rights, including the right to health, in line with the modern tendencies and demands is of great importance. Fortunately, this mission has been successfully implemented through various global conferences and active discussions on various human rights and health issues. In 2005, for instances, WHO held a global health promotion conference in Bangkok (Thailand) which led to the adoption of the Bangkok Charter for Health Promotion in a Globalized World (the Bangkok Charter). The authors of the Bangkok Charter confirmed that since the adoption of the Ottawa Charter the situation in the world and in health promotion has significantly changed, thus their main aim was addressing many global changes that are seriously affecting health and well-being of all people. One of the main advances made by the Bangkok Charter was that all actors, i.e. not only states but also public, private, NGOs and civil society, have a

\textsuperscript{120} More detailed information on the activity and mission of the UN Special Rapporteur on the right to health is available at the official site of the Office of the United Nations High Commissioner for Human Rights (OHCHR): http://www.ohchr.org/EN/Issues/Health/Pages/SRRightHealthIndex.aspx
commitment to make the promotion of health a requirement for good corporate practice. In particular, it identified that “ethical and responsible business practices and fair trade exemplify the type of business practice that should be supported by consumers and civil society, and by government incentives and regulations” (emphasis added).

Unfortunately, space constrains does not allow more thorough elaboration on human rights and health movement. In short, therefore, we can firmly conclude that the journey of health and human rights has achieved significant results: to date international community is more than ever concerned with the development of the right to health. Particularly, the right to health is enshrined in many national constitutions as a basic human right; half of the UN Millennium Development Goals are dedicated to the health rights; many civil society organizations, scholars, academics and others are actively contributing to the enhancement of the linkage between human rights and health, e.g. nowadays rights-based approach to health is being widely discussed with regard to the biomedical ethics and health policies; and civil society has become more active in protection of health rights - this can be demonstrated by the fact that the number of NGOs which exclusively specialize in health-related rights is increasing every year.

3.1.3 State Parties’ Obligations

a) Progressive realization and core minimum obligations

According to ICESCR Article 2.1. each state is required to take steps “to the maximum of its available resources” in order “to achieve progressively the full realization” of the right to health. This entails that the right to health is subject to progressive realization and resource constrains. An idea behind the principle of progressive realization is that there is a huge difference between countries in their level of overall development, health, economic, political

121 WHO, The 2005 Bangkok Charter for Health Promotion in a Globalized World
122 Ibid.
123 For more information please see http://www.un.org/millenniumgoals/ or http://www.endpoverty2015.org/
and social conditions, i.e. not every state has resources and opportunities required for full realization of the right to health therefore states are provided with flexibility in implementation of appropriate obligations.\textsuperscript{124} In other words, the General Comment No.14 establishes a wide range of state obligations: some of these obligations are subject to immediate implementation while others can be realized gradually/progressively, depending on each country’s available resources. But progressive realization does not mean that states may refrain from or delay their obligation indefinitely because of a lack of resources,\textsuperscript{125} rather it means that they have “a specific and continuing obligation to move as expeditiously and effectively as possible towards the full realization”\textsuperscript{126} of the right to health. By the way, the concept “the highest attainable standard of health” was introduced with the view that there exist various disparities among countries in their state of development, e.g. some countries may need significant amount of resources and time to achieve already existing level of other countries, thus this concept was used to make the implementation of obligations realistic and practical for all countries.\textsuperscript{127}

As it was already mentioned, certain state obligations are universal and immediate for every country, regardless of its level of development and resources available. Such obligations are known as minimum core obligations, and their main purpose is to ensure that even a country with poor resources, at the very least, provides to its people a minimum essential level of the right to health. Particularly, in order to comply with the right to health states must take actions immediately, for instance, to ensure access to primary health care on equal and non-discriminatory basis for all individuals; to ensure availability and protection of underlying determinants of health (e.g. access to safe and potable water, adequate nutrition and sanitation); to refrain from retrogressive measures; refrain from undertaking any actions

\textsuperscript{124} Judith Asher, above n.85, pp.22-39
\textsuperscript{125} OHCHR/WHO, \textit{The Right to Health, Factsheet No.31}, Geneva 2007
\textsuperscript{126} CESCR, \textit{General Comment No.14}, above n.97, para 31
\textsuperscript{127} Judith Asher, above n.85
that may, directly or indirectly, infringe upon enjoyment of the right to health; ensure adequate participation of the local community in decision-making process; to take concrete steps towards realization of obligations which are subject to progressive realization (e.g. to adopt or revise appropriate laws, public health strategies or plans of action).  

b) **Obligation to respect, protect and fulfil**

States have concrete three categories or types of obligations pertaining to the right to health: to respect, to protect and to fulfil. The obligation to respect the right to health requires that states refrain from undertaking actions that may infringe, directly or indirectly, upon enjoyment of the right to health. However people’s right to health can be temporarily limited by the state in exceptional occasions, e.g. in order to secure public health from spread of dangerous infection one may undergo coercive medical treatment. Another essential point with regard to the obligation to respect, which is directly relevant to the topic of the present paper, is that states must refrain from “unlawfully polluting air, water and soil, e.g. through industrial waste from state-owned facilities.”

The obligation to protect the right to health requires that states undertake all necessary measures (e.g. legislative) to prevent the violation of people’s right to health by third parties. For instance, though states “are not responsible for the acts or omissions of non-governmental enterprises such as the private sector …, they are responsible for taking measures aimed at ensuring that such bodies refrain from violating the rights of individuals and communities.”

The obligation to fulfil the right to health requires that states ensure the full realization of the right to health through adoption of appropriate legislative, judicial, budgetary, administrative, promotional and other relevant measures. The obligation to fulfil include obligation to facilitate, provide and promote. Under obligation to facilitate states must

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128 CESCR, *General Comment No.14*, above n.97, Part II
129 Ibid., para 34
130 Judith Asher, above n.85
131 CESCR, *General Comment No.14*, above n.97, para 33
undertake measures that enable and assist individuals to enjoy their right to health; obligation to provide requires states to intervene when individuals are unable, for reasons beyond their control, to exercise their right themselves through the means at their disposal; and obligation to promote requires states to actions that create, maintain and restore the health of the population, mainly through providing adequate information and education.\textsuperscript{132}

3.1.4 Other Actors’ Obligations

As defined earlier, under the obligation to protect states shall prevent any violation of the right to health by non-state actors. In this regard the General Comment No.14 envisages:

\begin{quote}
While only States are parties to the Covenant and thus ultimately accountable for compliance with it, all members of society — individuals, including health professionals, families, local communities, intergovernmental and non-governmental organizations, civil society organizations, as well as the private business sector — have responsibilities regarding the realization of the right to health. States parties should therefore provide an environment which facilitates the discharge of these responsibilities.\textsuperscript{133} (emphasis added)
\end{quote}

Accordingly the General Comment No.14 determines that the full realization of the right to health depends on all members of society, not solely on state. In this regard states are obliged to ensure that non-state actors respect basic human rights, including the right to health, for instance through adoption of appropriate laws and regulations.

Among all non-state actors, a special concern shall be given to private business sector. To date private businesses are affecting almost every sector of social life, including human rights domain. Thus one of the today’s agendas within a human rights framework is how to define a nature and scope of the private businesses’ responsibility for human rights abuses.\textsuperscript{134}

At present international human rights documents imposes only \textit{indirect} responsibilities on private businesses, i.e. responsibilities stipulated under domestic law in accordance with

\textsuperscript{132} Ibid., para 37
\textsuperscript{133} Ibid., para 42
\textsuperscript{134} OHCHR/WHO, \textit{Factsheet No.31}, above n. 125, p.30
states’ obligation to ensure the enjoyment of rights and prevent abuses by non-state actors.\footnote{135} In other words existing international human rights mechanisms are not legally binding for private businesses; therefore they do not have direct legal effect on them.

The other non-state actors whose role in protection and promotion of the right to health are also emphasized in the General Comment No.14 are international organizations, such as UN bodies and agencies, WHO, International Labour Organization, United Nations Development Programme, International Monetary Fund, UNICEF and other relevant bodies.\footnote{136} These organizations have an obligation to facilitate implementation of the right to health throughout the world.

\textbf{3.1.5 Availability, Accessibility, Acceptability and Quality (the AAAQ criteria)}

The General Comment No.14 stipulates a positive obligation of states to ensure access to health care with consideration of the following four essential elements/criteria: accessibility, availability, quality and acceptability. In short, under \textit{availability} requirement it is implied that health facilities, goods and services must be available in sufficient quantity; \textit{acceptability} – all health facilities, goods and services must be respectful of medical ethics and culturally relevant (e.g. sensitive to gender and life-cycle requirements, respect confidentiality, improve the health status of those concerned, etc.); \textit{quality} - health facilities, goods and services must be scientifically and medically appropriate and of good quality (e.g. skilled medical personnel, adequate sanitation, unexpired drugs, etc).\footnote{137} And last but not least important, \textit{accessibility} requirement - consists of four overlapping dimensions - implies that health facilities, goods and services have to be accessible to everyone without discrimination.

Specifically, following are dimensions of the accessibility: (i) non-discrimination – “health
facilities, goods and services must be accessible to all, especially the most vulnerable or marginalized sections of the population without discrimination”\textsuperscript{138}; (ii) physical accessibility – “health facilities, goods and services must be within safe physical reach for all sections of the population, especially vulnerable or marginalized groups”;\textsuperscript{139} (iii) economic accessibility - health facilities, goods and services must be affordable for all; and finally (iv) information accessibility - right to seek, receive and impart information and ideas concerning health issues.\textsuperscript{140}

\textbf{3.2 The Right to Health and Its Relation to Other Human Rights}

The right to health is closely related to and dependent on, as well as contributes to, the realization of other human rights.\textsuperscript{141} In other words, not only medical services, goods or facilities may influence the realization of the right to health, but also many other factors, so called “underlying health determinants”, that derive from the realization of other human rights, such as freedom from discrimination, equality, privacy, access to information and participation in decision-making process, the right to safe environment, to food and potable water, to adequate sanitation and housing, and the right to occupational safety and health. Although space constrains do not allow an examination of relation of each of these rights to the right to health, the present paper will focus on the rights that are mostly affected by mining activities and their relation to the right to health: the right to occupational health, to safe environment, to potable water, to participation and to access to information. However a large amount of comprehensive information on the impacts of poverty, discrimination, trade

\textsuperscript{138} Ibid., para 12
\textsuperscript{139} Ibid.
\textsuperscript{140} Ibid
\textsuperscript{141} OHCHR/WHO, \textit{Factsheet No.31}, above n.125, p.6
and reproductive rights on the right to health can be found in various reports of the Special Rapporteur on the right to health\textsuperscript{142} and WHO publications.\textsuperscript{143}

3.2.1 Health, environment and gold mining

The right to health gives rise to obligation of states to ensure “prevention and reduction of the population's exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health.”\textsuperscript{144} Moreover, health, in its turn, is one of the major concerns of the international environmental treaties and documents; actually most of them recognize an importance of reduction of detrimental environmental factors that may have severe impact on the right to health. In this regard a certain consideration is given to an effect of extractive industry and toxic wastes on environment and health. In particular, preamble of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal defines that there is “a growing threat to human health and the environment posed by the increased generation and complexity, and transboundary movement of hazardous wastes and other wastes.”\textsuperscript{145} Therefore the Basel Convention calls upon state parties to take necessary steps to:

Ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects which may result from such movement.\textsuperscript{146}

The Vienna Declaration and Programme of Action recognizes “that illicit dumping of toxic and dangerous substances and waste potentially constitutes a serious threat to the human

\textsuperscript{142} Available at \url{http://www.ohchr.org/EN/Issues/Health/Pages/IssuesFocus.aspx}
\textsuperscript{143} Available at \url{http://www.who.int/hhr/activities/publications/en/} and \url{http://www.who.int/hhr/information/guidelines_publications/en/index.html}
\textsuperscript{144} CESCR, \textit{General Comment No.14}, above n.97, para15
\textsuperscript{145} UN Environment Programme, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, as adopted in 1989 in Basel (Switzerland) and entered into force in 1992
\textsuperscript{146} Ibid., para 2 (d)
rights to life and health of everyone,”¹⁴⁷ and calls for prevention of illicit dumping of such wastes. The Bali Declaration on Waste Management for Human Health and Livelihood also reaffirms the need for protection of human health and the environment against the adverse effects of hazardous wastes.¹⁴⁸

As it is identified in above mentioned and other international human rights instruments, a toxic nature of mining operations puts people’s health and well-being at a great risk. Depending on the mineral being mined (metals, industrial, construction or fuel minerals) and its physical location in the land, there exist significant differences in the mining techniques and their environmental and social impacts, for example, although extraction of construction minerals (e.g. sand, clay, stone, gravel) involve the most massive destruction of landscape, they are not as toxic or hazardous as metal mining (e.g. gold, silver, mercury, nickel).¹⁴⁹ Metal mining is considered to be one of the world’s leading industries that produces toxic emissions; in particular, metal processing and smelting are defined by Blacksmith Institute and Green Cross Switzerland as one of the world’s worst pollution problems.¹⁵⁰

Health risks associated with the release of toxic substances from metal mining depend on many factors such as toxicity of the pollutant, its fate in the receiving environment, the amount (i.e. the higher concentration the higher toxicity) and duration of exposure to the pollutant after its release.¹⁵¹ Metal mining causes pollution by way of releasing hazardous heavy metals, which are poisonous at even low concentration, into environment in several forms: solutions, colloids, suspended particles, gases, aerosols, dusts, and tailings.¹⁵²

¹⁴⁷ UN Doc., Vienna Declaration and Programme of Action, as adopted by the World Conference on Human Rights in 1993 in Vienna (Austria), para 11
¹⁴⁸ The Bali Declaration on Waste Management for Human Health and Livelihood, 2008, Bali (Indonesia)
¹⁴⁹ Gavin Bridge, above n.2, p.6
¹⁵⁰ Blacksmith Institute and Green Cross Switzerland, above n.4, 2008
¹⁵¹ Gavin Bridge, above n.2, p.27
pollutants can be released through intentional use of toxic chemicals/reagents during processing in order to separate precious metal from crushed ore, or oxidation of naturally occurring minerals in the ore as a result of exposure to air and water\textsuperscript{153} which mainly leads to formation of acid mine drainage.\textsuperscript{154} In case of gold mining, usually cyanide\textsuperscript{155} is intentionally added to the ore for extraction of gold.\textsuperscript{156}

The main threat to human health from gold mining comes from exposure to such heavy metals as lead, arsenic, mercury and cadmium.\textsuperscript{157} The dangerous characteristics of these pollutants are that they can travel long distances and pollute soil and water, and their toxicity lasts for centuries, i.e. they do not disappear but rather actively move around the environment.\textsuperscript{158} People become exposed to these pollutants through inhalation and ingestion. In generals, exposure to heavy metals may mostly result in developmental retardation, nervous system damage, various cancers, kidney and lung damage, birth defects, and even premature death in some instances of exposure to very high concentrations.\textsuperscript{159}

Dust from mining operations also poses a great threat to the environment and people’s health – it can contaminate the surrounding environment with any of the toxic chemicals found at the mine site; it can also be easily transported to local communities and expose them to the risk of developing cancer or other respiratory problems such as silicosis by inhaling

\textsuperscript{153} Gavin Bridge, above n.2
\textsuperscript{154} To date the acid mine drainage is considered to be the most serious environmental problem of the mining industry and its largest environmental liability. For a detailed information about acid mine drainage see, e.g., the Report of the BC Wild & Environmental Mining Council of British Columbia (Canada): \textit{Acid Mine Drainage: Mining and Water Pollution Issues in BC}, available at http://www.miningwatch.ca/sites/www.miningwatch.ca/files/amd_0.pdf
\textsuperscript{155} Cyanide is a chemical which is deadly when swallowed - the size of a grain of rice is enough to kill a person (See, e.g., Jeff Conant & Pam Fadem, \textit{A Community Guide to Environmental Health}, Hesperian Foundation, May 2008, California (USA), p.485 )
\textsuperscript{156} Earthworks and Oxfam America (2004), \textit{Dirty Metals: Mining, Communities and the Environment}
\textsuperscript{158} Indian and Northern Affairs Canada, Northwest Territories Contaminants Factsheets: \textit{Heavy Metals}
\textsuperscript{159} World Resource Institute, \textit{Heavy Metals and Health}, available at http://www.wri.org/publication/content/8375
silica dust (a component of crushed rock). Just to mention, silicosis, which cannot be cured, can develop within seven months of exposure to the dust, and can lead to complete loss of lung function.

Metal mining also produces large amount of waste products known as mine waste rocks, which may cause hazardous impact on environment through generating acid mine drainage. In particular, for production of two gold wedding rings six tons of waste must be excavated and removed. It is estimated that in gold mining there is only 0.00001 percent of the ore is in fact refined into gold – anything else is waste.

On the basis of aforesaid it is obvious that gold mining has a deleterious effect on the enjoyment of the right to health, as well as the right to safe environment. Thus, for every state affected with extractive activity the prevention and reduction of its adverse effect must be an overarching objective.

3.2.2 Health, water contamination and gold mining

Water is a very important natural resource for people’s survival. Nowadays access to safe water is defined as a precondition for the fulfillment of fundamental human rights and indispensable for leading a dignified life. Access to potable water is also a one of the major components of realization of the right to health and the right to life. In particular safe and potable water prevents death from dehydration, reduces the risk of water-related diseases; thus

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160 Alaska Community Action on Toxics (ACAT) and Resisting Environmental Destruction on Indigenous Lands REDOIL, *Mining and Community Health*
161 Earthworks and Oxfam America (2004), above n.156, p.26
162 Waste rock is the rock material removed to access and mine the valuable ore, and deemed to be non-valuable for further processing (Blacksmith Institute and Green Cross Switzerland, *The World’s Worst Pollution Problems: the Top Ten of the Toxic Twenty*, 2008)
164 Earthworks and Oxfam America (2004), above n.156, p.4
165 CESCR, *General Comment No.15 on the Right to Water (ICESCR Arts. 11 and 12)*, November 2002, Geneva, para 1
166 CESCR, *General Comment No.14*, above n.97
it must be sufficient, physically accessible and affordable for consumption, cooking, sanitation and other personal and domestic uses.\(^{167}\)

According to the assertion of the Blacksmith Institute and Green Cross Switzerland fresh drinking water makes up only 6% of the total water on Earth, including the icecaps and glaciers; a major source of fresh potable water is groundwater which amounts for 97% of the world’s accessible freshwater reserves.\(^{168}\) Blacksmith Institute and Green Cross Switzerland in their report have estimated that every person needs approximately 20 liters of fresh water per day for basic survival needs like drinking and cooking. Unfortunately, various human activities can easily pollute this 6% of fresh water upon which 100% of world population rely and depend, and make it dangerous to their health.

Mining is one of the leading industries that cause contamination of fresh drinking water. Mining operations, including gold extraction, require immense quantities of potable water at almost every stage, e.g. for drilling, processing, grinding ores, mineral separation, dust control/separation, and washing equipments.\(^{169}\) What is crucial in water consumption volumes in the mining industry is that only fresh water is needed because salt water may corrode equipments, and thus affect the mineral processing.\(^{170}\) Mining activities may affect not only a quality, but also a quantity of the fresh water.\(^{171}\) Quality and quantity of fresh water are interdependent in the sense that “a contamination of water can make the effect of water scarcity worse, and likewise, water scarcity can make contamination more serious.”\(^{172}\) Basic four ways of contaminating water by mining operations, esp. gold mining, are as follows: formation of acid mine drainage, causing heavy metal contamination and leaching, erosion

\(^{167}\) CESCR, General Comment No.15, above n.165, para 2
\(^{168}\) Blacksmith Institute and Green Cross Switzerland, above n.4
\(^{169}\) Deanna Kemp, Carol J. Bond, Daniel M. Franks, Claire Cote, Mining, Water and Human Rights: Making the Connection, Journal of Cleaner Production, June 2010
\(^{170}\) Earthworks and Oxfam America (2004), above n.156, p.12
\(^{172}\) Jeff Conant & Pam Fadem, A Community Guide to Environmental Health, Hesperian Foundation, May 2008, California (USA), p.45
and sedimentation, and processing chemicals pollution. Gold mining may also pollute water through improperly disposing mine wastes, for instance by illegal dumping toxic mine wastes into the river, this practice is called “a riverine tailings disposal”. Such illegal actions may have dangerous and irreversible effects on environment and health of the people who live downstream from the mine site.

The toxic chemicals contained in the contaminated water can enter the human body directly through drinking or eating foods prepared with contaminated water or grown in the fields using contaminated water. It may also affect people when they are in direct contact with polluted waters. The health effect of the contaminated water may vary depending on the type of the toxic chemicals, duration of consuming, methods of ingestion. The health problems caused by water contamination may differ from a slight illness such as stomach irritation to grave illness as cancer, reproductive abnormalities, skin rash, and many other diseases.

Unfortunately, water pollution from mining activities may need to be controlled and managed for decades, if not centuries.

Although ICESCR makes no explicit reference to the right to safe water, a range of international human rights documents, as well as regional and national legal systems, recognize it as a self-standing human right which is closely related to the right to health. Therefore states have a direct obligation to protect, as well as refrain from, polluting water.

3.2.3 Mining, occupational safety and health

Work is an essential part of our life – it is a necessary precondition for realizing our

173 BC Wild & Environmental Mining Council of British Columbia (Canada), Acid Mine Drainage: Mining and Water Pollution Issues in BC
175 Ibid., pp.73-78
176 Blacksmith Institute and Green Cross Switzerland, above n.4
177 Safe Drinking Water Foundation, Mining and Water Pollution, available at http://www.safewater.org/PDFS/resourcesknowthefacts/Mining+and+Water+Pollution.pdf
basic rights, including the right to health. Moreover, it is a resource for good/decent quality of
live for many people in the world. Thus many international human rights documents
recognize the right to work as a fundamental human right. In particular, ICESCR, as well as
the General Comment No.18 on the right to work (ICESCR Art.6), contains comprehensive
provisions on this right. Article 6 of ICESCR defines the right to work in general manner,
while article 7 provides concrete dimensions of the right to work, such as just and favourable
working conditions, fair wage, rest and leisure time, gender equality, and occupational health
and safety. As for the latter, article 7 stipulates that healthy and safe working conditions are
not bonus or additional benefit, but it is our fundamental right to work under safe and healthy
conditions. In this regard numerous ILO conventions and documents address the importance
of ensuring occupational health and safety. Specifically, the 1981 ILO Occupational Safety
and Health Convention (No.155) presents concrete proposals with respect to promotion of
safe and health working environment, i.e. a list of concrete measures that states must
undertake in order to improve occupational safety and health. The 2008 Seoul Declaration on
Safety and Health at Work (ILO/ISSA) proclaims the need for preventive measures to ensure
the safety and health of all at work.\footnote{ILO/ISSA, Preamble of the 2008 Seoul Declaration on Safety and Health at Work}

ILO has also enacted health and safety regulations that apply to the mining industry.
Mining in general is one of the world’s most dangerous occupations,\footnote{Mine Safety and Health Administration of the United States Department of Labor, \textit{Injury Trends in Mining}} and consistently has
some of the highest fatality rates among all industries because of toxic emissions, tunnel
collapses, rock falls, fires, heat exhaustion and other dangers.\footnote{Earthworks and Oxfam America (2004), above n.156, p.24} According to the
International Labor Organization deaths within the mining industry as a whole accounts for
5% of all worker deaths on the job, although the industry employs just under 1% of all
workers worldwide.\footnote{Ibid., p.24} It is also argued that the life expectancy for mine workers is lower than
that of the general population.\textsuperscript{182} Mine workers are the part of the population which is most directly exposed to mining toxic chemicals. These chemicals can enter into a miner’s body through inhalation; absorption through the skin, eyes, or mucous membranes; ingestion; or ears.\textsuperscript{183} Specifically, Douglas F. Scott and R. Larry Grayson have identified that mining damages workers’ health in following ways:

"Dust, chemical spills, harmful fumes, heavy metals and radiation can poison workers and cause lifelong health problems. Heavy lifting and working with the body in awkward positions can lead to injuries to the arms, legs, and back. Use of jackhammers or other vibrating machinery can cause damage to nerves and blood circulation, and lead to loss of feeling, very dangerous infections such as gangrene, and even death. Loud, constant noise from machines can cause hearing problems, including deafness. Long hours working underground with little light can harm vision. Working in very hot conditions without drinking enough water can cause heat stress. Signs of heat stress include: dizziness, weakness, rapid heartbeat, extreme thirst, and fainting."

The 1995 ILO Safety and Health in Mines Convention obliges employers, i.e. “any physical or legal person who employs one or more workers in a mine”,\textsuperscript{185} to take preventive and protective measures to eliminate or minimize the risks to safety and health in mines, e.g. risks resulted from exposure to toxic chemicals. The 1977 ILO Convention on the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration obliges state parties to adopt national laws and regulations that require “prevention and control of, and protection against, occupational hazards in the working environment due to air pollution, noise and vibration,”\textsuperscript{186} e.g. to establish strict criteria for determining the hazards of exposure, as well as limits of exposure, to air pollution, noise and vibration at the workplace.

\textbf{3.2.4 Mining, access to information and public participation in health-related matters}

\textsuperscript{182} Ibid., pp.24-26
\textsuperscript{183} Douglas F. Scott & R. Larry Grayson, Selected Health Issues in Mining
\textsuperscript{184} Jeff Conant & Pam Fadem, above n.172, p.472
\textsuperscript{185} ILO, Convention on Safety and Health in Mines (No.176), as adopted in 1995 and entered into force in 1998, Geneva, Art. 1
\textsuperscript{186} ILO, Convention on the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration, as adopted in 1977 and entered into force in 1979, Geneva, Art.4
Full realization of the right to health is also dependent on human rights to access to information and to participation in decision-making process.\footnote{187} Article 19 of UDHR states that everyone has a right to seek, receive and impart information of all kind through any source of media and regardless of frontiers. The International Covenant on Civil and Political Rights (ICCPR) article 19 reaffirms the right of every individual to information, while article 25 stipulates a right of everyone to participate in the conduct of public affairs, directly or through representatives.

Mining may cause catastrophic consequences for environment and human health. Therefore states’ primary duty is to inform population about potential dangers of mining operations to individuals and local communities. Lack of information may have irreversible outcomes: first of all it would deprive people of opportunity to undertake disaster risk reduction and pre-disaster preparedness measures, i.e. opportunity to build and strengthen their capacity to resist and respond to, as well as to recover from, hazards of mining activities. Unfortunately, there is a tendency that states and mining companies are usually reluctant to reveal vital information about potential dangers of mining activities until accident has occurred; but even after the incident “such information is either withheld, falsified, provided after a delayed amount of time or given piecemeal in order to confuse or be deemed unusable.”\footnote{188} Accordingly, lack of adequate information prevents people from developing their potential to the fullest and exercise the full range of their human rights.

The right to access to information and the right to public participation are indivisible human rights, i.e. participation can only be effective and meaningful if individuals, communities and other actors are provided with relevant information. However, it is important to mention that information must be provided on time and in an accessible format

\footnote{187} CESCR, General Comment No.14, above n.97, para 11 and 12 (b)

\footnote{188} UN Special Rapporteur on the adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Report A/HRC/7/21, February 18, 2008, para 31
and language, considering such factors as ethnic, gender, age, cultural and religious background of the affected individual or community.\textsuperscript{189} Public participation in decision-making processes, including on health-related issues, significantly contributes to developing of policies and programs that are responsive to the needs and rights of the people who are intended to benefit from these policies and programs. Hence, in order to exercise the right to health individuals and communities affected by mining activities must have access to information and be entitled to participate in, and contribute to, discussions on every health-related issue of mining sector.

CHAPTER IV. REGULATION OF HEALTH-RELATED ISSUES OF THE KYRGYZ GOLD MINING SECTOR AT DOMESTIC LEVEL

Chapter IV explores both the extent to which Kyrgyz mining legislation ensures the full realization of the right to health and the extent to which the right to health is linked to other human rights that are mostly affected by mining activities under the Kyrgyz legislation. The analysis of the Kyrgyz laws that regulate relations in the field of protection of the right to health from adverse impacts of mining activities reveals that they, as a whole, correspond to international human rights norms related to the right to health.

4.1. The right to health under the Kyrgyz legislation

The Kyrgyz Constitution, as many other national constitutions, enumerates various civil, political, cultural, economic, and social human rights that comply with the international standards. The Constitution declares Kyrgyzstan’s commitment to universal respect for, and observance of, basic human rights and liberties; it guarantees that human rights and liberties are inalienable and of supreme value. Accordingly the right to health is also enshrined in the Kyrgyz Constitution. Article 47 of the Constitution stipulates that:

1. Everyone shall have the right to health.
2. The State shall create conditions for medical servicing of everyone and shall take measures to develop public, municipal and private healthcare sectors.
3. Free medical service as well as medical service on preferential terms shall be ensured within the volume of state guarantees envisaged in the law.
4. Withholding of facts and circumstances endangering life and health of people by officials shall be subject to liability established by the law.190

The right to health is also stipulated in the Law on Protection of Citizens’ Health (2005) which states that citizens of the Kyrgyz Republic, as well as foreign citizens, have an inalienable right to health protection. It also determines that the full realization of the right to health can only be achieved if various underlying determinants of health are ensured, such as

190 The Constitution of the Kyrgyz Republic, above n.19, Article 47
non-discrimination and equality with respect to health care services, goods and facilities; safe environment, water and food; healthy and safe working conditions; as well as access to information, participation and adequate education.\textsuperscript{191} The Law also defines health protection as a combination of political, economic, legal, social, cultural, scientific, environmental, medical, sanitary-hygienic and antiepidemic measures aimed at preservation and improvement of physical and mental health of each person, and providing him a medical treatment in the event of ill-health.

The right to health is also recognized in many other laws, e.g. various Kyrgyz laws ensure and protect the right to health of specific groups of the population. For instance, the Law on HIV/AIDS envisages the right of the people with HIV/AIDS to adequate treatment and access to safe syringes, needles, and condoms as one of the protective measures. The Law on Reproductive Rights of Citizens and Guarantees for Their Realization stipulates the right of a woman to reproductive health; the Children’s Code recognizes a state’s obligation to ensure and protect children’s right to health; the Law on the Rights and Guarantees of the People with Disabilities envisages equal opportunities to health care services, goods and facilities; the Law on Diabetes provides the right to prevention and treatment of severe complication of the disease, etc.

Additionally, an essential progress in promotion of the right to health throughout the country has been achieved through national health programmes. Since independence three main national health programmes have been developed and realized: “Manas” national health program (1996-2005), “Manas taalimi” national health reform program (2006-2011), and “Den sooluk” national health reform program (2012-2016). These national health programmes are the logical continuation of each other. For instance the priority health areas of the last two programmes are determined based on Millennium Development Goals, which

\textsuperscript{191} Law of the Kyrgyz Republic on Protection of the Kyrgyz Citizens’ Health, arts. 4 and 61
are maternal and child health, preventing HIV/AIDS spread, tuberculosis control, and prevention of cardio-vascular diseases and its complications.

The Kyrgyz health system consists of state, municipal and private sectors of health services. Financing of health system is maintained through state budget, private payments and contribution of international organizations. A major contribution comes from state budget and private sources (e.g. out-of-pocket spendings) - according to the data available for 2010 a state expenditure on health as a percentage of total expenditure on health accounted for 56.2 per cents, while private expenditure on health accounted for 43.8 per cents.\(^{192}\)

### 4.2 Health, environment and gold mining under the Kyrgyz legislation

As earlier mentioned there is a plenty of hazardous mining dumps and tailing dams which pose a great threat to the environment and human health all across the country. In order to prevent a recurrence of the experience of Mailuu Suu, a small Kyrgyz city which was included among the top ten polluted places of the world by the Blacksmith Institute in 2006,\(^{193}\) a protection of environment and health shall be country’s major concern. During Soviet times Mailuu Suu was one of the main places of uranium production; at present it is a highly contaminated place where a considerable amount of radioactive tailing dams and waste rock dumps are located. The experts of the Blacksmith Institute had determined that the population of all Central Asian countries is potentially at risk because of the location of radioactive tailing dams and dumps in a seismically active zone. In particular, in its report the Institute referred to the incident reported by Obschestvenny Reiting newspaper when 300,000 cubic meters of radioactive waste fell into Mailuu-Suu River after an earthquake in 2005. It was estimated that next failure of tailing dam may cause a contamination of the drinking

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\(^{192}\) WHO, Global Health Observatory Data Repository, available at [http://apps.who.int/ghodata/?vid=11800&theme=country](http://apps.who.int/ghodata/?vid=11800&theme=country)

water supply of the entire Ferghana valley. As for the specific impacts of the radioactive mining wastes on human health a study of the Institute of Oncology and Radioecology (1999) revealed that a cancer rate in Mailuu Suu was double that of the rest of the country. In its research the Institute of Oncology and Radioecology stated that:

Uranium is a known carcinogen and mutagen, that can additionally damage the kidneys, liver, and cardiac tissue. Decay of uranium produces radon gas, which has been found in elevated concentrations at these sites: radon is also carcinogenic, believed to be the most significant cause of lung cancer other than smoking.

At present gold mining, among other types of mineral extraction, holds a privileged position in the economic development of Kyrgyzstan. As noted before, Kyrgyzstan has not yet exploited its gold potential to the full, i.e. among all 65 prospective gold deposits only Kumtor gold deposit is actively working. It is obvious that the Kyrgyz government wants to bring into production all these deposits; however it is important not to neglect environmental and health issues in pursuit of this goal. In this regard the effect of extensive gold extraction on surrounding environment and human health can be minimized if Kyrgyzstan has a strong legal foundation that promotes and protects people’s right to safe environment and health.

Specifically, to date the right to safe environment is enshrined in numerous Kyrgyz laws. Moreover, these laws reaffirm an interdependence of the right to health and the right to safe environment. Particularly art.48 of the Kyrgyz Constitution determines that:

1. Everyone shall have the right to environment favorable for life and health.
2. Everyone shall have the right to compensation of damage to health or property resulting from actions in the area of nature management.
3. Everyone should care for the environment, flora and fauna (emphasis add)

The Law on Environmental Protection (1999) states that every citizen has a right to environment favourable for the life and health, as well as to compensation for adverse effects of environmental damages to health and property caused by economic or other activities. It

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194 Ibid.
196 The Constitution of the Kyrgyz Republic, above n.19, art.55
197 Law of the Kyrgyz Republic on Environmental Protection (1999), art.3
also distinguishes basic principles of environmental protection of Kyrgyzstan: the observance of, and respect for, the human right to a safe environment; the protection, restoration, preservation and rational use of natural resources; a science-based combination of ecological, economic and social interests of the population; the compulsory nature of environmental impact assessment of economic or other activities; the compulsory nature of the state environmental expertise of economic and other activities; strict adherence to, and responsibility for breach of, the environmental protection legislation by enterprises, organizations, institutions and individuals; and many others. Besides, the Law obliges business entities to comply with approved technological processes; to ensure reliable and efficient operation of control systems; to ensure decontamination and waste management; to integrate environmentally friendly technologies and processes; to ensure protection and rational use of land, subsoil, water, air, forests, flora and fauna, as well as restoration of natural resources.\footnote{Ibid., art.18}

Another principal law on environmental protection of Kyrgyzstan is the Law on Environmental Expertise (1999) the purpose of which is to regulate legal relationships relating to environmental assessment and prevention of possible adverse consequences of economic and other activities to the environment and human health. According to this law any activity that may have a direct or indirect impact on the environment and human health is subject to environmental expertise; hence cannot be undertaken before the approval of an authorized state body (i.e. the State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic).\footnote{Law of the Kyrgyz Republic on Environmental Expertise (1999), art.4} Moreover, the Law on Subsoil Use (2012) also defines that activities related to subsoil use which create threats to safety of workers, population and surrounding environment shall be deemed as a gross violation of the legislation on subsoil use. In addition to abovementioned laws there are many other principal
environmental, health and safety laws that apply to mining activities, such as Law on Industrial Safety of Hazardous Production Facilities (2001), Law on Technical Regulation of Ensuring Environmental Protection (2009), Law on Mandatory Insurance of Civil Liability of an Operator of Hazardous Production Facilities (2008), Law on Tailing dams and Mining dumps, Law on General Technical Regulation on Ensuring Ecological Safety (2009), Law on Radiation Safety of the Population (1999), Law on Mandatory Insurance of Civil Liability of an Operator of Hazardous Production Facilities (2008), and many others. All these laws unanimously proclaim a priority of protection of environment and people’s right to life and health from any adverse impacts of hazardous activities and industries, including gold mining.

Moreover, Kyrgyzstan is a party of a number of multilateral environmental agreements regulating the sound management and disposal of toxic and dangerous products and wastes, such as the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides (1998), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989), the Stockholm Convention on Persistent Organic Pollutants (2001).

4.3 Health, water contamination and gold mining under the Kyrgyz legislation

The right to water is not explicitly indicated in the Kyrgyz Constitution or other laws. However the provision that says “everyone shall have the right to environment favorable for life and health” (Art.48(1) of the Constitution) inevitably embraces a people’s right to safe water. Besides, the right to potable water is not explicitly indicated in either ICESCR or UDHR as well; nonetheless it does not undermine the importance of this human right.

As mentioned earlier, safe water is crucial for the full realization of the right to health. For this reason a number of Kyrgyz laws recognize an importance of adequate protection of water resources from contamination. The Law on Water (1994), for example, regulates
relations in the field of use and protection of water resources, and aims at preventing any environmentally harmful impact of economic or other activities on water resources. It stipulates that enterprises, organizations, institutions and individuals shall observe in their activities such principles as priority of people’s life and health; provision of healthy environment for work and leisure; rational and efficient use of water resources; compliance with, and responsibility for breach of, water regulations; provision of public participation in decision-making processes; and international cooperation in the field of use and protection of water resources. The Law stipulates that water resources of Kyrgyzstan shall be protected from pollution and depletion which can harm people’s health and well-being, as well as result in reduction of fish stocks, deterioration of water quality and other adverse effects on water resources due to the changes in the physical, chemical and biological characteristics of water. Thus it proscribes dumping of toxic and radioactive wastes of economic or other activities into water resources (art.46). In particular, it envisages that organizations and individuals engaged in mining activities are required to undertake necessary measures to protect groundwater, as well as to use special control systems, and shall immediately inform competent state bodies about every opening of groundwater reservoirs (Art.52).

The other principal law is the Water Code (2005) which determines that goals of water protection are prevention and reduction of dumping of contaminated pollutants and wastes into water resources; removal or disposal of wastes and pollutants; waste neutralization; restoration and rehabilitation of water resources, including flora and fauna existed before the pollution of water. It also prohibits any activity that may accelerate and aggravate melting of glaciers, as well as affect condition and quality of water contained in glaciers (Art.62). The Law on Environmental Protection (1999) also proscribes any contamination of water.
resources that may adversely affect surrounding environment and human health, and thus emphasizes the importance of water protection. In addition to the mentioned laws many various by-laws regulate relations in the field of use and protection of water resources, such as Instruction on conducting of inspections of water use and protection (2004), Regulation on protection of groundwater (1994), Regulation on compensation rates and procedures for breach of water legislation (1995), Instruction on maximum permissible volume of dumping of pollutants into water resources (1993), Hygienic regulations on maximum permissible concentration of chemicals in water resources (2004), and many others.

The state bodies that maintain management and control of water use and protection policies are the State Water Administration, the State Office of Hydrometeorology, the State Office of Hydrogeology, the State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic, the Ministry of Emergency Situations, the State Sanitary and Epidemiological Supervision Department.

4.4 Mining, occupational safety and health under the Kyrgyz legislation

The right to occupational safety and health is guaranteed in the Article 42 (3) of the Kyrgyz Constitution:

Everyone shall have the right to freedom of labor, the use of his/her abilities for work and choice of profession and occupation, labor protection and labor arrangements meeting safety and hygienic requirements as well as the right to remuneration for labor not less than minimum subsistence level. 203

The most extensive and comprehensive norms on occupational safety and health are contained in the Kyrgyz Labor Code (2004) and the Law on Occupational Safety and Health (2003). These legal acts define that everyone has a right to safe and healthy working conditions, and that it is an obligation of an employer to provide such conditions. In particular, employer has an obligation to comply with the approved state standards of occupational safety; to ensure free distribution of working clothes, shoes and other means of individual protection, washing

203 The Constitution of the Kyrgyz Republic, above n.19, art.42 (3)
off, soap and neutralization agents among workers; to provide individual and collective protection facilities; to purchase, repair, keep, disinfect, wash, and neutralize at employer’s expense means of individual protection and hygiene of workers; to organize training, instruction and informing of workers about the requirements of labor protection; to conduct obligatory preliminary (before employment) and regular medical examinations and special medical checkups of workers; to ensure obligatory social insurance of workers against industrial accidents and diseases; to inform workers about labor conditions and associated risks to health, and others. On the hand workers, in addition to observance of the established rules, regulations and instruction on labor protection, have an obligation to immediately inform employer about every industrial accident and deterioration of his/her health, including development of any symptoms of acute industrial disease or poisoning (art.12 of the Law on Occupational Safety).

The Labor Code stipulates that people who work under detrimental and dangerous conditions are entitled to subsidies and compensations, such as supplement to salary, additional leave, shortened working day, free prophylactic meal, free milk, and potable water (Art.224). In particular, according to the Resolution of the Ministry of Labor, the Ministry of Health and the Federation of Trade Unions of Kyrgyzstan (1996) workers of the gold mining companies shall receive free therapeutic and prophylactic meal, milk and special working outfit which can ensure health and workability of a worker. Besides, the Labor Code obliges employers to organize health care units (e.g. medical units, hospitals, etc.) and sanitary rooms (cloakrooms, restrooms, shower rooms, kitchens, first aid points in case of an accident or illness, rooms of private hygiene for women, etc.). It shall also be noted that women and persons under eighteen years are forbidden from working under deleterious and dangerous conditions. The control over compliance with the standards of occupational safety and health,

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204 The Labor Code of the Kyrgyz Republic (2004), art.211
205 Ibid., art.217
as well as representation and protection of workers’ rights, is maintained by the Ministry of Youth, Labor and Employment of Kyrgyzstan.

Moreover, Kyrgyzstan has international obligations to ensure and protect occupational safety and health. Specifically, Kyrgyzstan became a member of the ILO in 1992, and so far has ratified 53 ILO Conventions, including the ILO Convention on the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution (1977); the 1965 ILO Convention on Medical Examination of Young Persons (Underground Work); the ILO Convention on Radiation Protection (1960), and the 1935 ILO Convention on Underground Work (Women).

4.5 Mining, access to information and public participation in health-related matters under the Kyrgyz legislation

The right to access to information is widely recognized in the Kyrgyz legal system. Most of the abovementioned laws recognize the importance of the right to information for the full realization of other fundamental human rights, including the right to health. In particular, article 33 of the Kyrgyz Constitution states:

1. Everyone shall have the right to freely seek, receive, keep and use information and disseminate it orally, in writing or otherwise.
2. Everyone shall have the right to acquaint with the information on himself/herself in state authorities, local self governance bodies, institutions and organizations.
3. Everyone shall have the right to obtain information on the activity of state authorities, local self governance bodies as well as officials thereof, legal entities with the participation of state authorities and local self governance bodies as well as organizations financed from the republican and local budgets.
4. Everyone shall be guaranteed access to information in the possession of state authorities, local self governance bodies as well as officials thereof. The regulations of providing information shall be envisaged in the law.
5. No one may be subject to criminal prosecution for the dissemination of information which abases or humiliates honor and dignity of a person.207

The Law on Guarantees and Free Access to Information (1997) guarantees everyone, including foreign citizens and legal entities, a right to freely search, receive, investigate, produce, give and disseminate the information. Moreover, the Law sets concrete principles

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207 The Constitution of the Kyrgyz Republic, above n.19, art.33
that apply to the right to information: accessibility, objectivity, timeliness, openness and authenticity. In this regard the Law obliges not only state bodies, but also private entities (e.g. enterprises, organizations) to provide information on request (Art.6). The access to information can be also ensured by means of publication and dissemination of relevant material; public disclosure of information about state body’s or private organization’s activities; provision of direct access to documents and materials; and provision of direct access to state body’s open sessions. The Law on Access to Information Held by State Bodies and Local Self-Government Bodies of the Kyrgyz Republic (2006) also stipulates and obligation of all state bodies to guarantee maximum informational openness, publicity and transparency. The vital point is that this Law sets a principle of maximum disclosure, which means that all information (except legally limited) held by any state body should be accessible.

Hence, any information on the environment shall be publicly available. According to the Law on Environmental Protection (1999) the term “information on the environment” includes any information on the state of water, air, soil, minerals, flora and fauna, as well as information on any human activity that may affect their condition and measures undertaken or needed for their protection (Art.2). Specifically, the Law on Sanitary Epidemiological Welfare of the Population (2001) enables individuals to receive from state bodies and private entities information on the epidemiological situation, the state and quality of the environment, the potential danger that certain human activities may cause to human health (Art.7). The Law on Protection of Citizens’ Health (2005) also envisages that people are entitled to regularly receive accurate and timely information about factors that may favour or harm their health,

208 The Law of the Kyrgyz Republic on Guarantees and Free Access to Information (1997) prohibits free access and dissemination of certain types of information, e.g. it is prohibited to provide information that contain state or commercial secrets; insult religious feelings or call for the violent overthrow or change of the constitutional order; promote war, violence and cruelty, ethnic or religious discrimination and intolerance towards other people and nations; as well as prohibits dissemination of pornography and publication of false information (art.10)
including information on the environmental, sanitary and epidemiological conditions of their area of residence, the compliance of goods, works and services with sanitary norms and rules.

The right to public participation in decision-making processes is also widely guaranteed by the Kyrgyz laws. Article 52(1) of the Kyrgyz Constitution establishes that every citizen of Kyrgyzstan has the right to participate in the discussion and adoption of laws and decisions of republican and local significance. Likewise most of the Kyrgyz laws mentioned throughout the present paper also contain provisions on necessity of public participation in decision-making.

In addition Kyrgyzstan has obligations to ensure public access to information, esp. to environmental information, and public participation under numerous international human rights instruments. Specifically, in 2001 Kyrgyzstan acceded to the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention); in 2003 Kyrgyzstan signed the UN Convention Against Corruption.

4.6 The right to an effective remedy for damages caused by mining activities under the Kyrgyz legislation

As mentioned earlier, mining operations are extremely hazardous and dangerous to human health and environment. Thus it is crucial for a state to establish various remedial or other mechanisms that would encourage organizations or individuals engaged in mining activities to comply with the approved standards and norms of environmental and health protection, as well as to enable lay people to effectively seek an adequate compensation for damages caused by such organizations or individuals. The right to an effective remedy can be one of such mechanisms. The ICCPR Article 2 (3) establishes that each state has an obligation:
(a) To ensure that any person whose rights or freedoms as herein recognized are violated shall have an effective remedy, notwithstanding that the violation has been committed by persons acting in an official capacity;
(b) To ensure that any person claiming such a remedy shall have his right thereto determined by competent judicial, administrative or legislative authorities, or by any other competent authority provided for by the legal system of the State, and to develop the possibilities of judicial remedy;
(c) To ensure that the competent authorities shall enforce such remedies when granted.  

As for the Kyrgyz legal system, Articles 39 and 40 of the Kyrgyz Constitution defines that:

**Article 39**
Everyone shall have the right to compensation for any damage caused by illegal acts of state authorities, local self governance bodies or officials thereof in their official capacity.

**Article 40**
1. Everyone shall be guaranteed judicial protection of his/her rights and freedoms envisaged in the present Constitution, laws, international treaties to which the Kyrgyz Republic is a party as well as universally recognized principles and norms of international law. The state shall ensure the development of extrajudicial and pre-trial methods, forms and means to protect human and civil rights and freedoms.
2. Everyone shall have the right to protect his/her rights and freedoms by any means that are not prohibited by law.

With regard to violation of the right to health and to safe environment article 48(2) of the Constitution specifies that everyone has the right to compensation of damage to health or property resulting from activities in the area of nature management. Moreover, the Law on Environmental Protection (1999) obliges organizations or individuals whose activities have negatively affected human health and environment to pay full cost of compensation, including cost of treatment, degree of loss of work capacity, rehabilitation costs, nursing and other expenses (Art.54). In order to receive full compensation affected individuals shall have an effective court decision. However, not only organizations or individuals engaged in mining activities can be held responsible for damages caused to human health and environment, but also state officials personally in case if they concealed information about (1) violations of the established mining standards and regulations or (2) accidents appeared at tailing dams and mining dumps.

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209 ICCPR, art. 2(3)
210 The Constitution of the Kyrgyz Republic, above n.19, arts. 39 and 40
211 The Law of the Kyrgyz Republic on Tailing Dams and Mining Dumps (2001), art.18
CONCLUSION AND RECOMMENDATIONS

The aim of this paper was to analyze whether Kyrgyzstan is fulfilling its obligations under international human rights instruments to respect, protect and fulfil the right to health when it comes to regulation of mining industry. This paper demonstrates that mining industry, especially gold mining, is one of the most vital components of Kyrgyzstan’s economic growth. Indeed Kyrgyzstan has immense potential for extensive extraction of gold. It is estimated that Kyrgyzstan has more than 2000 tons of gold reserves, however annually about 20 tons of gold is being extracted at the Kumtor mine site, currently the only active gold mine. It is obvious that the Kyrgyz government will do anything possible to exploit its gold potential to the full. However, to date we can witness negative mood of the population against mining industry. Mainly because of the lack of information, transparency and high corruption level in the mining sector there are heated debates among population about economic and social viability of the mining industry, especially gold mining sector. In my opinion, in order to improve the situation, i.e. reconcile interests of the Kyrgyz population and mining sector, it is important to improve social position of mining industry as a whole. In this regard the Kyrgyz government and mining companies shall take positive measures to ensure proper implementation and observance of basic human rights. In other words, if mining activities are being maintained with maximum consideration of the rights and interests of the affected population, than mining industry itself would benefit from public support.

In this paper I only discussed the relationship between mining industry and the right to health, i.e. the extent to which Kyrgyz mining legislation ensures the full realization of this human right. My findings are quite ambiguous: de jure the right to health is fully guaranteed, de facto there are gross violations of the right to health. As a solution of this controversy I suggest to put in place effective enforcement mechanisms. Specifically, the analysis of the

212 Robert E. Moran, above n.61
Kyrgyz laws that regulate relations in the field of protection of the right to health from adverse impacts of mining activities reveals that they, as a whole, correspond to internationally recognized standards applied to the right to health. In other words, most of the principal environmental, health and safety laws of Kyrgyzstan that apply to mining operations recognize, promote and protect people’s right to health to the extent prescribed in the international human rights documents. However in reality we have essentially different picture. Unfortunately the history of Kyrgyz mining industry, its modern status and example of Kumtor mine site cast serious doubts on Kyrgyzstan’s strict adherence to the protection and promotion of human right to health. It seems that de jure everything is perfect in Kyrgyzstan, while de facto mining activities are creating threats to public health and environment of Kyrgyzstan and neighboring countries. Thus, in order to ensure maximum fulfillment of obligations towards proper health promotion and protection Kyrgyzstan shall undertake concrete measures to enforce existing laws and regulations. In other words, Kyrgyzstan already has a good legal foundation, now it needs effective and workable enforcement mechanisms for achieving socially positive results in gold mining sector. In this respect below are a number of recommendations that could improve enforcement of health protection and promotion with respect to mining operations in Kyrgyzstan.

Foremost Kyrgyzstan shall enhance its international cooperation – the effective results can only be achieved with the assistance and support of international community since Kyrgyzstan does not have adequate human, technical and financial resources. As earlier mentioned, it is crucial to have baseline data on mine sites; therefore Kyrgyzstan needs to collect all necessary and reliable data on each potential gold mine sites. As for Kumtor mine, an international community may help Kyrgyzstan to conduct thorough science-based research on compliance of Kumtor Operating Company and Centerra Gold.Inc with environmental protection standards and practices. Besides, the results of such research would enable
Kyrgyzstan and its population to make an accurate assessment of impacts of mining operations at Kimtor site on human health, and as a result to take timely required preventive and protective measures.

With regard to legislative framework following recommendations could be of use. At present most of the Kyrgyz laws on environmental protection are of a framework nature, thus to make them workable it is necessary to adopt more detailed and comprehensive laws and regulations.213 Also, as Special Rapporteur on toxic wastes has defined in his report on Kyrgyzstan, there is a need to develop concrete procedures to be followed in the event of disaster, be it natural or man-made, which could result in the release of toxic contaminants into the environment.214

As for the institutional framework, there are a lot of state bodies which deal with environmental, health and safety issues of mining industry, and which have vague and overlapping functions. In order to make their efforts more efficient it is recommended to reduce overlapping functions, and rather enhance their active cooperation and coordination. Mining companies would directly benefit from such changes since the number of controlling state bodies might be significantly reduced.

Another essential point is to enhance corporate social responsibility of mining companies, first of all, through ensuring that companies are observing people’s right to information. At present it is a burning issue: on the one hand, because of the lack of information people are unaware of real risks that mining activities pose to human health and surrounding environment; on the other hand, mining companies are constantly suffering from conflicts with local populations. In particular, there a plenty of instances when mining operations have been totally stopped or suspended by local communities, e.g. by organizing

213 UN Special Rapporteur on the adverse effects of the movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights, Report A/HRC/15/22/Add.2, Mission to Kyrgyzstan, October 2009, para 61
214 Ibid., para 61-66
strikes, rallies, public protests, blocking the roads to mine sites, seizure of mine sites, etc.\textsuperscript{215} Unfortunately, in most of the cases lay people are becoming a tool of various dishonest individuals: by using people’s ignorance and unawareness they are achieving their selfish goals and motives. This is a striking example when through timely observance of human right to access to information mining companies may significantly benefit.

The right to access to information is closely linked to the right to health, i.e. full and adequate information about potential threats would enable people to adopt protective and preventive measures necessary to reduce any risk to their health. Therefore it is important that information on environmental, sanitary-hygienic, epidemiological, scientific, technical and medical conditions and risk associated with gold mining operations to be publicly available. Moreover the full observance of people’s right to information by state bodies and private entities is ensured only if the information is provided on time and in a comprehensive and accessible format and language, considering such factors as ethnic, gender, age, cultural and religious background of the affected individual or community. Hence, it is a direct violation of the right to information if information which contain vital health-related issues of mining activities are provided in a language that affected people do not speak and understand, e.g. local communities who live in the vicinity of mine sites and mostly speak Kyrgyz language shall have access to information prepared in Kyrgyz, not Russian or English languages. In addition adequate information enables population to effectively participate in discussion and adoption of decisions that may affect their health and life. When developing various health-related laws and policies it is crucial to take into account opinion of the people who are supposed to benefit from such laws and policies – they know more about their needs and problems. In this regard the next recommendation would be to include mining-related health issues to national health reform programs after thorough public discussion of crucial points of

\textsuperscript{215} Minister of Economy and Antitrust Policy of the Kyrgyz Republic, above n.22
the problem. To some extent this would draw public’s attention to concrete health problems associated with mining operations, not only to environmental concerns. The Kyrgyz population shall understand that it is a right time to talk about health issues, no time to wait – the territory of the country is already full of hazardous and dangerous mining wastes.

Another issue of high importance is the urgent need for harmonization of Kyrgyzstan’s financial interests in mining ventures and its commitment to respect for, and observance of, fundamental human rights. Unfortunately, to date in pursuit of economic benefits the Kyrgyz Government is neglecting many serious social problems associated with mining industry. Probably it is a good option to have a shareholder interest in mining ventures, but as Kumtor’ example demonstrates sometimes it significantly undermines Kyrgyzstan’s proper promotion and protection of people’s basic rights and interests vis-à-vis those of mining companies.

The main goals of this paper were (1) to demonstrate that passive adoption of neutral laws and regulations, even if they comply with international standards applied to the right to health, do not guarantee an improvement of people’s health; and (2) in order to ensure the full realization of the right to health concrete enforcement mechanisms must be put in place.
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