





centerra**gold** 





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Centerra believes that socially and environmentally responsible mining practices are a vital element in maximizing the potential of our current properties.

#### CORPORATE PROFILE

Centerra Gold Inc. (Centerra) is a Canadian-based and publicly listed gold mining company engaged in operating, developing, acquiring and exploring gold properties primarily in Asia, the former Soviet Union, and other emerging markets worldwide. We are the largest Western-based gold producer in Central Asia with two operating gold mines located in the Kyrgyz Republic (Kumtor) and Mongolia

(Boroo). Our objective is to build shareholder value and to establish annual gold production of 1.5 million ounces by maximizing the potential of our current properties, and leveraging our financial strength and experience to acquire new long-life, low-cost projects.

#### ABOUT THIS REPORT

This is Centerra's second corporate responsibility report and includes information for the 2011 and 2012 financial years (ended December 31, 2012). Financial amounts are reported in US dollars unless otherwise stated. We have adopted the Global Reporting Initiative's (GRI) Third Generation (G3) sustainability reporting framework and the GRI Mining and Metals Sector Supplement for reporting purposes. In determining the scope, content, and boundaries of this report, we used a materiality

assessment process described in this report. This report is focused on Centerra's two operating mines: Kumtor and Boroo. We self-declare our 2011-2012 report at GRI G3 Level 'B'. A GRI Standard Disclosure Index for this report is available on our website (www.centerragold.com). We welcome your comments and suggestions on how we can further improve our corporate responsibility practices and reporting. Please send your comments and suggestions to sustainability@centerragold.com.

During 2011-2012, we invested over \$44 million in strategic and outcome oriented community investment initiatives.



### MESSAGE FROM THE PRESIDENT

The publication of this - our second - corporate responsibility report, highlights key accomplishments and key challenges Centerra experienced in 2011 and 2012. The former include a recordable injury frequency rate of 0.30 in 2011 and 0.15 in 2012, which shows that our operations outperformed comparable mining operations in many parts of the developed world.

Other challenges include unexpected acceleration of the ice and waste rock at our high altitude Kumtor mine, which resulted in 46% lower gold ounces produced in 2012 when compared to 2011.

Maintaining safe operations and ensuring responsible mining practices remain our top priorities. We continue to demonstrate and promote transparency. This includes our active support of the Extractive Industry Transparency Initiative (EITI),

our adoption of the Global Reporting Initiative's (GRI) sustainability reporting framework, and our participation in the Carbon Disclosure Projects (CDP). We also remain a signatory of the International Cyanide Management Code.

We are conscious of the scale and importance of Kumtor to the national economy of Kyrgyzstan. Prior to the decline in our gold production in 2012, Kumtor contributed approximately 12 percent of the GDP, 25 percent of the industrial output, and over 50 percent of the country's foreign exchange earnings in 2011. We continue to tackle the technical challenges we face at Kumtor and expect to get back to normal gold production levels in the last quarter of 2013.

During the reporting period, Kumtor was subject to an extraordinary level of scrutiny by a series of Kyrgyz government commissions and inspections, which continued well into 2013. In December 2012, Kumtor received a series of claims or directives totaling approximately \$152 million. These claims focused on allegations related to land use, water use, waste management, and waste rock disposal practices. At the time of writing this report, these claims have been rejected by the local courts. An additional claim of \$315 million has been received for environmental pollution charges. These claims are exaggerated or without merit, and ignore the high standard of performance at our operation. We remain committed to work diligently with the Kyrgyz government to fairly resolve these claims.

During 2011-2012, we invested over \$44 million in a series of strategic and outcome oriented community investment initiatives. These included \$21 million provided to a national micro-credit financing program in the Kyrgyz Republic and \$6.9 million provided towards completion of a new annex to the Maternity Hospital No. 1 in Mongolia. Our operations in Mongolia also became one of the first beneficiaries of grants by the Canadian Department of Foreign Affairs and International Trade (DFAIT) to leverage corporate social responsibility initiatives of the Canadian private sector.

We broke new ground by developing and publishing the first Biodiversity Management Strategy and Plan, and the first GRI-based environmental and sustainability report of a mining operation based in the Kyrgyz Republic. We also implemented award winning mine closure initiatives in Mongolia. To magnify the positive impacts associated with our social investments, we collaborate with local, national and international

organizations, such as Japan International Cooperation Agency (JICA), the European Bank for Reconstruction and Development (EBRD), the Canadian Department of Foreign Affairs and International Trade (DFAIT), the German Society for International Cooperation (GIZ) and others to leverage our social investments and associated outcomes. Examples of such activities are highlighted in this report.

Although hampered by the lack of availability of specialized mining goods and services, our local procurement in the Kyrgyz republic was approximately \$74 million in 2012. During the same period, our local procurement spending in Mongolia was \$25 million.

Looking forward, we will continue to deliver responsible and sustainable mining practices everywhere we work. In the short term, our key corporate responsibility challenges and opportunities are tied to the successful outcome of our negotiations with the Kyrgyz government. Given the magnitude of the broader development challenges in our project regions, we will need to continue to deliver effective community engagement and investment programs, and scale up outcome-oriented initiatives with and through our partners.

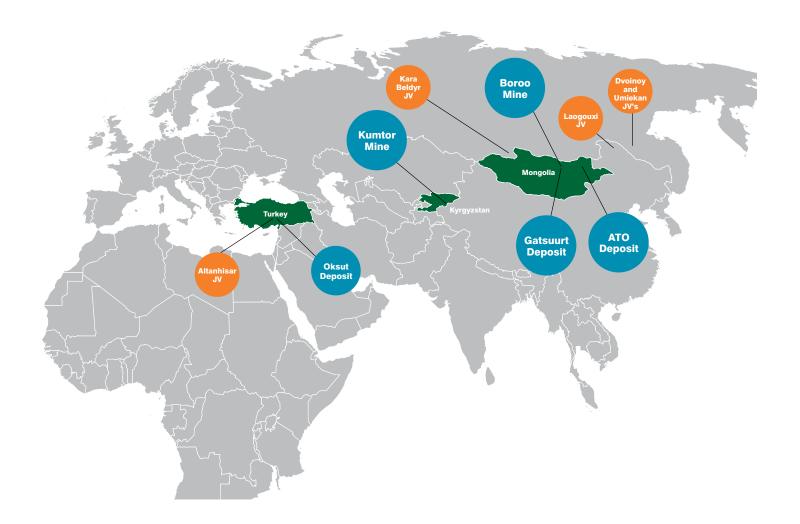
We look forward to hearing your suggestions as to how we can further improve our corporate responsibility programs and our reporting practices.

lan Atkinson
President and Chief Executive Officer

#### CORPORATE RESPONSIBILITY SNAPSHOT

CR Pillar	Challenges & Achievements	Targets 2013-2014
Project Benefits	<ul> <li>46 percent decreased gold production</li> <li>Over \$99 million in local procurement</li> <li>Over \$112 million in wages and benefits</li> <li>Over \$42.3 million in community investments</li> </ul>	<ul> <li>Return to normal production at Kumtor and conclude negotiations amicably with the Kyrgyz government</li> <li>Planned \$11.5 million for community investments in 2013</li> </ul>
Health & Safety	<ul> <li>No fatalities in 2011 and 2012</li> <li>Recordable injury frequency rates of 0.30 and 0.15 in 2011 and 2012, respectively</li> </ul>	<ul> <li>No lost time injuries</li> <li>Recordable injury frequency rate of 0.36</li> </ul>
Environment	<ul> <li>Kyrgyz government commissions' inspections resulted in series of claims totaling approximately \$152 million in 2012, and an additional \$315 million in early 2013</li> <li>Award winning mine closure activities at Boroo</li> <li>Developed Kumtor's Biodiversity Management Strategy and Plan</li> <li>No significant environmental incidents and spills</li> </ul>	<ul> <li>Amicably resolve claims in Kyrgyz Republic</li> <li>Further improve waste management practices</li> <li>Improve data management and reporting systems</li> <li>Address water quality exceedances at Kumtor</li> <li>Implement early warning and solutions for glacial lake outburst flood risk to Petrov Lake near Kumtor</li> <li>Update conceptual closure plans</li> </ul>
Community	<ul> <li>Developed new Community Development Plan for Kumtor</li> <li>Implemented CSR program in Mongolia partially funded by Canadian Department of Foreign Affairs and International Trade (DFAIT)</li> </ul>	<ul> <li>Implement a web-based system to support management of stakeholder engagement and community investment at Kumtor</li> <li>Conduct socio-economic baseline study in Issyk-Kul region</li> </ul>
Governance & Standards	<ul> <li>Formed 3 regional committees for greater community oversight in Kyrgyz Republic</li> <li>ICMI certified Kumtor's cyanide transportation operation from marshaling yard in Balykchy to Kumtor mine site as being in full compliance with ICMI's transportation protocol</li> </ul>	<ul> <li>Develop standards to encourage development of local business through procurement at Kumtor</li> <li>Pursue Cyanide Code certification of all operational activities at Kumtor and Boroo</li> </ul>

 $\textbf{\textit{ICMI}} \ \textit{International Cyanide Management's Institute} \ \ \textbf{\textit{RIF}} \ \textit{Recordable Injury Frequency}$ 



### OUR OPERATIONS AND ASSETS

As the leading Western-based gold producer in Central Asia, we have developed an expertise of operating responsibly in the region.

Centerra has assets which are at different stages in their life-cycle. Our gold producing mining assets comprise the Kumtor mine in the Kyrgyz Republic and the Boroo mine in Mongolia. These operations are the focus of this corporate responsibility report. The Kyrgyz Republic, through the state owned Kyrgyzaltyn Open-End Joint Stock Company, is Centerra's largest shareholder, owning 77,401,766 common shares, which represents 32.75 percent of the outstanding shares.



Kumtor is one of the most important economic assets in the Kyrgyz Republic.

#### KUMTOR MINE

Centerra is the parent company of and owns 100% of the Kumtor Gold Mine, Kumtor Gold Company, and Kumtor Operating Company. The Kumtor open pit mine is located approximately 350 kilometers southeast of the capital Bishkek and 60 kilometers north of the border with the People's Republic of China. Kumtor is the largest western-operated gold mine in Central Asia and has been operating since 1997, having produced approximately 8.7 million ounces of gold by December 31, 2012. The year 2012 marked the sixteenth year of the Kumtor Mine operation in the Kyrgyz Republic and the ninth year under the parent company Centerra.

Located at an altitude of 4,000 meters above sea level in a partially glaciated permafrost zone, Kumtor is one of the highest open pit gold mines in the world. The gold is separated and recovered from the mined ore using a carbon-in-leach process involving cyanide followed by electro-winning. Kyrgyzaltyn JSC, a Kyrgyz state-owned and controlled mining company, purchases all of Kumtor's production of unrefined gold bars for processing at its refinery in the Kyrgyz Republic.

One of the unique features of Kumtor include the neighboring Sarychat Ertash Nature Reserve.

This protected area was established after the Kumtor Concession was granted to support the conservation of globally important flora and fauna, including Marco Polo sheep (argali) and snow leopards. Kumtor's location also poses unique technical challenges due to the presence of active glaciers and slopes at the mine site that are underlain by permafrost soils, periglacial landforms and deep moraine deposits.



During 2011 and 2012, Kumtor produced 583,156 and 315,238 ounces of gold, respectively.

Production results during 2012 were impacted by accelerated movement of ice and waste, and related technical challenges. Kumtor's proven and probable reserves (as of December 31, 2012) increased by 58 percent and total 9.5 million contained ounces of gold. This has resulted in an extension of the life of mine by five years to 2026. In addition to the open pit reserves at Kumtor, there is an additional 1.9 million contained gold ounces of inferred high-grade underground resources identified beneath the new KS-13 planned pit bottom.

Kumtor is one of the most important economic assets in the Kyrgyz Republic. Prior to setbacks experienced in 2012, Kumtor contributed approximately 12 percent of the country's GDP, 25 percent of its industrial output, and over 50 percent of its foreign exchange earnings.



During 2011 and 2012, gold production at Boroo was 59,224 and 71,838 ounces, respectively.

#### BOROO MINE

Centerra owns a 100 percent interest in the Boroo mine which is located 110 kilometers northwest of Ulaanbaatar, Mongolia's capital. Boroo is within three kilometers of the all-weather Ulaanbaatar-Irkutsk highway with easy access to the Trans-Mongolian railway. Boroo's open pit operation began commercial production in the first quarter of 2004 and has produced approximately 1.66 million ounces of gold through the end of 2012.

During 2011 and 2012, gold production was 59,224 and 71,838 ounces, respectively. This includes gold production from an oxide mill and a cyanide heap leach operation which was restarted in the fourth

quarter of 2012. Although the Boroo mine is nearing its mine closure, it continues to process both mined and stockpiled ore while the company awaits final approvals for the Gatsuurt project (see below).

Boroo uses groundwater and recycled water from it tailings facility to supply its operation, and maintains a 'zero discharge' facility. Boroo has been regularly ranked among the top five tax payers in Mongolia in recent years, and has been recognized for its outstanding health and safety performance, corporate social responsibility programs, and mine closure related activities.

#### GATSUURT DEPOSIT

Centerra owns 100 percent of the Gatsuurt exploration property, which is located in an area that was previously subject to artisanal mining activities. At the Gatsuurt project, proven and probable reserves are 1.5 million ounces of contained gold. Ore from the Gatsuurt Project will be trucked along a 55 kilometer road, completed in 2010, to the Boroo site for processing.

Although initial site preparation has been completed, the Gatsuurt project remained under care and maintenance throughout 2011 and 2012. This was due to delays in permitting as a result of the Water and Forest Law, enacted in 2009, which prohibits mining and exploration activities in water basins and forested areas, but provides an exemption for "strategic deposits." Despite these uncertainties, community relations programs and the necessary environmental baseline studies were continued during the reporting period.

# ÖKSÜT DEPOSIT EXPLORATION

In January 2013, Centerra owned 100 percent of the Öksüt Gold Project in Turkey. The Öksüt property is located in the Kayseri region of central Turkey, approximately 50 kilometers south of the city of Kayseri and 10 kilometers south of the town of Develi.

As of December 31, 2012, the Öksüt project had an indicated resource of 682,000 ounces of contained gold and an inferred resource of 477,000 ounces

of contained gold on a 100 percent basis. In 2013, we expect to increase our exploration activities and initiate detailed environmental, social, and technical project studies.

#### OTHER ASSETS

We are also involved in a number of advanced exploration projects. These include a 100 percent interest in the Altan Tsagaan Ovoo (ATO) property in Mongolia, and a 70 percent interest in the Kara

Beldyr Russian joint venture. Centerra is also earning an interest in other joint venture exploration properties located in Russia, Turkey, and China.



We believe that the way in which we conduct our business and the way our employees act in fulfilling their job responsibilities are fundamental to achieving our business objectives.



### RESPONSIBLE MINING

While Centerra's ultimate objective is to deliver value to our shareholders, we also believe in the principles of sustainable development. In endeavoring to achieve our strategic objectives we will:

- be a leading performer among our peers with regard to shareholder value, business ethics, workplace safety, environmental protection, and community economic development;
- minimize the potential for adverse impacts that may arise from our operations to levels as low as reasonably achievable, taking into account social and economic factors;
- continually improve the management of our operations so we may respond to the economic, environmental, and social expectations of our stakeholders, including our employees, communities, shareholders, governments and the public; and

• as an international company, respect the different needs and values of people and their cultures and operate with a high level of transparency to ensure stakeholder confidence.

We believe our strong commitment to these principles will continue to make Centerra the employer and the business partner of choice by governments and state-owned enterprises in Asia and other emerging markets.

### GOVERNANCE AND STANDARDS

Our board of directors and management believe that sound and effective corporate governance is essential to Centerra's performance. We have adopted practices and procedures to ensure that effective corporate governance practices are followed. We expect all directors, officers, and employees to conduct themselves in accordance with the highest ethical standards.

These are detailed in three policies:

- Code of ethics for officers and employees
- Code of ethics for directors
- International business conduct policy for all directors, officers, and employees.

Centerra also has a "whistle-blower" program, which provides directors, officers, and employees a means to anonymously file complaints or submissions in good faith regarding potential ethical obligations by other directors, officers, and employees. Directors, officers and employees are also encouraged to speak to in-house legal counsel, human resources, or their managers if they have any concerns or questions. We provide on-going training on these policies for all of our directors, officers, and employees.

The code of ethics for employees addresses, among other things, avoidance of conflicts of interest, protection of confidential information, compliance with applicable laws, rules and regulations, adherence to good disclosure practices, and procedures for employees and third parties to report concerns with respect to accounting and auditing matters. Employees with such concerns may report their concerns directly, confidentially, or anonymously.

The board has also adopted a code of ethics for directors. This code sets out the ethical standards that apply to directors in the exercise of their duties. Directors are required to promptly report all actual, potential, or perceived conflicts of interest to the corporate secretary, who is required to bring such

conflicts to the attention of the nominating and corporate governance committee. Directors may not participate in discussions, deliberations, or decision-making in which they have a conflict of interest.

The international business conduct policy is our anti-corruption policy and is an important component of Centerra's commitment to conduct business in an ethical and lawful manner, wherever we work. This policy prohibits directors, officers, and employees from making, offering, or promising, "anything of value" to a "Government Official" for an improper purpose such as (without limitation) obtaining preferential treatment, obtaining business, or securing or amending mining permits, licenses and concessions. In our policy and the accompanying training, we highlight the broad definitions of "anything of value" which is not restricted to monetary payments, and of "Government Officials" which can include individuals which people do not consider to be Government workers, such as candidate for political parties, and directors of government-owned companies.

The board of directors has established a number of standing committees, including the corporate social responsibility, and the safety, health and environmental committees, to support its work. These operate under written charters, which are posted on Centerra's website. The charters set out responsibilities and duties, qualifications for membership, procedures for committee member removal and appointment, and reporting to the board. The charters are reviewed annually by the relevant committee and the nominating and corporate governance committee.

Centerra's compensation for corporate operations, exploration and site managers is supplemented with annual performance-based or incentive payments. These include health and safety performance, and environmental performance criteria.



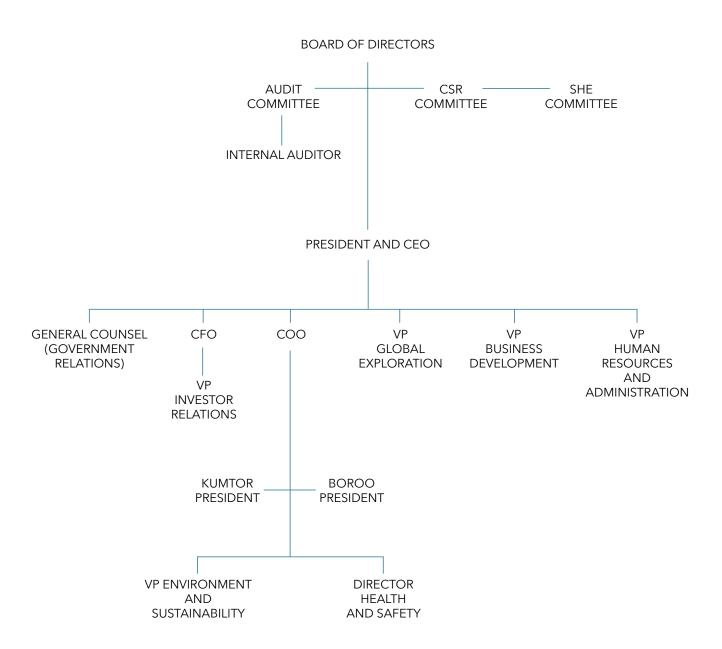
#### CENTERRA'S SUSTAINABILITY POLICY

Centerra conducts all of its activities in an economically, safe, environmentally and socially responsible manner that meets or exceeds the expectations that society has of business. To this end, we are committed to the following general business principles:

- striving to be a leading performer among our peers with regards to shareholder value, safety and environmental protection, business ethics, community support, community economic development, corporate governance, human rights, and the work environment
- integrating environmental management into all of our operations
- allocating clear responsibilities at the corporate level (environmental, social, health and safety) and providing adequate staffing and resources for environmental management at each operation
- minimizing the potential for adverse impacts that may arise from our operations to levels as low as reasonably achievable, taking social and economic factors into account
- optimizing the potential for positive impacts to arise from our operations to levels as high as reasonably achievable, taking social and economic factors into account
- continually improving the management of our operations so we may respond to the economic, environmental, and social expectations of our employees, communities, shareholders, governments and the public

In adopting these principles, Centerra recognizes a continuing commitment to behave ethically and contribute to society through the creation of wealth, employment, and the sale of its products and services on a long-term basis.

# CORPORATE RESPONSIBILITY GOVERNANCE



Aspects of corporate responsibility are considered by various committees of Centerra's board of directors, including the safety, health and environment, corporate and social responsibility, audit, governance, and human resources committees.



Our memberships signal our desire to apply responsible mining practices across our operations and partnerships.

# MEMBERSHIPS AND COMMITMENTS

Our external memberships and commitments provide an opportunity to learn from and align our activities with good international industry practice.

Centerra became a Supporting Company of the Extractive Industries Transparency Initiative (EITI) in 2011. The EITI is a coalition of governments, companies, civil society, investors, and international organizations. The EITI contributes to improved governance in resource-rich countries through the verification and publication of all company payments to governments as well as government-reported revenues from oil, gas, and mining. Centerra has played an active role in promoting the EITI in the Kyrgyz Republic and Mongolia. Our operations were among the first to establish, report, and help improve EITI infrastructure in their respective countries.

Centerra has been a signatory to the International Cyanide Management Code for the Manufacture,

Transport, and Use of Cyanide in the Production of Gold since 2009. This Cyanide Code was developed by a multi-stakeholder steering committee under the guidance of the United Nations Environmental Program and the predecessor of the International Council on Mining and Metals. The objective of the Cyanide Code is to improve the management of cyanide used in gold mining and assist in the protection of human health and the reduction of environmental impacts.

Centerra is also a member of the World Gold Council. Its global advocacy for gold plays a key role in the development of a responsible gold mining industry. The Council's members regard the management of the local environment and relationships with local communities as paramount considerations during the lifetime of any mine project.



Our operations have been recognized or received awards for the quality of our responsible mining activities.

#### AWARDS

Awards and recognition received in 2012 include the following:

- Kumtor received the "Bona Fide Partner of the Year Award" from Super Info, Kyrgyzstan's largestcirculation newspaper, for contribution to Kyrgyz economy, transparency, and charitable work.
- Boroo was recognized by the Ministry of Mining as an "Economic Entity that Ensures Occupational Safety".
- Boroo was recognized as one of the "Best Socially Responsible Organizations of 2012", for its reclamation activities, by The Ugluunii Sonin Morning News newspaper.
- Kumtor received "Partnership 2012" award for the film "The Four Elements" commissioned by Kumtor and detailing its mining operations in the category

"best coverage of environmental security" in a competition sponsored by CSR Business Network Kyrgyzstan and the Development Policy Institute.

- Boroo received the "Best Eco Mine" award by the Mongolian Mining Journal.
- The development of a new wing at the Maternity Hospital No.1, financed by Boroo, was recognized among the "Best Development Projects of 2012" announced by the Ugluunii Sonin, a Mongolian newspaper.
- Centerra Gold Mongolia received "Best Exploration Company" award by the Mongolian Mining Journal, noting sustainability practices such as reclamation and water use.



As part of our corporate responsibility reporting, we conducted a review to identify our material - or most significant sustainability issues.

### MATERIALITY ASSESSMENT

Material issues are those which are considered important by several key stakeholders, have the ability to significantly impact our business performance, and can be influenced by our actions. We use three complementary approaches to identify our material issues:

First, we continue to engage in conversations with our stakeholders about issues and concerns they express about our operations. Examples are detailed further in the biodiversity and stakeholder engagement sections of this report.

We also acknowledge our dialogue with the Kyrgyz Republic government related to its efforts to renegotiate certain legal agreements and

Second, we benchmarked the coverage of our previous corporate responsibility report against

associated environmental claims.

similar reporting by a selected peer group. This allows us to review key issues that a majority of our sustainability reporting peers are discussing, consider the relevancy of these issues, and if they should be included in Centerra's reporting.

Third, our membership in or support of industry and multi-sectoral initiatives, such as the World Gold Council, the Cyanide Code, and the Extractive Industries Transparency Initiative (EITI), and our participation in a variety of local and international events, allows us to remain abreast of societal, peer and advocacy expectations, and emerging trends and standards. This process informs our management judgment on determining material issues.

We also continue to monitor the way in which we are being portrayed in the media. Our media analysis in the Kyrgyz Republic shows that the



number of articles covering Kumtor or Centerra more than tripled from 1,037 items (15 percent of which were critical) in 2011 to 3,336 (25 percent critical) in 2012.

We have determined our material issues to be:

- Economic performance, including local benefits
- Environmental performance, including waste management and biodiversity
- Community investments, including engagement and transparency

• Health and safety performance

Kumtor has also published its own environmental and sustainability report, which can be accessed on Kumtor's website (www.kumtor.kg). Kumtor's report became the first report by an organization operating in the Kyrgyz Republic which adopted the Global Reporting Initiative's sustainability reporting framework.





Following a strong 2011 performance, we experienced a challenging 2012

Our consolidated gold production of 387,076 ounces was significantly lower than 2011. This was due to a 46 percent decrease in production at Kumtor as a result of unexpected acceleration of ice and waste movements. These created unsafe mining conditions and the need to revise Kumtor's mining plan.

During 2012 we also achieved a very significant increase in reserves at Kumtor and acquired 100 percent interest in the Öksüt property in Turkey in January 2013. In Mongolia we were successful in converting the Altan Tsagaan Ovoo (ATO) exploration license to a mining license, and we received the necessary permits to restart the heap leach operation at Boroo.

We continue to create and contribute significant economic value in the countries and communities where we operate. This includes direct contributions to the national and regional governments; wages and benefits; taxes, royalties and social and community development programs; local procurement of goods and services; and indirect

benefits to local economic development including improvements to local infrastructure. In addition, the Kyrgyz Republic, through the state owned Kyrgyzaltyn Open-End Joint Stock Company, is Centerra's largest shareholder, owning 77,401,766 common shares, which represents 32.74 percent of the outstanding shares.

Kumtor continues to have a very significant impact on the economy of the Kyrgyz Republic, even if that impact declined in 2012 due to lower gold production. In 2012 Kumtor's contribution to the GDP was 5.5 percent (11.7 percent in 2011), its share of the national industrial output was 5.5 percent (11.7 percent in 2011), and its share of the national industrial output was 18.9 percent (26.19 percent in 2011).

#### **Direct Economic Value Generated and Distributed (US\$)**

Company	2011	2012	
Revenues	044 072 770	F22 FF2 407	
Kumtor	941,072,769	533,553,407	
Boroo Centerra	79,270,937 1,020,343,706	127,183,519 660,736,926	
Operating Costs	1,020,343,700	000,730,720	
Kumtor	283,015,058	202,547,051	
Boroo	37,676,434	47,334,782	
Centerra	318,504,605	250,531,005	
Goods, Services	310,304,003	230,331,003	
and Materials Purchased			
Kumtor	186,112,664	98,070,364	
Boroo	31,249,152	39,289,805	
Centerra	210,038,530	128,723,511	
Exploration Expenditures	210,000,000	120,720,011	
Kumtor	13,635,847	11,772,443	
Boroo	11,378,759	10,007,810	
Others	14,582,758	16,014,240	
Centerra	39,597,364	37,938,794	
Capital Expenditure	0.,0,,,001	3. 1. 33 1, 7 1	
Kumtor	180,714,697	397,031,394	
Boroo	6,301,074	9,768,510	
Others	923,403	3,817,585	
Centerra	187,939,174	410,617,489	
Other Operating Costs		,,	
Kumtor	21,534,000	73,974,000	
Boroo	6,169,000	5,496,000	
Centerra	27,703,000	79,470,000	
Employee Wages and Benefits	,,	, .,	
Kumtor	96,902,394	104,476,687	
Boroo	6,427,282	8,044,977	
Centerra	103,329,676	112,521,664	
Payments to Providers of Funds	· ·		
Kumtor	125,000,000	0	
Boroo	120,000,000	18,000,000	
Centerra	99,322,000	31,406,000	
Taxes and Royalties			
Kumtor	146,637,113	74,697,477	
Boroo	10,756,662	18,310,309	
Centerra	157,393,775	93,007,786	
Payments to Governments <sup>1</sup>			
Kumtor	383,171,869	298,641,158	
Boroo	0	0	
Centerra	383,171,869	298,641,158	
Community Investments			
Kumtor	11,494,808	23,954,691	
Boroo	3,682,693	5,359,731	
Centerra	15,177,501	29,314,422	
Economic Value Retained			
Kumtor	291,758,436	-420,221,770	
Boroo	-116,693,685	12,906,377	
	(203,329,183)	(560,903,898)	

 ${\sf NOTE}\, [1]\, {\sf Kumtor's}\, {\sf revenues}\, {\sf are}\, {\sf based}\, {\sf on}\, {\sf accruals}\, {\sf and}\, {\sf payments}\, {\sf to}\, {\sf government}\, {\sf are}\, {\sf on}\, {\sf cash}\, {\sf basis}\,$ 



Citizens of our host countries provide over 95 percent of our full time staff at our operations.

#### LOCAL HIRING

We believe the wages paid to our workforce make us one of the most attractive employers in the regions in which we operate. With a workforce of 3,361 on January 1, 2013, Kumtor remains one of the major employers in the Kyrgyz Republic. We have taken great steps in recent years to further improve the hiring process, its transparency, and its credibility. Our information centers support our local hiring efforts. We also involve community observers during the screening and interview process at Kumtor.

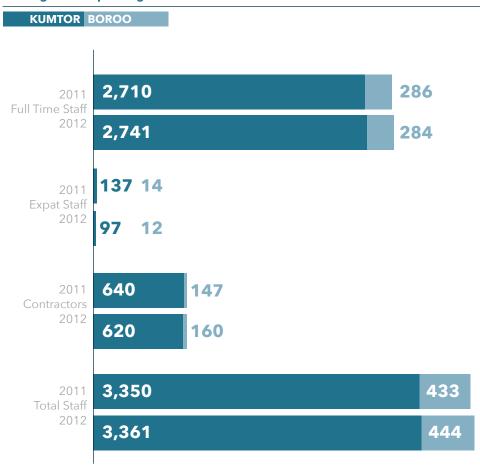
In December 2010, approximately 50 percent of the Boroo workforce was downsized due to depleting reserves at Boroo and the lack of government approval to commence operations at Gatsuurt. In 2011, in consultation with the trade union, we provided English language and computer

skills training to redundant employees to further improve their employability. At the end of 2012, the workforce at Boroo numbered 444.

At Boroo, we continue to advertise our external vacancy announcements and post them at the labor offices in our local communities.

When external vacancy announcements are used, our policy in Mongolia is to fill these positions from the local communities, provided a candidate with the right knowledge, skills, and experience for the job is available. For temporary projects, such as reclamation and tailings dam extension, we usually invite experienced former employees and casual workers, in addition to using external vacancy announcements to fill positions requiring a lower level of skill or experience.

#### **Staffing at Our Operating Sites**



#### Proportion of Nationals in Full Time Staff (number, percentage, year)



We believe that the biggest contribution we can make to the well-being of the communities in which we operate is through the creation of long-term, well-paid employment opportunities.



#### EMPLOYER OF CHOICE

The high entry level wages at our operations and benefits offered to our employees makes us an employer of choice.

The benefits available to our full-time employees at Kumtor include:

- cash awards on employee jubilee, marriages, retirement, female employees giving birth to or adopting a child
- home improvement loans

- vacation and rest allowances
- allowance for temporary disability as a result of injury at work or occupational disease

The benefits also include monthly transfers equivalent to 1.5 percent of the monthly national payroll to the account of Kumtor's trade union.

These funds are to be directed towards the improvement of the health of Kumtor's workforce.

In Mongolia, full-time and part-time employees are all eligible for the same statutory benefits. These include pension, family benefits, health care, compensation for job-related accidents or occupational diseases, and unemployment insurance. The benefit of full-time employees also includes scheduled wage increases and employee loans. The Mongolian social insurance law applies to both nationals and expatriate employees. This calls for both compulsory employee and employer contribution.

We also support collective bargaining with unions to reach collective agreements. The collective agreement signed between the trade union committee and the administration of Kumtor, which became effective January 1, 2013, covers approximately 97 percent of our employees and was the first of its kind negotiated in the Kyrgyz Republic. This agreement covers a wide range of issues including: labor compensation, schedule

of work, health and safety, probation, benefits for employees and their families, and labor dispute resolution. The agreement also provides for a notice period (one month) for significant operational changes.

At Boroo, all employees are covered by a collective agreement, with the exception that the compensation of senior nationals (about 20 employees at the superintendent, manager and director level) is determined by management and not by the collective agreement. The agreement also includes a clause which requires a minimum two month notice period in advance of liquidation or reorganization of the company.

#### **Entry Wage Compensation Ratios**

	2011	2012
Country Minimum Hourly Wage		
Kumtor (soms)	4.13	4.55
Boroo (MNT)	826	826
Entry-Level Hourly Wage		
Kumtor (soms)	57.76	60.36
Boroo (MNT)	4,269	5,466
Ratio of Entry-Level Wage/Country Minimum Wage		
Kumtor	14:1	13:1
Boroo	5:1	6:1



Centerra aims to purchase high quality and cost effective goods and services from local suppliers.

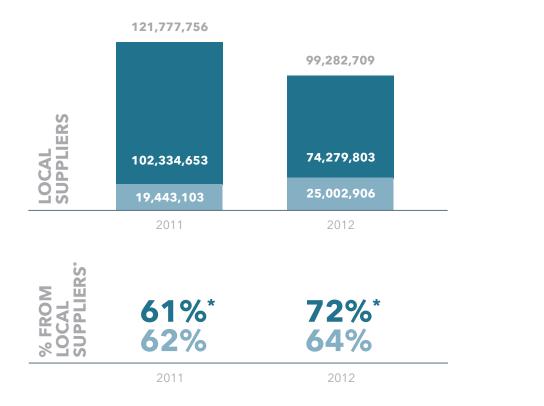
#### PROCUREMENT

Centerra aims to purchase high quality and cost effective goods and services from local suppliers. Our internal and external stakeholders encourage us to continue to innovate our local procurement practices, and help reduce barriers for local suppliers and vendors.

Our data show that we continued to procure over 60 percent of goods and services required in Mongolia locally. However, challenges we face in the Kyrgyz Republic have not allowed us to achieve similar milestones for Kumtor. Barriers include the relatively small scale and limited growth of the extractive industry, and the resulting lack of related production or distribution centers of certain specialized goods and services. Examples of items we are unable to procure locally include large mining trucks and chemical reagents.

In the Kyrgyz Republic, we continue to support local vendors by reducing their working capital requirements. Periodically, we review our international purchases to identify their local availability. We also continue to support Kumtor-unrelated economic development activities. These range from financing microcredit facilities to mapping the business needs and opportunities in the Issyk-Kul region.





<sup>\*</sup> Kumtor's figures when adjusted by excluding original equipment manufacturer, capital equipment and parts, major consumables, and reagents that are not readily available for purchase in the Kyrgyz Republic, and fuel, which is imported from Russia.



Kyrgyzstan expects to lose 64 to 94 percent of its glaciers by the end of this century.

# FINANCIAL IMPACTS OF CLIMATE CHANGE

Climate Change is emerging as an important societal challenge, including in the mining sector. For Centerra, the potential effects of climate change include mainly risks, particularly in colder or extreme climates such as those encountered in the high altitude mountains of the Kyrgyz Republic. The impacts on our operations are highlighted below.

For Boroo, which is nearing its mine closure period, financial impacts associated with Climate Change are not expected to be significant. Overall, increased average temperatures and longer growing cycles may have a net positive impact on success of ongoing reclamation activities. However, these positive impacts may be offset by changes or severity in rainfall patterns.

The effects of climate change across the Kyrgyz Republic have been described and forecasted in the Kyrgyz government's 2009 submission to the United Nations Framework Convention on Climate Change. The latest submission notes that, by the end of this century, the Kyrgyz Republic expects to lose up to 94 percent of its glaciers. Related concerns include the melting of ice within natural moraine dams of high altitude glacial lakes. This process reduces the stability of moraine dams and may generate a natural hazard known as a glacial lake outburst flood, a sudden release of large volumes of water. Petrov Lake, located near the Kumtor mine and supplying our operation with water, is one such high altitude lake which appears to be susceptible to a glacial lake outburst flood hazard.



We have supported or commissioned several studies over the past few years to better understand the characteristics of the moraine dam of Petrov Lake and the potential risks that may be associated with a related glacial lake outburst flood event. In response to the findings of these studies, we have begun to monitor movements of the moraine dam,

commissioned a study on how best to reduce the volume of Petrov Lake, and are planning to install an early warning system. We expect to provide additional safeguards for potentially affected mine infrastructure.





We take a systematic 'plan-act-monitorimprove' approach to evaluating and managing our environmental footprint.

## ENVIRONMENTAL MANAGEMENT SYSTEMS

In this section, we highlight activities ranging from partnership-based biodiversity stewardship efforts in the Kyrgyz Republic to award winning mine reclamation activities in Mongolia.

We also acknowledge and discuss challenges and concerns being voiced about our environmental performance by our stakeholders.

This starts with environmental impact assessment at an early project planning stage, continues with the implementation of an environmental management program, and also incorporates mine closure planning. Our operations have developed and implemented Environmental Management Systems (EMSs) which are generally aligned with ISO 14,001 principles. These EMSs are designed to address the effects of operations on the environment and to monitor compliance with our various permits and other requirements. The systems provide for scheduled monitoring, engineering controls, reporting, and audits.

### MATERIAL INPUTS

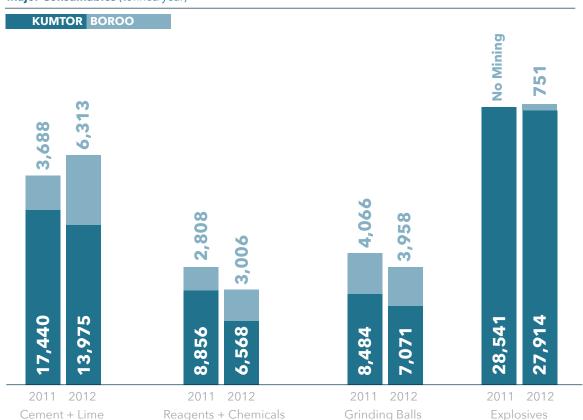
Mining, milling and metallurgical operations require large quantities of materials to generate unrefined gold bars, our end product.

We continue to review our material consumption in order to ensure efficiency and control our costs. The major raw materials we consume include cement and lime, reagents and chemicals (including cyanide) used in the milling or leaching processes, in addition to grinding balls used to crush the ore to enable gold extraction. We also consume substantial quantities of non-renewable materials, such as fuel, lubricants, grease, and explosives. Gold mining operations do not provide many

opportunities to use recycled materials, although we seek to maximize the recycling of some of our waste products.

In 2012, we saw a decline in material consumption at Kumtor compared to 2011. This was due to the seven week in the mill shut-down once the stockpiled ores were exhausted. Conversely, resumption of heap leach operations at Boroo, which started during the fourth quarter of 2012 and reduced mining activities in 2012, due to the completion of mining activities, increased our material consumptions of major mill supplies at Boroo.

#### Major Consumables (tonnes/year)





Centerra seeks to avoid, reduce, mitigate or offset significant impacts on biodiversity and ecosystem services.

### BIODIVERSITY

During the reporting period, some of our stakeholders in the Kyrgyz Republic raised concerns about our exploration activities, their location in relation to the Sarychat Ertash Nature Reserve and its buffer zones, and impacts on biodiversity. These concerns highlighted the need to re-engage with our conservation-oriented stakeholders.

In addition to considering the outcomes of several Kyrgyz government sponsored commissions, we hosted a biodiversity workshop in the Kyrgyz Republic, in October 2012.

The information and recommendations we received during this workshop helped us develop Kumtor's Biodiversity Management Strategy and Action Plan, which has since been published on Kumtor's website.

In contrast to the Kyrgyz Republic, our operations in Mongolia have a more limited biodiversity profile. Boroo's project EIA and our more recent reclamation-related monitoring identified two Mongolian Red Book listed butterflies, one of which is also listed by the World Conservation Union

(IUCN) in the "Vulnerable" category. Since 2008, we have also collaborated with the Biological Institute of the Academy of Science, the Eco-Asia Institute, and the Governor's Office of Bayangol Soum, to re-introduce the marmot back to the region.



We learned that, since the mid-1990s, when Kumtor's operations started, the number of Marco Polo sheep near Kumtor has increased from 750 to 2,500. Also, snow leopards, which had been decimated through poaching, have reappeared. DNA-supported research shows the presence of 18 individual snow leopards in the nature reserve neighboring Kumtor.

Mining and milling are energy intensive activities. Energy costs, particularly those associated with fuel, are therefore significant cost items at our operations.



# ENERGY USE AND CARBON EMISSIONS

We have been reporting our carbon footprint by participating in the Carbon Disclosure Project (CDP), an independent international not-for-profit organization that tracks and reports corporate information pertaining to climate change. We have also taken steps to better understand and manage our carbon footprint. Following up on an energy audit at Kumtor, which was completed in November 2008, we developed an energy use and carbon emission inventory for Kumtor for 2012. Given its scale, the performance at Kumtor drives our energy use and Greenhouse Gas (GHG) emission profile.

Overall, the increase of material movement at Kumtor and the decrease in gold production resulted in a significant increase of Centerra's GHG intensity from 2011 to 2012. The Kyrgyz Republic generates the majority of its electricity

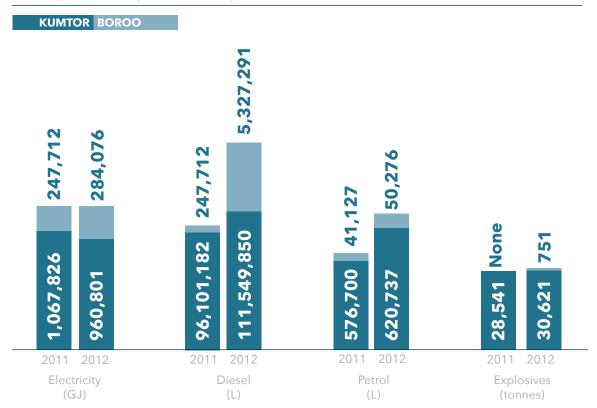
through hydropower. This means that efforts targeted at reducing our diesel fuel consumption and replacing it with grid power would create the greatest reduction of our carbon footprint at Kumtor. The results of our GHG footprint study will continue to be reviewed in order to develop strategies that could be pursued to reduce our GHG intensity at Kumtor.

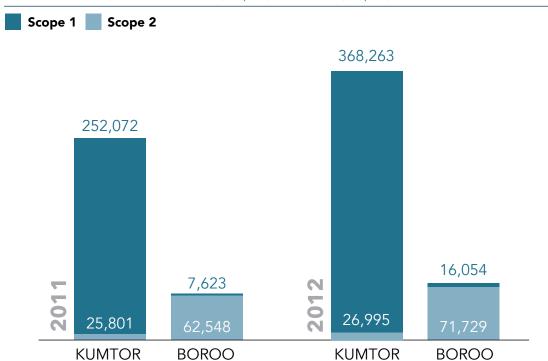
The scale of production and energy intensity at Boroo is relatively small compared to Kumtor. Boroo ceased mining activities in 2010, but resumed mining of remaining ore for part of 2012. Boroo also resumed heap leaching in late 2012. Overall, this resulted in an increase in energy consumption and associated GHG emissions during the reporting period.

Mongolia's grid electricity, which is used by Boroo for its operations, is largely generated by burning coal and other fossil fuels. Therefore, the normalized GHG footprint associated with Boroo's electricity consumption is greater than that of Kumtor. In 2012,

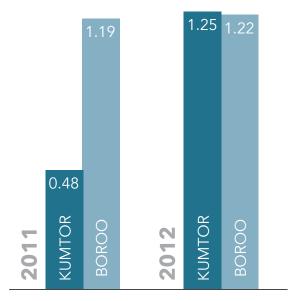
Boroo produced approximately 20 percent more gold than in 2011 and we saw a corresponding increase in GHG emissions.

#### **Electricity, Fuel and Explosives Consumption**





#### **Greenhouse Gas Intensity**



NOTE I GHG = Greenhouse Gas; Intensity Ratio calculated as Total GHG emission (tonnes of  $CO_2e$ )/Total Gold (ounces)



We aim to reduce our GHG intensity by reducing energy consumption and increasing energy efficiency.

# ENERGY CONSERVATION MEASURES

Both of our major projects have conducted energy audits within the past five years and have been implementing some of the recommendations contained in those audits.

Kumtor has started to reduce the use of diesel generators for dewatering pumps and is connecting these to the electric grid instead. Additional conservation measures accomplished during the reporting period include the introduction of more energy efficient lighting, voltage regulated lighting, and the use of timers to automatically control electricity usage in infrastructure and buildings at the mine.

# AIR EMISSIONS

Our operations do not feature significant point source emitters for NO2 or SO2 as we use electricity supplied by the national grid. However, we conduct regular monitoring of our ambient air quality. For both Kumtor and Boroo, particulate matter, primarily from fugitive dust produced from transport fleet traffic on the access road to and on site, is the

principle source of air emissions. Responding to concerns about impacts from dust generated by Kumtor's vehicle movement, we continue our dust suppression program by maintaining the access road in Barskoon valley, planting trees, and watering the road during the dry summer months.



Water management is an integral and significant part of our operations.

## WATER CONSUMPTION

Water management is an integral and significant part of our operations. The geographic and climate conditions play an important role in water consumption and its overall management at our operations. During the reporting period, some stakeholders, including Kyrgyz government sponsored commissions, raised a series of concerns about our water use and water quality at Kumtor. Key elements are summarized in this report, and additional information is available in Kumtor's web-posted environmental and sustainability report.

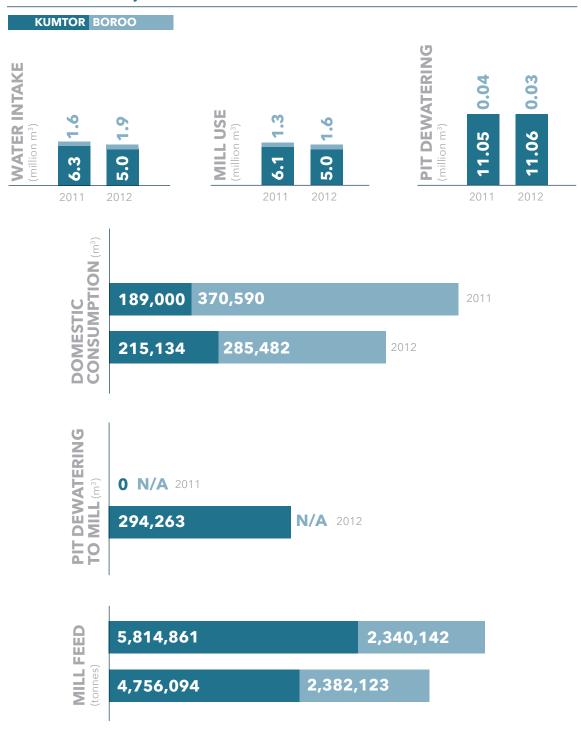
Kumtor obtains approximately five million cubic meters per year from Petrov Lake, a glacial lake located near our operation. The amount of water pumped from the Lake Petrov ranged from approximately eight percent of the total natural inflow per year into the lake in 2011 to five percent in 2012. Despite supplying Kumtor's water needs, this high altitude lake is growing due to increasing inflows from melting glaciers.

As part of the processing of ore, Kumtor recycles annually approximately five million cubic meters of

effluents within its mill. A similar volume is also discharged annually to its tailings management facility. This effluent contains cyanide and is subject to detoxification and treatment prior to discharge to the Kumtor River during the summer months when the river is not frozen. In addition, Kumtor discharges large quantities of glacial melt water, which reports to its open pit, to ensure safe mining conditions.

In contrast, the climatic conditions at Boroo provide an opportunity to maintain a 'zero discharge' facility. This means that the water balance at Boroo is negative and there is no need to discharge effluents into surface water bodies. Boroo obtains its water from a series of groundwater wells located in the Boroo River valley. Hydrogeological assessment had determined that Boroo's extraction of the water would not generate a significant impact on the aquifer. Boroo supplements its fresh water intake with water recycled from its tailings management facility.

#### **Water Use and Intensity**



Water Use Intensity Ratio\*

2011 1,083 | 543 2012 1,102 | 658

<sup>\*</sup>Make-up water for mill and heap leach pads (liters) /Mill feed (tonnes); # includes water used for road irrigation and dam construction; n/a is not available



Our sampling and analytical programs allow us to observe the efficiency of our treatment processes, discharged water quality and any environmental impacts.

## WATER QUALITY

Boroo is a 'zero discharge' facility. This means that Boroo's effluents are directed to and contained in the tailings storage facility without requiring off-site discharge. During periods when temperatures are above freezing, the water from the tailings storage facility is re-cycled to the plant for re-use.

This is not the case for Kumtor which requires discharge of large quantities of glacial melt water collecting in Kumtor's open pit, along with treated effluents from the mill and the mine camp. These discharges reach the Kumtor River before passing through Kumtor's designated compliance point further downstream.

Our data show that we have been in material compliance with our key water quality standards. Kumtor's environmental and sustainability report identifies and explains exceedances and how we plan to address them. These plans include exploring the application of commonly used ecological risk-based approaches to develop site specific standards for parameters such as ammonia.

In response to stakeholder concerns about sulfate levels, we have also raised the profile of this aspect in our closure planning process. We commissioned international consultants to undertake a sulfate loading and predictive study. A key conclusion of this study, which was generated in 2013, shows that it was possible to maintain compliance with the maximum allowable concentrations of sulfate during the life of mine, provided Kumtor implements good water management practices and controls.

Our operations are routinely subject to inspections by local government agencies. Following a series of questionable results presented by Kyrgyz government commissions in early 2012, the management and board of Centerra commissioned reputable international experts to provide an independent assessment of Kumtor's water quality impacts. Key conclusions contained

in their reports, which have been posted on Kumtor's website and are consistent with Kumtor's own findings, noted that there was no evidence of "undue high concentrations of cyanide and toxic elements in surface water." We will continue to engage with the Kyrgyz government and other stakeholders to resolve water quality and other environmental concerns.

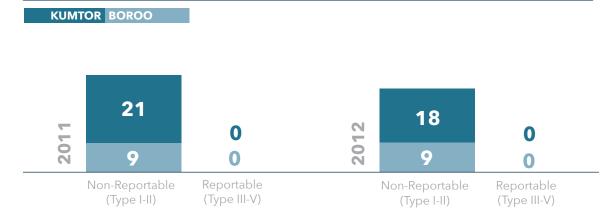
## ENVIRONMENTAL INCIDENTS

Centerra maintains a system for reporting environmental and safety related incidents. This is based on a five point reporting system which considers level of environmental impact, national and other regulatory compliance, and concern to local communities.

Senior environmental staff are immediately informed of all incidents and allocate the appropriate classification level. For Type I and

Type II incidents, which are considered insignificant in terms of the scale and severity of impacts, there are no external reporting requirements. Incidents classified as III to V are reported to our board of directors and, in many cases, these trigger also external reporting requirements to relevant local regulatory agencies. No reportable environmental incidents occurred at our operations during the reporting period.

#### **Environmental Incidents and Spills**





Kumtor received a series of claims and directives totaling approximately \$467 Million.

# INSPECTIONS AND CLAIMS

In December 2012 and in early 2013, Kumtor received a series of claims or directives from the Kyrgyz State Inspectorate for Environmental and Technical Safety Agency and the State Agency for Environment Protection and Forestry totaling approximately \$467 million. These claims focused on allegations associated with land damage, water use, waste management, and waste rock disposal practices.

Centerra and Kumtor responded promptly and thoroughly to these claims. We highlighted that our operations are designed to meet Kyrgyz and international standards. Our operational performance has been demonstrated over the years in systematic audits conducted by Kyrgyz and international experts. At the time of writing this report, these claims were not fully resolved; however, we remain committed to work diligently with the Kyrgyz government to fairly resolve them.

During the reporting period, Boroo did not receive fines or sanctions by regulators for non-compliance with environmental laws and regulations.



Waste management is addressed at each of our mines by implementing a waste management plan.

## WASTE MANAGEMENT

Our mines produce domestic, industrial and hazardous waste streams. Domestic waste typically includes food scraps and paper materials from camp facilities and offices. Industrial waste typically includes plastic containers, wood, scrap metal, and tires. Our main hazardous waste includes cyanide packaging, sewage sludge, waste oil, batteries, and expired reagents.

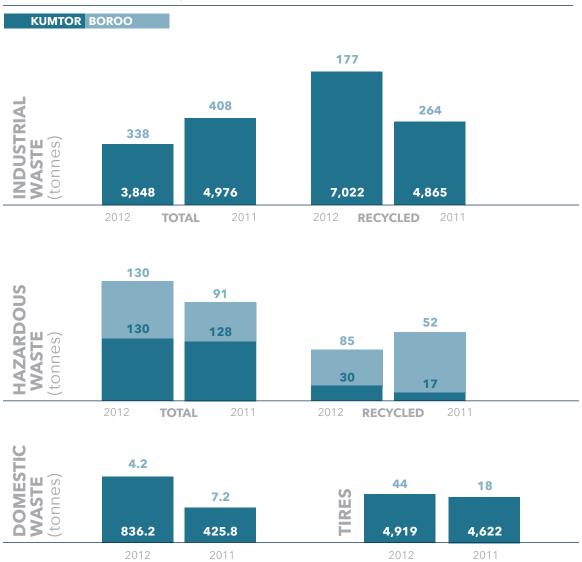
Wastes such as scrap metal, timber, and waste oil are typically sold or recycled. Waste materials that may have the potential to be recycled or reused, but for which no appropriate local recycling market is readily available, are temporarily stored on site.

In response to Kyrgyz government inspections and independent audits, Kumtor further upgraded its waste management practices in 2012. This included increasing scrap metal recycling, improving the

storage of waste tires and sea containers, overhauling the waste oil collection system, and renewing efforts to find reuse or disposal options for waste tires. At Kumtor, the use of burn pits were phased out in 2011.

Boroo generates smaller volumes of waste. Waste oil, equipment batteries, plastics, metals, and rubber are typically segregated and recycled off site. Domestic waste is generally landfilled and burned. Reagent and other packaging material is typically burned in open burn pits. Efficient turbo burners are used to incinerate any used spill absorbents.

#### Waste Produced at Kumtor (Weight in tonnes)





Removal of overburden at Kumtor includes glacial ice, moraine and associated historic waste rock deposits.

## WASTE ROCK, ICE AND TAILINGS

Waste rock material and tailings from mining and milling generally comprise the majority of waste materials generated by volume from open pit gold mining operations. At Kumtor, the removal of overburden materials also includes glacial ice, moraine and associated historic waste rock deposits.

Historically, Kumtor deposited waste rock on glaciers, mainly the Davidov Glacier, located near the open mine pit. This deposition was carried out in designated areas and in accordance with Kyrgyz regulatory approved mine plans. The presence and movement of glacial ice and waste dumps into the Kumtor open pit, which is planned to be expanded to allow mining until 2026, continue to require the removal of glacial ice materials.

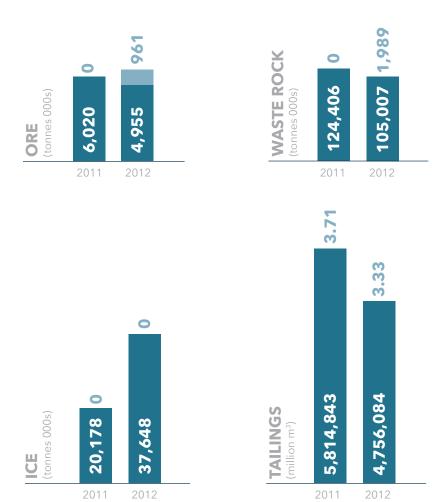
According to its submission to the United Nations
Framework Convention on Climate Change, the
Kyrgyz government expects that up to 94 percent of
the country's glaciers will be lost by the end of this
century. We have been observing glacial melting and
movements at the five active glaciers located in part

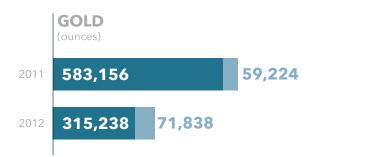
within the Kumtor concession area. The estimated total of 147 million tonnes of ice removed between 1995 and 2026 to enable and safeguard the Kumtor mine, is approximately five percent of the estimated ice losses attributable to Climate Change for the five Kumtor area glaciers during the same period.

In December 2012 and February 2013, Kumtor received a series of claims, including a significant claim for alleged damages in relation to the previously permitted placement of waste rock dumps in designated areas, including on glaciers which surround the Kumtor open mine pit. We continue to work diligently with the Kyrgyz government to resolve these claims.

In contrast to Kumtor, Boroo is in the final phases of its mining operation. This means that Boroo continues to mill and process mainly mined and stock-piled ore, including for placement on heap leach pads, and does not generate material amounts of waste rocks or tailings.

KUMTOR BOROO





 ${\sf NOTE} \mid {\sf At\ Kumtor, waste\ rock\ includes\ pit\ fill\ and\ moraine\ that\ is\ moved\ in\ the\ mining\ process}$ 



We conduct mock emergencies and hold competitions to test our emergency preparedness.

# EMERGENCY PREPAREDNESS

Each of our operations maintains an emergency response capability suited to its working environment and risks. Our emergency response plans are generally reviewed and revised annually. At both operations, we maintain an emergency response team, on-site medical doctors, and on-site emergency response equipment. In order to test and refine our preparedness procedures, we conduct mock emergencies and Kumtor hosts an annual competition among the emergency response teams of our operations and selected contractors.

The use and management of cyanide is an important element in our emergency response planning. In April 2012, the International Cyanide Management's Institute (ICMI) recorded the certification of Kumtor's cyanide transportation operation from our marshaling yard in Balykchy to the Kumtor mine site as being in full compliance with ICMI's transportation protocol.

Also, independent audits have deemed the remainder of both Kumtor's and Boroo's gold mine operations to be in "substantial compliance" with the Cyanide Code. We are working towards achieving full compliance with the Cyanide Code.



Independent monitoring and inspections of the dam structure show that it is performing as designed.

# KUMTOR'S TAILINGS DAM

In late 2011 and 2012, Kumtor's tailings management facility and its associated dam had been subject of reviews by Kyrgyz government sponsored commissions, revisiting the issues which had been reviewed by several other commissions since 1999. During that year, we observed and reported to the relevant Kyrgyz regulatory agencies movements of Kumtor's tailings dam, which is a compacted earthen fill dam structure approximately three kilometers in length. Kumtor constructed a shear-key and confining toe berm (buttress) and

has been monitoring its effectiveness.

Much like a conceptual door stop, the mitigation measure is designed to slow and arrest the dam movement over time. Independent monitoring and inspections, supported by over 150 instruments placed within the dam body, show that Kumtor's tailings dam structure is performing as designed.



We routinely test the ARD characteristics of the ore, waste rock, and tailings.

# ACID ROCK DRAINAGE

The term acid rock drainage (ARD) is used to describe the outflow of waters that have been acidified by contact and exposure to sulfide-bearing rocks, thus reducing the pH levels which can liberate and mobilize metals into the environment. Our operations routinely conduct tests to determine the ARD characteristics of the ore body, tailings, and waste rock.

Over the course of several independent evaluations, including during the reporting period, it has been determined that the majority of our waste rock at Kumtor has a strong neutralizing potential.

This is derived from a high proportion of carbonate materials present in the deposit.

However, in response to stakeholder concerns about sulfate levels at Kumtor, we have raised the profile of this aspect in our closure planning process. We commissioned international consultants to undertake a study and review the loading and model the fate of sulfate. The results obtained in 2013 show that it is possible to maintain compliance with the maximum allowable concentrations of sulfate during the life of mine, provided Kumtor implements good water management practices and controls.



During the reporting period, Boroo achieved award winning reclamation performance.

## MINE CLOSURE

Our commitment to safe and responsible mining also means that we plan for the full life cycle of mining. This includes mine closure. As part of this process, we seek to reduce and limit our long term environmental and social impacts. With each of our projects, we consider how to avoid, minimize, and mitigate impacts from exploration through the closure process.

Our operations have a process to develop and update closure plans through the life of the mines. The plans are updated regularly and are adjusted to material changes that have occurred and may significantly affect the final closure process and costs. We also continue to engage with communities, local stakeholders, and government agencies to plan, develop, and implement mine closure activities. In addition, we consider supporting related initiatives that aim to improve habitats or create agricultural land-use opportunities.

We believe that, where practical, progressive and on-going reclamation is the best way to ensure we minimize impacts to the areas that we disturb. Nevertheless, the majority of rehabilitation can generally only be performed following the completion of mining operations. We record estimated final closure costs based on conceptual closure plans, and accrue these costs according to the principles of International Financial Reporting Standards (IFRS).

Kumtor established a reclamation trust fund to pay for mine closure costs from the revenues generated over the life of mine. Kumtor is planning to introduce a geographical information system-based process to track and manage land disturbances and reclamation activities. At Boroo, 50 percent of the upcoming year's annual reclamation budget is deposited by Boroo into a government account. These funds are recovered by Boroo when the annual reclamation commitments are completed.

By the end of 2012, our future undiscounted decommissioning and reclamation costs have been estimated to be \$61.6 million, before salvage value. This includes an estimated \$37.0 million for the decommissioning and reclamation costs for the Kumtor mine.

In December 2012, we revised the closure plan at Boroo. This resulted in an extension of the reclamation spending by an additional two years, ending in 2020. The next regular update to the closure costs estimate at Kumtor is scheduled for 2013 and will take account of the extension of its mine life to 2026.

#### **Centerra Land Management (Hectares)**

	2011	2012
Total Amount of Land Owned (Licensed)		
Kumtor	26,320	26,320
Boroo	3,660	3,660
Total of Land Disturbed and Yet not Rehabilitated		
Kumtor	N/A	N/A
Boroo	459.1	428.8
Total Amount of Land Newly Disturbed Within the Reporting Per	iod	
Kumtor	N/A	N/A
Boroo	0	10.7
Total Amount of Land Rehabilitated Within the Reporting Period		
Kumtor	0	0
Boroo	55.2	41.0
Total Amount of Land Rehabilitated and Handed Over to Local G	overnment	
Kumtor	0	0
Boroo	318.7	359.7

NOTE | N/A - data not available at time of reporting and will be tracked for future reporting; total disturbed area during mining operation at Boroo is 870.5 ha; the licensed areas noted for Kumtor do not include regional exploration licenses.



One of Centerra's core corporate values is to operate safely at all our operations.

## SAFETY, HEALTH AND WELLNESS

We invest substantial amount of time into health and safety training. At Kumtor, with a total workforce of 3,361 in 2012, this involved 12,157 person-days for training staff and contractors in 2012. At Boroo, which features a workforce of approximately 440, we provided 3,570 hours of training in 2011, and 1,257 hours in 2012.

The investment in health and safety training resulted in a positive outcome at our operations during the reporting period. Relevant indicators, such as reportable injury frequency and severity, typically used in the mining sector, highlight good health and safety performance at our mines. They also show that our mines outperform comparable operations in many parts of the developed world.

Boroo recorded no lost time incident during the reporting period and no confirmed cases of occupational diseases. Kumtor recorded two lost time injuries in 2011 and one in 2012. Kumtor also recorded one case of occupational disease and the total amount of compensation paid due to occupational injuries was nearly \$47,000.

Both of our operations continue to provide free influenza vaccinations. Kumtor also conducted smoking cessation and nutritional counseling campaigns. Unusual events during the reporting period included an outbreak of acute intestinal infection at the Kumtor mine site in July 2012. The results of the investigations showed that this infection did not originate at the mine, the mine

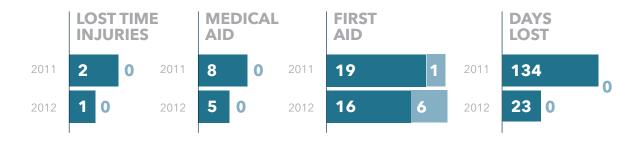
camp (food), or kitchen staff. The most likely source was a bacteria-carrying worker returning to work. In response, we introduced relevant training and communication programs that target hygiene and other preventative measures.

While drafting this report, we regretfully recorded one fatality at the Boroo mine site following a single vehicle rollover car accident on July 3, 2013.











**LTI** Lost time injuries





We continue to innovate and expand our stakeholder engagement processes.

## STAKEHOLDER ENGAGEMENT

We have established procedures to effectively listen to and communicate with our stakeholders, including regulators, shareholders, employees, local communities, and the general public.

Our stakeholder engagement efforts include structured processes. These help us develop a dialogue about the economic, environmental, and social expectations relating to our operations. They also enable us to us capture and resolve grievances.

At the corporate level, our engagement includes quarterly conference calls with industry analysts, investors, and media representatives in conjunction with the release of financial results, as well as regular presentations to, or meetings with, industry analysts and with institutional shareholders. Efforts focused on national and local stakeholders at our operations are highlighted in the following sections.

## ENGAGEMENT CONTEXT

Our approach to engagement is shaped by our desire for respectful and meaningful dialogue and the circumstances of our operations.

In the Kyrgyz Republic, for example, we witnessed civil unrest and a revolution in 2010.

There have been several government changes since. A third of the country's population continues to live below the national poverty line. Kyrgyzstan's Soviet past, along with uranium and other mining related environmental legacies continue to shape perceptions today. This context presents a

challenging backdrop to our stakeholder engagement processes.

Our own operational legacy issues include a spill of one of our cyanide shipments at Kumtor in 1998. We have also face a series of allegations and claims and on-going dialogue with the Kyrgyz government to renegotiate certain agreements. These activities have raised the profile of Kumtor and Centerra in the media.

## EXPANDING ENGAGEMENT

During the reporting period, we expanded our institutional capacity and local presence.

This includes reassigning, or hiring and training additional community relations officers. We also created a new director-level position for sustainable development at Kumtor. This position was filled in early 2012.

In 2012, we helped establish two regional committees in the Ton and Jety-Oguz regions, and a third was established for the city of Balykchy, were Kumtor's marshaling yard is located. These committees typically meet on a monthly basis, and membership of the committees comprises the akym (head of the region) or mayor (for Balykchy) as well as local deputies, heads of villages youth representatives, and NGOs.

These regional committees provide us with an opportunity for formal and structured stakeholder engagement. They also enable communities to prioritize funding requests which are consistent with local community needs, and to pursue issues of interest or concern.

To better respond to a material increase in media and underlying stakeholder interest, we expanded our communication channels in the Kyrgyz Republic. This includes a re-launch and update of Kumtor's multi-lingual website. We increased Kumtor-related news releases from 40 in 2011 to 67 in 2012, and commissioned an award-winning film "The Four Elements" about Kumtor's operation.

At the end of 2012, we started the monthly publication of multi-lingual newsletters and brochures. These are designed to provide project updates, and respond to frequently asked questions raised by our stakeholders. These printed materials complement our frequent face-to-face interactions with our stakeholders. These include hosting and contributing to a variety of workshops and meetings. Examples of such engagements are also highlighted in the biodiversity section of this report.

In 2012, the number and scope of Kyrgyz environmental inspections increased significantly as part of various Kyrgyz commission reviews. These included successive Kyrgyz Prime Ministers, representatives from NGOs, youth groups and the media. In 2012 alone, we hosted approximately 28 such inspection visits, involving approximately 300 individuals and a total of 560 person-days spent at the mine site.

We also commissioned and published independent assessments related to reports published by Kyrgyz government sponsored commissions, and an environmental due diligence study by an international environmental consulting firm about our performance. The associated reports have been published on Kumtor's website.

We also initiated a broader stakeholder mapping exercise for Kumtor which we expect to complete in 2013. To further improve our stakeholder engagement effectiveness, we organized a training event for our community relations officers (CRO) in the Kyrgyz Republic. This event was also attended by CROs from Mongolia and Turkey, as well as other community and public facing team members from our media relations and environmental departments.

#### CANADIAN OECD NATIONAL CONTACT POINT REVIEW

In March 2012, a coalition of three non-governmental organizations (NGO) jointly submitted a request for review to the Canadian National Contact Point (NCP) for the OECD Guidelines for Multinational Enterprises, in relation to Centerra's operations at the Boroo Mine and the Gatsuurt gold deposit. The request outlined alleged environmental and human rights concerns associated with Centerra's operations in Mongolia.

One key concern noted by the NGO coalition in its submission related to the protection of and community access to sacred burial sites at Mount Noyon and the Naadam festival held there. To ensure that our activities in the area do not significantly affect cultural heritage sites, we had already commissioned a survey of the area in 2005. This survey was conducted by the National University of Mongolia's Department of Anthropology and Archaeology. A number of sites of archaeological interest were identified within and outside of the company's license area but not within the mining footprint areas. Also, in line with good international practice, we developed a chance find procedure to guide our activities should a cultural heritage site be uncovered unexpectedly during exploration and mining activities. The local population continues to have access to Mount Noyon as well as a horse racing route during the Naadam celebrations.

On November 2, 2012 the NCP rendered its findings. After reviewing the various submissions provided by, and requested from, the NGO coalition, Centerra, and Canada's Embassy in Mongolia, the NCP concluded that the issues raised by the NGO coalition were unsubstantiated and did not merit further examination.

In response to NCP's review, we have expanded our engagement and disclosure activities. We also introduced a formalized grievance mechanism for our operations in Mongolia.



We financed a new annex to the Maternity Hospital No. 1 in Mongolia.

# STRATEGIC COMMUNITY INVESTMENTS

We aim to generate sustainable benefits for the countries in which we operate and make strategic investments in the communities that are sustainable beyond the life of the mine. Our social and sustainability oriented contributions in 2011 and 2012 exceeded \$15 and \$29 million, respectively, and selected initiatives are highlighted further below.

In the Kyrgyz Republic, our contributions in 2012 included \$21 million towards a national micro-credit financing program. In 2011, our social investments included a \$10 million contribution for a school reconstruction program.

In Mongolia, we continued our support to complete a new annex to the Maternity Hospital No. 1 in Mongolia by contributing \$6.9 million and spent an additional \$2.2 million on various CSR projects.







# COMMUNITY INVESTMENTS IN THE KYRGYZ REPUBLIC

#### Issyk-Kul Region Development Fund

Kumtor's payment obligations under the 2009
New Terms Agreement include a contribution of one percent of its gross revenue, paid on a monthly basis, to the Issyk-Kul Region Development Fund.
These resources are designed to support the development of the region's economic potential and social infrastructure. The fund is controlled by an oversight committee appointed by the governor of the Issyk-Kul oblast (administrative region) and functions independently of Kumtor. The 46 percent decrease in Kumtor's gold production in 2012 from 2011 resulted also in a decline of our contribution to the fund in 2012.

#### Kumtor's Corporate Funds

In 2012, Kumtor developed a new policy related to community development. It targets long term value

creation and takes a more outcome-oriented approach to development involving delivery partners. The overall budget for community development in 2012 was \$5.0 million (and excludes contributions to the Issyk-Kul Region Development Fund). Projects developed and supported in 2012 include the following:

Microfinance program: \$1 million to support three independent microfinance lending agencies in Jety-Oguz, Ton, and Balykchy to provide low interest loans to small and medium size enterprises, as well as agricultural development.

Karagat+: This three-year project will be implemented by the AVEP public foundation and will be supported with \$0.9 million. The project is developing and supporting the whole value chain of the black currant berry from nurseries to the consumer.

One Village One Product: This one-year project was supported with \$175,000 and implemented by Japan International Cooperation Agency.

The project aims to form small business associations at the local level producing a variety of hand-made goods such as jams, felt products, honey and soap. Goods are sold through stores in major cities, such as Bishkek and Karakol.

Business Map of Issyk-Kul: This survey was undertaken in partnership with the European Bank for Reconstruction and Development and supported with \$35,000. The results of the survey enabled a detailed mapping of the business opportunities in the Issyk-Kul administrative regions. Over 1,000 entrepreneurs were identified during the study, which included a business forum in Karakol, as well as a comprehensive listing of businesses seeking investment.

## COMMUNITY INVESTMENTS IN MONGOLIA

We supported projects ranging from microcredits to financing the completion of a new annex of Maternity Hospital No 1 (see below). Initiatives proposed by our local communities, including Tunkhel village, which is the closest to the Gatsuurt deposit, were among activities undertaken as part of a three-year grant of approximately CAN\$ 0.28 million we received from the Canadian Department of Foreign Affairs and International Trade in August 2010.

#### Maternity Hospital

Centerra financed a new annex to the Maternity
Hospital No 1. It has a capacity for 150 beds,
including 50 units for infants. We invested
\$6.9 million for the construction and completion of
the hospital, including \$4.3 million in 2012, which was
inaugurated in January 2013. The Mongolian Ministry
of Health, which operates the facility, approved hiring
200 workers including physicians, pediatricians,
pathologists, hygiene specialists, nurses and
laboratory staff.

## Community Relations and the Soum Development Fund

Much of our social responsibility investments in Mongolia are implemented through the Soum Development Fund. We have provided \$0.75 million per annum since 2007, and a total of over \$5.8 million since 2004. In addition, we have contributed \$2.1 million since 2004 in donations for social welfare purposes.

The fund is governed by a multi-stakeholder council. It consists of Soum governors, citizens' representatives and relevant officers from Boroo. The council manages the selection and funding for projects that are designed to improve local development and livelihoods, and are aligned with the governor's action plan. This plan targets poverty reduction, job creation, promoting small and medium businesses, improving infrastructure, and supporting sustainable development of local communities.

Significant projects completed during the reporting period include the construction of a children's



development center in Bayangol soum (administrative region), completion of a pedestrian underpass at a rail yard in order to improve safety, and supporting small business development.

#### **Development Partnerships**

Examples of our partnership approach to implement development oriented programs include a three-year grant-funded program developed in partnership with Canada's Department of Foreign Affairs, Trade and Development. Outcomes of this program include small enterprises, such as dairy products plant, a solar-powered greenhouse producing vegetables, and a bakery. The dairy products plant in Tunkhel village improved the livelihood of 20 households. The project was also a recipient of the Healthy Food

2012 award given by the Mongolian Ministry of Industry and Agriculture.

#### Training for Artisanal Gold Miners

In 2012, we cooperated with the Mineral Resources Authority of Mongolia, the Boroo Trade Union and the Federation of Mongolian Mining Sector Trade Unions, and provided training to artisanal miners operating in Zuunkharaa and Tunkhel of Selenge Aimag (administrative region). The purpose of this training was to improve health and safety conditions among artisanal miners, and highlight practical approaches to reclamation and re-vegetation. The company also provided the miners with safety clothing and equipment.



## GRIEVANCE MECHANISM

Although our operations have been scaled down at Boroo and we are still awaiting permits to initiate the Gatsuurt project, we introduced a more formalized grievance mechanism at the end of 2011. This process was introduced to our local communities in early 2012. Since that time, we logged and successfully resolved four grievances. These ranged from concerns about access to water due to a frozen culvert to a request for compensation for a loss of livestock which fell into an excavation hole left by artisanal miners.

As the major company operating in the Kyrgyz Republic, Kumtor receives complaints ranging from dust from truck traffic to requests for jobs and building hospitals or roads. Kumtor has also experienced temporary road blocks by local communities. The list of demands included building a brick plant, an environmental laboratory, a veterinary laboratory, and use more local companies in Kumtor's supply chain. The road block lasted several days and was settled successfully through negotiations, with most of the demands being dropped. We expect to further improve the recording and monitoring of grievances, and covered related topics as part of a training program which was delivered to our community relations officers

## GLOSSARY

Aimag - A local word for province in Mongolia. Mongolia consists of 21 Aimags.

**ARD** - Acid rock drainage is a term used to describe the outflow of mine waters that have been acidified by contact and exposure to sulfide bearing rocks, reducing the pH levels which, in turn, can release and mobilize metals into the environment.

**Biodiversity** - Short for "biological diversity," the variability among living organisms and the ecosystems of which they are part. This includes diversity within species, between species and within ecosystems.

**Boroo Gold Company** - The name of Centerra's operating entity in Mongolia.

**Capacity Building** - Activities and initiatives that strengthen the knowledge and skills of individuals and improve structure and processes such that communities can grow and develop in a sustainable way.

**Carbon-in-Leach (CIL)** - A recovery process in which a slurry of gold ore, carbon granules and cyanide are mixed together. The cyanide dissolves the gold, which is then absorbed by the carbon. The carbon is subsequently separated from the slurry and the gold removed from the carbon.

**Closure Plan** - A plan designed to ensure public safety and restore the physical, chemical and biological quality of the area disturbed by mining to an acceptable level. It must aim at leaving the area in such a way that the rehabilitated property does not become a burden to society after the mining operation is over.

**Code of Ethics** - A policy that sets out Centerra's dedication to upholding high moral and ethical standards and specifies basic business conduct and behavior.

**Collective Bargaining Agreement** - An agreement between a company and one or more workers' organizations or, in absence of such organizations, the representatives of the workers duly elected and authorized by them in accordance with national laws and regulations.

**Corporate Responsibility** - A form of corporate self-regulation integrated into a business model where companies embrace the responsibility for the impact of their activities on the environment, consumers, employees, communities and stakeholders.

**Currencies** - Mongolian tugrik (MNT); Kyrgyz som (KGS)

**Cyanide** - A chemical compound containing carbon and nitrogen used to dissolve gold from ore.

**DFAIT** - Canadian Department of Foreign Affairs and International Trade

**Doré** - Unrefined gold and silver bullion bars

**EITI** - Extractive Industries Transparency Initiative

**Electrowinning** - Recovery of a metal from ore by means of electro-chemical processes.

**Engagement** - A process of contact, dialogue and interaction that ensures all parties of interest are informed and participate in decisions that affect their future.

**Environmental Management System (EMS)** - A framework developed by an organization to help improve its environmental performance by taking environmental considerations into account when making decisions and managing risks.

**GHG** - Greenhouse gas emissions

**GJ** - Gigajoules is equal to one billion (109) joules.

**Global Reporting Initiative (GRI)** - A global network-based organization that has developed a widely used sustainability reporting framework consisting of principles and indicators to measure and report on an organization's economic, environmental and social performance.

**Governance** - A set of processes, customs, policies, laws and institutions affecting the way a company is directed, administered or controlled.

**Hazard** - A source of potential damage, harm or adverse effects on something or someone under certain conditions at work.

**Heap Leach** - A process used for the recovery of gold from ore (usually low-grade ore) whereby crushed ore is laid on a slightly sloping, impervious pad and uniformly leached by the percolation of a cyanide solution trickling through the ore by gravity to a pond or other collection system.

**ICMI** - International Cyanide Management Institute

**Independent Contractor** - An individual legally recognized as being self-employed.

**Joint Venture (JV)** - The partnership of two or more companies in a specific operation, each agreeing to share profit or loss according to ownership percentage. Operational control often depends on ownership percentage.

Kumtor Operating Company - The name of Centerra's operating entity in the Kyrgyz Republic.

**Kyrgyz Som (KGS)** - 2012 exchange rate 1 USD = 47 KGS.

**Level I to V Environmental Incident** - Level I: Low-volume, contained spill and no regulatory exeedance. Level II our target is 0 low-volume, uncontained spills or one-off exeedance. Level V: Significant environmental or community impact and major regulatory or reputational risk.

Local Suppliers - Suppliers based in the same country as the operation that they supply.

LTI - Loss time injury

**MAC** - Maximum allowable concentration standards apply at Kumtor's surface water quality compliance point downstream of the Kumtor mine.

**MAD** - Maximum allowable discharge standards apply to treated effluent discharges from Kumtor's effluent treatment plant and the sewage treatment plant.

**Materiality** - The threshold at which an economic, environmental or social issue or indicator becomes sufficiently important to multiple stakeholder groups that it warrants disclosure in the corporate responsibility report.

Mongolian Tugrik - Mongolian currency (MNT).

**Non-Governmental Organization (NGO)** - A not-for-profit group largely funded by private contributions and operating outside of institutionalized government or political structures.

**Open Pit** - A mine where the minerals are mined using surface mining technique and do not require tunneling.

**Ore** - A metal or mineral, or a combination of these, of sufficient quality and quantity to enable it to be mined at a profit.

**Reclamation** - The restoration of a site after the completion of mining or exploration activity. Reclamation initiatives are used to create biologically diverse environments that are similar to the pre-mining landscape and will be attractive to a variety of wildlife species.

**Recordable Injury Frequency (RIF)** - A measurement of the percentage of people seriously hurt in a given year, including fatal, lost-time and medical aid injuries. RIF = [(lost-time injuries + medical aid injuries) X 200,000] / hours worked.

**Responsible Mining** - A comprehensive and transparent minerals activity that respects the rights of all stakeholders, especially those of local people, operates safely, protects the environment, minimizes the impact on human health, embraces the best international practices and upholds the rule of law while generating benefits for host countries. See also Corporate Responsibility.

**SCER** - Sarychat Ertash Reserve, a strictly protected Zapovednik neighboring the Kumtor Concession

**Significant Spill** - Any spill that is Level III or higher, as defined by Centerra's incident reporting system. Level III spills are significant enough that they must be reported to Centerra's Board of Directors.

**Soum** - A Mongolian local word for sub-province or district in Mongolia.

**Stakeholder** - Any person or group of people who may be affected in a good or bad way by the financial, safety, environmental and social aspects of our operations and those who have an interest in or an influence on our activities.

**Sustainability** - An approach to decision-making that integrates economic, environmental and social considerations. See also Corporate Responsibility.

**Sustainable Development** - As used in the report Our Common Future (also known as the Brundtland Report): "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." See also Corporate Responsibility. Centerra develops mineral deposits in a manner that does not restrict communities' efforts to sustain themselves and strives to catalyze economic activity that promotes long-term sustainability among our communities and their surroundings.

**Tailings** - The material that remains after recoverable metals or minerals of economic interest have been removed from ore through milling.

**Zero Discharge Site** - No direct discharges of effluent to surface water bodies.

### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain information contained or incorporated by reference herein may include "forward-looking statements" within the meaning of certain securities laws. Such forward-looking statements involve risks, uncertainties and other factors that could cause actual results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. For a detailed discussion of such risks, uncertainties and other factors, see the Management's Discussion and Analysis included in Centerra's most recent Annual Report and Annual Information Form, both of which are available on Centerra's website. Although Centerra believes that the assumptions inherent in these forward-looking statements are reasonable, the reader should not place undue reliance on these statements. Forward-looking information is as of December 31, 2012. Centerra disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

### centerragold



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