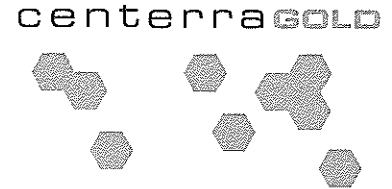




Ref# EXE/4430

January 28, 2013



**To: State Inspectorate for Environmental and Technical Safety under the KR Government
Attention: Mr. O.M. Artykbaev**

Dear Sirs and Mesdames,

Please see below our responses to the Directions #09/1498 (the "Direction") issued by the State Environmental and Safety Inspection Service ("SIETS") under the Kyrgyz Republic Government ("Government") dated December 11, 2012. This response is provided in furtherance of our notice of appeal to SIETS and the Government dated January 4, 2013 (effective date of delivery January 8, 2013). For convenience, we have provided below the activity requested by SIETS and our response.

1. Acquire a license for development of Central area in accordance with effective KR laws. Deadline 2013.

Response: Effective KR legislation regulating the subsoil use right is the KR Law #160 "On subsoils" of August 9, 2012, that became effective on September 17, 2012. Clause 1, Article 20 of this law provides for the grounds for granting the subsoil use right:

«i. The subsoil use right occurs on the basis of:

- 1) license;
- 2) state registration;
- 3) concession agreement;
- 4) production sharing agreement".

Kumtor Gold Company CJSC (hereinafter KGC) is operating on the basis of the Restated Concession Agreement of June 6, 2009. Thus, your request on getting license for development of the Central area is not legally sound.

2. Develop a design for recovery of the by-product metals foreseen in Feasibility Study such as tellurium, tungsten and sulphur trioxides in combination with recovery of gold. Deadline 2013.

Response: The Kumtor Gold Project Feasibility Study (November 1993, Revised April 1994), Volume 1, Section 5.3.4 – By-Product Recovery states the following (Quote):

1

“Tellurium (Te) – The estimated operating costs without consideration of capital payback exceed the projected revenues by 50 times and therefore the economics of recovery of Te are dismal.

“ Tungsten (WO₃) – The operating costs without consideration for payback of the capital costs exceed revenue by three times and therefore further investigation of the recovery of tungsten is not warranted.

“Sulphur – Kilborn has examined the economics of acid production for similar projects. The required acid plant would probably cost about US\$ 30 million to install.----- Using a realized value of \$10/t for sulphuric acid produced at the Kumtor site, a net revenue of about \$4 million per year might be possible. Based on a capital cost of \$30 million, this is clearly a poor return on investment.

Besides that, sulphuric acid is a dangerous chemical and its production would likely increase environmental risks at the mine.

The feasibility study is quite explicit in the unfavorable economics associated with Tellurium, Tungsten, and Sulphur. KOC sees no fundamental reason as to why the economics of extraction would have changed and hence agrees with the original feasibility study. If SIETS wishes to study this further then they should do so at their own cost.

3. Prohibit the dumping of rock on the glaciers Lisiy, Davydov, Kichi-Sarytor.

Response: KGC stopped dumping of such unprocessed rock on the glaciers in 2009.

4. Resolve the matter of constructing new tailings facility and submit a proposal during the first quarter of 2013.

Response: The determination of whether to construct a new tailings facility (TMF) should be based on:

1. Relevant engineering estimates and monitoring data confirming the danger of further exploitation of the existing dam;
2. The inability to ensure stability of the existing dam in case of further raising of the dam; and
3. Lack of space in current tailings dam in case the production expansion.
4. Acceptable levels of environmental impact as a result of the increase project footprint and the loss of habitat.

KOC has explored the option of constructing a new TMF and has determined it to be unnecessary, especially in light of the additional unnecessary environmental impact. In 2006-2007, specialists from BGC Engineering, ECO-Service, and ‘GEOPRIBOR’ Scientific Engineering Center (Director I. A. Torgoev) under the Institute of Geomechanics and Subsoil Use, studied 10 alternative locations for a new tailings facility. This study did

not include environmental impacts which we feel would be substantial and favor the alternative of increasing the capacity of the existing TMF.

We submit that the concerns regarding dam instability are based on allegations and fears of some experts that are not confirmed by investigation findings and calculations. Kumtor has reviewed at length over the years this issue of the dam stability, including obtaining expert advice from international experts. The decision made by Kumtor to raise the height of the dam rather than building a new one is supported by such international opinions.

Estimates by specialists of the Institute of Geomechanics and Subsoil Development (IGSD) under KR National Academy of Science, "BGC Engineering" Company of Canada and by designers of Geoservice SDC IGSD in 2006 and 2007 carried out in accordance with advanced methods and software indicate that dam movement rate should decrease gradually to the lowest values (less than 3 mm per year) by 2025 subject to compliance with schedule of work on construction of shear key and surcharges including dam raising works planned for a period before 2016. By raising the dam, the shear key and buttress will effectively become part of the dam basement, which is expected to increase stability of the dam.

Specialists of the "Mehanobr Engineering" CJSC (former Lenmehanobr), St. Petersburg, Russia, together with the scientists of the Laboratory of Soil Mechanics and Stability of Tailings Facilities of St. Petersburg State Polytechnical University have issued a positive expert opinion regarding the dam stabilization and dam increase design (based on their own engineering estimates).

Furthermore, the monitoring data confirms the gradual decrease of the dam movement rate. From January 2007 until November 2012, the maximum movement experienced at the dam was 2.7 cm (about 2.1 cm/year), i.e. dam movement rate decreased twice in comparison with 1999-2006 (3.5-4.5 cm/year) and the current state of the dam is stable.

Instead of considering a matter of constructing new tailings facility, KGC offers to arrange a meeting on tailings dam stability involving local and international experts for discussion and modeling expansion of the current shear key and buttress and dam raising up to final level of the dam crest at 3,670.5 m.

5. Prohibit stockpiling, disposing of toxic and non-toxic industrial wastes in the tailings water area.

Response: KGC disposes of toxic and non-toxic industrial wastes in the tailings basin as recommended in the Environmental Impact Assessment and the Feasibility Study (1994), which were accepted and endorsed by international lenders (EBRD, IFC, and EDC) and which passed all necessary expertise required under Kyrgyz law. The Feasibility Study was also approved by KR Governmental Decree #379 from May 31, 1994. Also, the disposal of such industrial waste is also contemplated in the Kumtor Ecological Passport which is prepared every five years (starting from 1999). Positive expert opinions from KR environmental protection regulatory state authority were received on all these Ecological

Passports. KGC currently disposes of Tailings and Toxic Wastes in the TMF under Licenses No. 013 and No. 014, respectively (May 30, 2011 valid to May 30, 2014) issued by the State Agency of Environmental Protection and Forestry.

KGC has been disposing wastes in the tailings basin, an activity that is considered as the most appropriate place for waste disposal as per KR environmental legislation and KR Land Code. By doing so, the company has minimized the area of land removed from pasture use as well as the environmental risks arising while disposing of any wastes at additional land areas, and most importantly, KGC has rationally used land resources in accordance with Section IV, Article 56 of the KR Land Code.

We also note that the storage of sediments from the sewage treatment plant in the tailings water area is an activity that has been known by KR regulatory authorities, and in fact, been encouraged by them. In particular, we reference the Kumtor Environmental Activities Inspection Act (report) inspection carried out from August 9 -12, 2005 by specialist of the Department of Ecology and Nature Management (DENM) of the Ministry of Ecology and Emergency Situations of the Kyrgyz Republic. The working group of specialists recommended that Kumtor review the economic feasibility of discharging sewage directly to the tailings pulpline (rather than trucking), and the possibility of its realization from the point of view of industrial safety. No issues were raised with the practice itself of placing sewage from the STP to the tailings dump.

For reference: Water areas are the bodies of waters limited by natural, artificial or conventional borders.

Lastly, we note that the subject matter of this directive is also discussed in SIETS' Claim No. 09/1501 dated December 11, 2012. KOC has responded in writing to this claim and we refer SIETS to such response for additional discussion on this point.

6. Develop a design for disposal of industrial toxic and non-toxic wastes and submit it to relevant state agencies for state expertise. Deadline before 2014.

Response: Wastes generation standards (wastes disposal limits) developed and agreed with the KR authorized environmental agency serves as a ground for getting permits for waste disposal. It is only after approving the Waste Generation Standards (WGS) design that authorized KR state environmental agency can issue a permit for wastes disposal in accordance with the KR regulatory acts.

The WGS design shall be developed as maximum allowable discharge (“MAD”) and maximum allowable emissions (“MAE”) designs on the basis of approved instructions such as instructions on development of MAD and MAE. The KR environmental legislation and regulatory acts do not currently provide for the approved instructions on development of WGS design. Moreover, the last Instruction regulating the wastes disposal expired in accordance with Article 36 of the KR Law “On KR regulatory acts”. Though the Technical Regulations and KR Law № 151 “On environmental safety” from May 8, 2009 provide for a requirement to getting the permit for wastes disposal, there is no subordinate regulatory

act that can be guided for wastes disposal and development of WGS design. That is why SIETS' requirement to develop a design on disposal of toxic and non-toxic wastes is not legally sound.

Lastly, we note that the subject matter of this directive is also discussed in SIETS' Claim No. 09/1501 dated December 11, 2012. KOC has responded in writing to this claim and we refer SIETS to such response for additional discussion on this point.

7. Develop a design for burial and removal of sludge sediments from Sewage Treatment Plant ("STP") and wastes from Effluent Treatment Plant ("ETP"). Deadline 2013.

Response: Please see response to item 6 above. Due to the same reasons discussed in Item 6 (lack of approved instructions on development of waste generation standards), it is currently impossible for Kumtor to develop a design for burial and removal of sludge sediments from STP and wastes from ETP.

We note that the subject matter of this directive is also discussed in SIETS' Claim No. 09/1501 dated December 11, 2012. KOC has responded in writing to this claim and we refer SIETS to such response for additional discussion on this point.

8. Develop design and begin construction of facilities on treatment of in-pit and dump run-off waters at Kumtor Mine, Lysyi, Chon Sary Tor and Kichi Sary Tor creeks. These designs shall be submitted to relevant state agencies for approval. Deadline 2014.

Response: KGC considers the requirement on construction of dump and in-pit run-off waters treatment facilities at the foot of the Lysyi Glacier, at the basin of the Davydov and Sarytor Glaciers is groundless.

According to results of the 17-year monitoring the assayed elements of samples taken from the sampling point (W1.5.1) for analysis are broadly within acceptable compliance of MAC.

Cumulative effect from discharged treated effluent water, in-pit and waste dumps run-off waters is not proved by State Commission (SC) members or by experts as they failed to conduct any investigation on determination of the cumulative effect. The experts had done this assertion a priori based on increased content of sulphates. ARD (acid rock drainage) is not indicated by numerous studies due to the high neutralization potential (70%) of unprocessed rock. This is indirectly confirmed by results of water sample assays conducted for the State Commission, which indicate a weakly alkaline nature in rivers and streams sampled (pH of more than 8).

With respect to sulphates present in waste dump run-off waters in high concentrations, as per many scientific publications including those of the World Health Organization, it is known that sulphates do not have a toxic or cumulative effect. This is also confirmed by results of the 15-year monitoring of qualitative and quantitative content of hydrobionts in Kumtor site channels that indicate a lack of any toxic impact from treated effluents and

run-off waters from the Kumtor mine. That is why it is also incorrect to assert about any cumulative effect and especially about further migration of polluted stream sediments to the Naryn River and beyond.

For Reference. Concentration of sulphates in the “Jalal-Abad” mineral water recommended by KR Ministry of Health for drinking is within 450-1,900 mg/l. For comparison – according to results of assay from German laboratory, conducted for the State Commission, concentrations of sulphates in the Kumtor river at the sampling point (W1.5.1) was 416mg/l while MAC is 500 mg/l.

9. Based on the tests carried out by laboratories of the Kadamjai District Center for Hygiene, Sanitary and Epidemiologic Supervision, Institute of Environmental Hygiene and Toxicology (Germany), and Jozef Stefan Laboratory (Slovenia) the following is required:

- **Joint sampling of water by the State Laboratory and KOC Laboratory should be carried out at least twice per year from the surface water courses;**
- **Recommence monitoring of stream sediments in the Kumtor River;**
- **Arrange stationary observation stations at problematic points of the Kumtor Mine (for instance: 1.5.1. Points of discharge from ETP and STP, etc.) equipping these with automatic analyzers, which would transmit information via Internet to relevant authorities.**

Response: KGC supports joint sampling from surface water courses with participation of specialists of the state laboratory.

One of the features of the Kumtor River, just as that of other alpine rivers of glacial origin, is the consistent pattern related to annual variability in the hydrological regime, i.e. minor water flow in the winter season and early spring and significant increase of water flow in the summer season and early autumn. Such hydrological regime is characterized by expansion of riverbeds in the flood period, significant increase of turbulent water flow which provokes mobility of suspended solids in the river bottoms, and increased quantity of suspended matters in the flow. This is directly confirmed by the seasonal increased concentration of suspended solids in waters of the Kumtor River. The above extreme natural factors do not facilitate formation of stable stream sediments. Given features of the silt sediment material, it is almost impossible to carry out comparative analysis of obtained data in terms of their dynamics, and, therefore, in such case monitoring data would not reflect their actual state. That is exactly why KGC specialists decided not to monitor stream sediments at the early stage of mine operation. These natural suspended solids and their re-suspension in the river systems at Kumtor were described at length in the Environmental Impact Assessment of the Feasibility Study.

On the other hand, considering the fact that water organisms act as indicators of water environment contamination the company decided to conduct hydrobiological researches, i.e. study of zooplankton and zoobenthos in rivers and water bodies in the vicinity of the Kumtor Mine. One can judge about purity of natural water courses and water bodies on the basis of species diversity and quantity of hydrobionts. The fact that species composition and quantitative development of invertebrates inside water courses and water bodies within

territory of the Kumtor Mine remains virtually invariable since 1993 (before commissioning of the Mine) and until present despite regular discharge of treated effluents since 1999, suggests that the Kumtor Mine discharges have no impact on hydrofauna of water bodies within the Kumtor Mine and in its vicinity.

Regarding your request to arrange stationary observation stations equipping them with automatic analyzers in order to provide on-line transmission of information, we should note that this demand is impracticable for the following reasons:

Results from many years of monitoring indicate that concentrations of most substances analyzed are within thousandths of a milligram per liter (for instance such heavy metals as cadmium, cobalt, chromium, and lead), and for some other heavy metals it is even within ten thousandths of a milligram per liter (for instance, mercury). Such extremely low concentrations may only be analyzed with the help of special analytical equipment such as atomic absorption spectrophotometer with inductively bonded plasma. And to determine the ten thousandths concentrations even such powerful equipment would not be sufficient. In such cases one would need to use the most powerful modern analytical equipment such as spectrometer with inductively bonded plasma – mass spectrometer. The strictest requirements are applied to functioning of such analytical equipment including: environment temperature within 20°C -24°C, de-ionized water for solutions preparation, disposable sampling vials, etc. One doesn't have to be a great specialist to understand that installation of such delicate high precision equipment in immediate proximity to a monitoring point is impossible: strict temperature regime, the requirement to use disposable vials, etc. would not be met. There are no companies in the world that manufacture equipment that could function in field conditions. Given if an automatic analyzer was installed that could function in field conditions, due to its poor sensitivity and high error margin, we would obtain results not reflecting the real concentration of analyzed substances in a sample.

10. Develop a design for construction of treatment facilities as per Feasibility Study (Lysyi, Sarytor, and Kichi-Sarytor creeks of the Mine).

Response: See the response to Item 8 of this response. Besides that, Section 6, Volume 3 of the Feasibility Study contemplated only collection of surface run-off in a holding pond without building of treatment facilities. However, based on recommendations from international experts (eg. Lorax, Prizma and ERM), the environmental department at Kumtor is exploring alternatives for Water Management Strategy. This will be included in Kumtor's conceptual closure plan, the Biodiversity Management Strategy and Plan, and other future reclamation efforts.

11. In cooperation with the State Agency for Environment Protection and Forestry ("SAEPF") under KR Government put an order into all accounts of standard payments on release of emissions, discharges and disposal of waste. Deadline: 2013.

Response: This issue was discussed in the end of December 2012, during a meeting with the SAEPF specialists. Further discussions are expected to continue. However, we note that the Restated Investment Agreement dated June 6, 2009 between the Government of the

Kyrgyz Republic, Centerra Gold Inc., KGC and Kumtor Operating Company (KOC), provides a complete regime of payments to be made directly to the Government, including an annual US\$310,000 environmental pollution payment which covers release of emissions, discharges and disposal of waste. This payment of US\$310,000 takes precedent over any other taxes or payments or charges generally payable under Kyrgyz Republic law for environmental pollutants. As contemplated in the Restated Investment Agreement (and endorsed by the Parliament pursuant to the New Kumtor Law, as defined in the Restated Investment Agreement) if the Agreement of New Terms for the Kumtor Project dated April 24, 2009 among the Government, Centerra, KOC, KGC and Kyrgyzaltyn, or any restated project agreement, one of which is the Restated Investment Agreement, specify different rules than the legislation promulgated by the Kyrgyz Republic, the rules of the agreements shall apply to the relations so regulate.

12. Acquire all of the required permissions as per the requirements of the Law of Kyrgyz Republic. Deadline: 2013.

Response: Other than for reasons as detailed in this response, Kumtor believes it has obtained and has taken all action within its control to obtain all required permits and licenses within defined terms as per KR legislation. If SEITS has any particular concerns, we would welcome further discussion.

13. Perform an inventory of all emission sources. Term of execution: year 2013.

Response: Information on emission sources (inventory) will be provided to SAEPP during adjustment of MAE Standards for 2013.

14. Revise the Ecological Passport, as well as MAE and MAD Volumes in compliance with the requirements of environmental legislation. Deadline: 2013.

Response: Kumtor Mine Ecological Passport developed in 2009 and duly endorsed by an authorized KR environmental authority, according to KR environmental legislation, is valid until 2014. Before expiry of the ecological passport, KGC will develop a new ecological passport and submit it for approval as per the established procedure.

MAE and MAD Standards are developed by the company and submitted for endorsement on an annual basis. On the basis of these, within defined terms KGC obtains permits for emissions and discharges from an authorized KR authority.

15. In cooperation with the Water Management Department of the Ministry of Agriculture and Melioration, provide estimates for the payment for the use of water. Deadline: 2013.

Response:

This directive refers to a subject matter that is covered under a SIETS claim No 09/1502 dated December 11, 2012. We refer you to the response provided by KOC on this Claim for further information regarding why Kumtor believes that the requested action is inappropriate.

By way of summary, we note that as per Article 3 of KR Water Code, the principal regulatory document governing water use relations within the Kyrgyz Republic is the Water Code. As per Article 7 of KR Water Code, determination of a rate for use of water as a natural resource is among competencies of KR Parliament. Until now, KR Parliament has not determined any rate for use of water as a natural resource. Therefore, currently there are no legal grounds for the request to pay for water used by the Mine, and, consequently, calculation of such payment.

In any event, we note that Restated Investment Agreement for the Kumtor Projects provides a full and comprehensive financial regime for all payments to the KR Government, and unless otherwise indicated therein, Kumtor is exempt from such payments. Accordingly, even if the rate for use of water as a natural resource is determined, Kumtor is not required to pay. As contemplated in the Restated Investment Agreement (and endorsed by the Parliament pursuant to the New Kumtor Law, as defined in the Restated Investment Agreement) if the Agreement of New Terms for the Kumtor Project dated April 24, 2009 among the Government, Centerra, KOC, KGC and Kyrgyzaltyn, or any restated project agreement, one of which is the Restated Investment Agreement, specify different rules than the legislation promulgated by the KR, the rules of the agreements shall apply to the relations so regulated.

16. Develop a design for prevention of the Petrov Lake outburst hazard and endorse it with the relevant state authorities and departments. Deadline: 2014.

Response: In October 2012, KGC signed a contract for development of pre-design solutions for planned decrease of water level in the Petrov lake with the 'Sevkavgiprovdokhoz' Engineering Institute, which has a vast experience in engineering hydrotechnical structures in mountainous areas for protection of populated settlements situated near mountain rivers and lakes with high risk of outburst flood. Upon request of specialists of the engineering organization we provided them with required materials including orthophotomap of the Mine's current infrastructure, a set of geodesic profiles of the Petrov Lake moraine dam relief, planned and high-altitude position of the Kumtor riverbed (from its source to the lower bridge) and its main tributaries, data on water discharge of the Kumtor River and its main tributaries at the mine site, water intake construction, actual geometric parameters of openings under bridges at the mine site, general location plans of constructions etc. required for developing pre-design solutions. In 2013, on the basis of the pre-design solutions provided by the 'Sevkavgiprovdokhoz' JSC, one of local engineering organizations holding all required licenses and permits for engineering of such structures will develop an engineering design on planned reduction of water level in the Petrov Lake, which will be subjected to expertise of issues concerning construction, industrial, and environmental safety. KGC is planning to finish development of the design for planned reduction of water level in the Petrov Lake in the 2nd or 3rd Quarter of 2013, and submit it to the relevant state authorities for expertise in the 4th Quarter of 2013.

17. Develop the Kumtor Mine Reclamation Design; determine the estimated cost of works and annual amount of deductions into the Reclamation Trust. Deadline: 2014.

Response: In compliance with the Good International Mining Practices and as set forth in the Restated Investment Agreement (Section 3.3), the company develops and updates the Conceptual Closure Plan (CCP) for the Kumtor Mine every three years attracting internationally acclaimed consultants and experts who have the required experience in development of similar plans and designs.

KOC is in compliance with requirements pertaining to mine decommissioning in accordance with good international mining practices, Good International Industry Practices (GIIP) and the Restated Investment Agreement provisions (Clause 3.3) and New Terms Agreement of 2009 (Clause 5.4), which states: KOC shall develop a Kumtor Mine Conceptual Closure Plan (“CCP”) together with international consultants and experts experienced in development of such plans and projects. These include initial closure/decommissioning criteria provided by the Feasibility Study dated November 1994 (the Reclamation Plan); updated closure strategies and closure strategies by Conor Pacific; iterations of CCP prepared by Lorax (2004), Golder (2007-2008), Lorax (2010) , and the latest update, which is planned for 2013. The 2013 CCP is scheduled to also include elements of the Kumtor Biodiversity Management Strategy and Plan, Social aspects and progressive reclamation, including passive treatment components as part of the integrated water management strategy.

As per the Restated Investment Agreement, no less than two years prior to commencement of reclamation works, KGC will submit the final detailed engineering design for closure of the Mine to relevant state regulators for expertise of issues related to construction, industrial, and environmental safety.

Given that the life of mine at the Kumtor Mine is scheduled to be until 2026, development of the final reclamation design at this time would be impractical.

18. Introduce recycled water supply as foreseen in the FS for the Kumtor Mine. *Deadline: before year 2014.*

Response: This directive refers to a subject matter that is covered under a SIETS claim No 09/1502 dated December 11, 2012. We refer you to the response provided by KOC on this Claim for further information regarding why Kumtor does not think that the requested action is appropriate in the circumstances.

By way of summary, we note that there are at least two types of “recycling” that can be done at the Kumtor mill, both of which have the effect of reducing amounts of water used from Petrov Lake:

- (a) Circulating water supply (“оборотное” in Russian): This is a water supply system permitting the re-use of water treated after its use in technological processes.
- (b) Repeating water supply (“повторное” in Russian): This is a closed system permitting the re-use of water in any technological process without any interim treatment.

Kumtor carries out repeating water supply at the Kumtor mill, as is required in the permit for water use, which results in approximately five point four (5.4) million m³ of water being recycled at the mill annually.

Circulating water supply (whereby water is treated and then circulated back to the beginning of the mill technological cycle) is not used by Kumtor because 1) circulating water negatively impacts gold recovery rates; 2) circulating treated water is not cost-efficient (would not be available for use approximately 8 months of the year due to freezing); and 3) circulating of treated water could cause environmental risks.

We refer you to the responses of the Claim No 09/1502 for further discussion.

We suggest that specialists of the state regulatory authorities and experts carry out joint testing to determine impact of tailings waters on recovery of gold in the flotation process, and to review other accompanying technical and economic issues related to introduction of water recycling system at the Kumtor Mill, as well as develop recommendations based on comprehensive joint analysis.

19. Develop the design/project for reclamation of the developed South-West deposit and obtain expert opinions from authorized state authorities. Deadline: 2013.

Response: Currently, the South-West Area has not been developed to its ultimate limit. Given that the Mine Plan for the Kumtor Mine extends up to 2026, its ultimate development has been postponed to a later period. During the next revision of the CCP in 2013-2014, reclamation of the South-West Area of the Kumtor Mine will be given consideration and reflected in the mentioned CCP.

Respectfully yours,

Michael Fischer,
President
Kumtor Operating Company CJSC

Copy: His Excellency, Zhantoro Satybaldiyev, Prime Minister of the Kyrgyz Republic
Ian Atkinson, President and CEO, Centerra Gold Inc.