Minerals are essential to economic growth and stability. All countries must seek to implement sustainable development in the mining sector that is transparent, environmentally sound, and socially responsible.

The United States is engaged in global partnerships that support such integrated planning and that share knowledge and lessons learned as part of a tool kit of approaches tailored to be effective under different situations all over the world. Above all, the United States stresses, and encourages other countries to promote, the fundamental importance of sustainability to a mining strategy that integrates four basic elements: (1) adoption of best mining practices, (2) encouraging good governance, (3) reduce methane emissions from coal mining, and (4) address environmental damages caused by abandoned mines. An integrated approach is critical in meeting four essential challenges facing all of our nations:

1. Adoption of best mining practices

It is important to assure that best mining practices are adopted to improve sustainability of mining and to reduce environment, health, and social impacts. The United States will work with international organizations as well as individual countries to promote best mining practices, particularly in developing countries which do not have long histories on large scale commercial mining. Technical assistance may be provided through onsite seminars where the “train the trainer” approach may be used, as well as other forms of support via web based training.

Guidance on Best Mining Practices. Many countries adopt the same or similar best practices for mining. Guidance from various sources allows countries, especially those new to mining, to choose best mining practices appropriate for their needs and situations. There are many useful manuals to consult for guidance that could be promoted within existing international fora. For example, the U.S. Agency for International Development (USAID) prepared a manual and compact disc on best mining practices in non-ferrous mining. In 2000, this manual was handed out to over 50 mining ministers of developing countries. Australia was one of the first countries to develop guidance for hard rock mining best practices, which has been recently updated. Last
year, Canada issued its guidance for best mining practices. The World Bank Group has specific Environmental, Health and Safety (EHS) guidelines for mining. The Environmental Law Alliance Worldwide issued its guidebook in 2010 for evaluating mining environmental impact assessments, which includes useful information regarding best mining practices and sound approaches for mitigating environmental impacts from mining.

The United States recently helped develop an Environmental Impact Assessment (EIA) guide for metal and non-metal mining as part of the Dominican Republic – Central America – United States Free Trade Agreement (CAFTA-DR). This guide was cooperatively developed with Central American government mining experts and should assist in broadening the environmental governance of mining in Central America. Participating countries intend to implement this guidance by conducting country specific training to better integrate government and non-government parties into the EIA process.

The International Council on Mining and Minerals (ICMM) has developed guidance in a series of best practices that cover social and economic growth, transparency regarding mining plans and operations, financial assurance for reclamation, and mine closure. Recently the ICMM issued guidance on implementing sustainable mining practices, which can be important to developing countries that have not yet developed their own regulatory structures. The United States has not provided direct assistance to this effort, but continues to support its goals and activities.

UN Mercury Programs. Artisanal gold mining is a significant contributor to global mercury releases. It is often conducted without government oversight and is a serious threat to environmental and social resources while providing jobs to miners. Artisanal gold mining often relies on women and child labor. Since the exposure to mercury is not usually addressed, large numbers of women and children are at risk where artisanal gold mining is taking place. The United States has provided technical support to the United Nations Environmental Programme's (UNEP) mercury program since its inception. This program deals directly with reducing the use of elemental mercury in artisanal gold mining through a joint UNEP and United Nations Industrial Development Organization (UNIDO) program that has provided technical assistance to developing countries managing artisanal mining. The United States will continue to support efforts to reduce or eliminate the use of mercury in artisanal gold mining, such as through educational programs about the hazards of mercury and the use of alternative approaches to ore processing and refinement.

The United States is providing technical assistance to reduce mercury emissions from gold shops in Brazil and Peru. This effort was created to design a low cost mercury capture system that could be inserted into operating gold shops to reduce mercury releases into heavily populated areas. The United States has provided the mercury capture system design drawings and operating manuals to Latin American governments. This activity is an outgrowth of United States support to the UNEP mercury program, but is solely supported by the United States at this time. We hope to provide drawings and assistance to countries seeking this equipment on an as needed basis. Implementation of system at gold shops should reduce the direct exposure of mercury to people, including women and children, by at least 80-90 percent.
The United States is funding a grant to reduce the use and release of mercury in artisanal and small-scale gold mining in Peru. This project promotes more efficient mining methods during ore processing (where most of the mercury is lost to the environment) that use less mercury and recover more gold from the ores. We also funded the Supporting Entrepreneurs for Environment and Development (SEED) Initiative to work with Oro Verde, a mercury-free gold producer in Colombia, to develop a long-term marketing strategy to increase sales, take the Oro Verde brand to other countries, enlarge the client base, and help Oro Verde achieve social, environmental and financial sustainability.

*Mine Worker Health and Safety.* Sustainable mineral development does not occur without implementation of sound mine worker health and safety regulation. The U.S. Mine Safety and Health Administration (MSHA) was established to develop and implement a range of regulations to assure that surface and underground mining is conducted safely. We support the efforts of the International Labor Organization (ILO) to promote sound international worker safety programs.

*Technical Assistance.* The United States continues to provide direct technical assistance on mining management as part of our trade agreements with different countries, which include environmental side agreements that often address mining concerns. For example, as part of our trade agreement with Chile, the United States and Chile have conducted cooperative technical seminars on mining environmental impact statements and financial assurance for mining reclamation and closure.

USAID and the U.S. Department of Interior (DOI) established the International Technical Assistance Program (ITAP) to provide capacity building in other countries using DOI expertise. DOI mining staff have broad expertise in resource delineation, geological resource mapping, mine planning and environmental mine management and mine reclamation and closure. The U.S. Department of Agriculture (USDA) has mining staff with broad expertise similar to those of the DOI, and provides technical assistance with land use zoning in developing countries to support integrated land management planning involving mining, forestry, and other sectors. While DOI and USDA are responsible for public land management functions, the U.S. Environmental Protection Agency (EPA) and DOI manage and plan for mineral development and related effects for hard rock mines (see U.S. National Report CSD 18/19). The United States continues to engage in activities of ITAP that assist developing countries.

*International Financial Institutions.* International assistance through international financial institutions is one important tool to promote socially and environmentally sound mining practices. The World Bank and regional development banks apply environmental and social safeguard policies to their projects, including mineral development projects. While the International Monetary Fund does not provide financing for the extraction and export of natural resources, it is an important source of data and analytical work through a number of initiatives, including the "Guide on Resource Revenue Transparency."

The United States continues to engage with the international financial institutions to strengthen environmental and social considerations in their work. For example, the United States is currently engaged in the review of both the International Finance Corporation's Policy and Performance Standards on Social and Environmental Sustainability, and its Access to Information Policy. The United States supports those efforts to assure that respect for human
rights is an integral part of any mining development.

The United States also continues to work with the World Bank’s Community and Small Scale Mining (CASM) program. CASM is a key international organization whose efforts are primarily focused on reducing the environmental and socio-economic impact of artisanal and small scale mining in developing countries. This program assists countries in implementing less intrusive mining practices. In particular, we think CASM’s focus on reducing the use of mercury in artisanal gold mining addresses an important issue and it has been successful with small scale miners in South America.

*Mining Organizations.* We continue to work with the National Mining Association (NMA), a mining trade organization within the United States that represents the interests of mining companies, on environmental issues related to mining. The NMA has encouraged sustainability goals for U.S. mining companies and has recently drafted an Environmental Management Plan to provide guidance to companies to improve environmental protection at operating mines.

2. **Encourage good governance**

Developing countries often struggle with the costs and time it takes to draft and implement sound environmental and socio-economic policies and programs for natural resource management. The international community is composed of member states with long histories in mining, some of which may welcome strengthening their governance systems. Regulation styles vary and can be tailored to best fit an individual country’s needs. The United States has provided technical assistance regarding the training of park rangers, environmental enforcement officers, judges and attorneys. DOI also has assisted governments in developing their mineral leasing/mineral grants programs, mining regulation, inspection and enforcement and will also seek means to continue that support. We support efforts by the multilateral development banks to help countries strengthen their environmental governance systems. The United States will seek ways to continue to offer this type of support.

*Transparency.* There is a continuing need to increase transparency throughout the mining cycle. The United States supports increasing the transparency of mining information and disclosure about mining proposals, mining plans of operation, and financial assurances and contracts. The United States will continue to support the Extractive Industries Transparency Initiative (EITI).

*Conflict Minerals.* Conflict zones and human rights abuses often arise in mineral rich countries. The United States is working to ensure that countries develop their mineral resources sustainably to benefit the people and that profits do not support armed groups, and we believe other countries should also work towards this goal. Legislation recently adopted in the United States will require all companies reporting to the U.S. Securities and Exchange Commission to disclose their potential use of certain conflict minerals related to the conflict in eastern Congo and, in particular, what due diligence measures they used to assess whether the minerals in their products directly or indirectly benefited armed groups. We worked closely with an *ad hoc* committee of the Organization for Economic Cooperation and Development (OECD) and the United Nations Security Council Democratic Republic of the Congo Sanctions Committee’s Group of Experts to develop due diligence guidance for these purposes, and we led the successful effort of the UN Security Council to take the latter recommendations forward in a
binding Security Council Resolution.

The Kimberley Process Certification Scheme was initiated in 2003 to ensure that conflict diamonds do not enter the legitimate diamond trade. Each participant country must ensure that its “internal controls” system is sufficient to ensure that the diamond supply chain is secure. The United States led the effort to promote sustainable development of artisanal diamond mining as a means of ensuring effective internal controls. In the Central African Republic and Liberia, USAID developed the Property Rights and Artisanal Diamond Development program that secured the land tenure of almost 2,000 individual miners and trained thousands of miners on best practices in environmental mitigation, alternative livelihoods, and diamond valuation. We support the work of the Diamond Development Initiative to improve mechanization techniques and create Development Diamond Standards. Finally, the United States supported the work of several West African countries to create “enforcement profiles,” where they used multistakeholder forums to understand better the challenges of preventing smuggling and promoting development in remote mining areas.

*International Forum on Mining.* The International Forum on Mining is an international voluntary group of developing countries which seek to cooperatively assist one another on technical and governance mining issues. This effort has been managed by Canada and remains an excellent forum to discuss best mining practices and remediation approaches. The United States was an active participant in the past and will look at ways to support its efforts in the future.

3. Reduce methane emissions from coal

Coal mining is one of the major contributors to the global release of methane. Coal mining companies are addressing these releases either by methane removal either prior to mining or removal during mining. In many cases, the methane recovery systems collect enough methane to power electric generation or the gas is placed into commercial gas pipelines for other industrial or commercial uses. Trace methane from mine exhaust systems is often treated by oxidation. The United States is interested in continuing its support of the Global Methane Initiative (formerly Methane to Markets Partnership) and will seek means to reduce methane emissions from operating coal mines. The U.S. EPA has a voluntary Coalbed Methane Outreach Program that reduces methane emissions in coal mining operations by recovering and using drained methane gas in active mines. More information about this program can be found at: http://www.epa.gov/cmop.

4. Address environmental damages caused by abandoned mines

The United States, as well as many other countries, has long dealt with the costs of remediating abandoned mines. There are a wide range of technical approaches to dealing with the remediation of waste rock piles, tailings ponds, contaminated mine waters, and contaminated soils. The United States established the Interstate Technology and Regulatory Council (ITRC), which is composed of states and federal agencies to evaluate remediation approaches and share expertise. ITRC developed a mine waste group that shares the successes and failures of specific mine waste treatment and publishes case studies describing treatments have been utilized at a commercial scale. The United States is seeking the proper means to effectively share this
information with developing countries to reduce their cost of remediation. We established the Federal Mining Dialogue in order to share and leverage its mining resources to address domestic mining challenges. We are interested in seeking ways to offer this expertise to developing countries interested in sustainable minerals development.