

**Response from Freeport-McMoRan Copper & Gold Inc.  
to the Draft Report of  
Minerals, Mining and Sustainable Development (MMSD) Inc.**

The management of Freeport-McMoRan Copper & Gold Inc. has considered the draft report of MMSD and offers the following general and specific comments for posting on the MMSD website and for incorporation into the MMSD final report for the Global Mining Initiative (GMI) meetings to be held in Toronto on May 12 through 14, 2002.

**General Comments:** The MMSD has extensively dealt with many of the issues that the mining industry and observers of the mining industry have identified as important for the future of mining. However, in illustrating the issues that are important to all parties, the report's authors have often relied on incomplete, dated, and one-sided information. Many different parties will look at the information in the report from differing perspectives and will, to be sure, disagree about what information is incomplete, outdated and/or one-sided. However, most parties will agree that the use of such less than complete and accurate information diminishes the value of the report. In the specific sections of the report that deal with Freeport and its Grasberg mine, Freeport will try to make the information more complete, up-to-date and accurate.

**Specific Comments (Community and Social):** Freeport wishes to comment on a section of Chapter 8 appearing on page 25. Certain statements by the report authors are false or misleading and appear to be based on unreliable and biased information. The effect is to give an inaccurate portrayal of the relationship between Freeport and the local Papuan people in its area of operations on social issues and especially with regard to human rights issues. Freeport works very hard to maintain a positive relationship with its Papuan partners and much positive progress has been made that is not reflected in the MMSD report.

Freeport has taken a clear position promoting basic human rights and has communicated that position to its employees. In February 2001, our Board of Directors approved a revised Social, Employment and Human Rights policy that set the Universal Declaration of Human Rights as the standard for all company activities. The company requires that all staff employees and all employees of the Security and Community Relations Departments sign a Letter of Assurance that they have neither participated in nor know about any human rights violations connected with company operations. Teaching about human rights, which began in the Security Department, has now been extended to other operating units of the company. The Human Rights Compliance Office of the company investigated several possible human rights violations during 2001, but did not find any credible evidence that any violations had occurred in the area of company operations. Freeport has also contracted with an expert on corporate policies and codes of conduct to establish benchmarks for evaluating the Social, Employment and Human Rights Policy, to measure and monitor its effectiveness.

FCX has also endorsed the joint U.S. State Department-British Foreign Office Voluntary Principles on Human Rights and Security. The Voluntary Principles were endorsed by several major mining and oil and gas companies and by important human rights organizations. In announcing the principles and naming the companies that had endorsed them, then U.S. Secretary of State Madeleine K. Albright called the agreement “a landmark for corporate responsibility...(that)...demonstrates that the best-run companies realize that they must pay attention not only to the particular needs of their communities, but also to universal standards of human rights, and that in addressing those needs and standards there is no necessary conflict between profit and principle.”

To enhance human rights awareness throughout the company, Judge Gabrielle Kirk McDonald was appointed as Special Counsel on Human Rights to the Chairman of the Board of FCX. Already a member of our Board of Directors, Judge McDonald has had a distinguished career as a civil rights lawyer, a federal judge and as the President of the International Criminal Tribunal for the former Yugoslavia. In 2001, she took a leading role in negotiating the Voluntary Additional Land Rights Trust Fund agreement with Amungme and Kamoro tribal leaders and actively worked with local leaders to plan and implement two important human rights initiatives supported by the company. As 2002 began, she traveled to Papua to participate in meetings and conferences related to these two projects:

#### *The LEMASA Human Rights Center*

At the request of Thom Beanal and LEMASA, the Amungme people’s organization, a Human Rights Center is being established in Timika. Freeport is funding the first stage of its development, including the construction of the building and support for the first conference to be held during 2002 as part of the human rights center programs. In addition to the basic human rights focus of the center, there will also be activities to enhance the development of civil society and good governance in the area and programs to look at ways to enhance conflict resolution within the local community.

#### *The Women’s Rights Center*

The Women’s Rights Center is being developed by the HAMAK Foundation headed by Mama Yosepha Alomang, an Amungme who resides in Timika. It will focus on the unique challenges women and children face in today’s world and especially the challenges within Papuan society in an area where there is rapid social change and economic development. Freeport is funding these first phases of the development of the Women’s Rights Center, which will have its own facility in Timika and held its first conference in January 2002.

In addition to these human rights programs, Freeport sponsors a comprehensive array of health, education and social development programs designed to ensure that our Papuan neighbors are positively impacted by our operations. In 2000, a formal agreement called a Memorandum of Understanding (MOU) was signed by PT-FI and the local community organizations representing the Amungme and Kamoro peoples. That agreement was the result of five years of negotiation and focused on socioeconomic resources, human rights,

land rights and environmental rights. The MOU details the aspirations of PT-FI and the traditional residents of the company's operations area to seek harmonious and mutually beneficial relationships based on equality, honesty and justice. In 2001, Freeport and Amungme and Kamoro tribal leaders signed another milestone agreement, the Voluntary Additional Land Rights Trust Fund. This agreement, first outlined five years earlier, fulfills a commitment by PT-FI for voluntary special recognition for the holders of the traditional land rights in the mining area and for the expanded scope and continuing success of the mining operations. Reports on these agreements and programs may be reviewed on our website ([www.fcx.com](http://www.fcx.com)).

**Specific Comments (Environmental):** Chapter 10, Page 17

“The main advantage of riverine disposal is that it is cheap and convenient and it may also appear less hazardous than building tailings storage facility [sic], especially in the mountainous, high rainfall areas with little stable land and the risk of seismicity.”

**Comment:** Freeport's Grasberg mine transports mill tailings from its mountainous, high rainfall mill to the lowlands where most of the tailings are impounded in a deposition area (Modified Ajkwa Deposition Area, or ADA). The ADA area corresponds to the natural alluvial deposition area, which formed millions of years ago at the convergence of the Otomona and Ajkwa rivers. The Ajkwa river depositional center, which receives tailings, is comparable in composition to depositional centers of other rivers in Papua that do not receive tailings. The tailings from Freeport's mine speeds up the depositional process and the levee system that Freeport has constructed impounds most of the mill tailings. Therefore, it would be more accurate to call Freeport's tailings management “riverine transport with tailings impoundment,” rather than “riverine disposal.” The cost of levee construction and maintenance, lowland revegetation, research and development of reclamation techniques, and environmental management and monitoring efforts associated with tailings management is significant – over \$177 million in capital and operating costs on tailings and river management since 1990.

“Riverine disposal has caused many types of environmental damage. These include a change in the morphology or physical form of rivers, an increased risk of flooding resulting in the die-back of vegetation and damage to aquatic ecosystem.”

**Comment:** Freeport's Grasberg mine's riverine transport of tailings to the deposition area uses the Otomona River which due to steep banks, high turbulent flow and high natural sediment content has few people living close to it and was never used extensively as a fishery or as a source of drinking water. Since the implementation of the impoundment levees in 1997, flooding and die-back of vegetation has taken place only in the Modified ADA. These impacted lands were not used historically for gardening, but rather for hunting and gathering activities. Moreover, through NGO-supervised negotiations, local people have been compensated for the use of their lands for tailings impoundment activity. Monitoring shows the system is working as designed and active

reclamation research shows the tailings will support the growth of agricultural crops. Land affected by tailings deposition will be reclaimed for multiple use including agriculture, aquaculture, forestry etc. These uses will be determined after consultation with the local people and government.

### **Grasberg and Ok Tedi: A Comparison**

A number of people inside the mining industry, a number of NGOs that watch the mining industry and now, at least by implication, the MMSD document makes the Ok Tedi and the Grasberg deposition methods sound very similar environmentally and socially. Freeport wishes to demonstrate that the two scenarios are very different and that each should be judged on its own merit. The following chart shows how different the two situations are:

<b>OK TEDI MINE</b>	<b>GRASBERG MINE</b>
Both tailings and overburden are discharged to the river.	Only tailings are discharged to the river. Overburden is placed in managed storage areas surrounding the mine and does not enter the local river system.
A tailings dam was under construction in early 1984 when it failed due to a landslide. Subsequently, upon beginning of production, the Government of Papua New Guinea allowed discharge of tailings and overburden to the river. At this time, the tailings and overburden discharges to the river continue.	No dam construction was ever attempted, due to studies showing high seismic and tectonic activity would make such a construction dangerous and subject to failure. A Tailings Management Program, approved by the Government of Indonesia, has been implemented involving the engineering, construction and maintenance of a levee system to capture and control the deposit of tailings as they enter the lowlands. Monitoring shows the system is working as designed and active reclamation research shows the tailings will grow both agronomic and non-agricultural species. Tailings-impacted land will be reclaimed for multiple use after consultation with the local people and the government.
Tailings and overburden are discharged to the Tedi and Fly River systems, which flow some 990 river kilometers to the sea. According to BHP, there are 120 villages in this area of the Tedi and Fly Rivers, with a total of 50,000 inhabitants. Many of these local people utilized the riverbanks for gardens and the rivers for	Tailings are discharged to the Ajkwa River system 128 kilometers from the sea and captured in the Ajkwa Deposition Area (ADA) 80 kilometers downstream. While the current downstream population – which includes mine employees and all those people attracted by the mine economy – is comparable to that below the

<p>sustenance fishing and presumably drinking water prior to mining operations.</p>	<p>Ok Tedi mine, fewer than 500 people lived downstream when the mining operation began, and they only in the highland area. No one lived along the Ajkwa-Otomona in the lowlands until after the mine began operation when there was a migration to the area that came to be known as Timika. These people live outside the levee area. Due to the steep banks, high turbulent flow and high sediment content of this upper portion of the river, few people lived close to it and it was never used extensively as a fishery or as a source of drinking water.</p>
<p>The disposal of waste rock and tailings has led to a build-up in the riverbed levels, which adds to the frequency of river bank overtopping and the deposition of sediment into the adjacent floodplain, which, together, can affect trees and other vegetation. BHP reports that this has affected garden crops as well, and villagers have moved their gardens further from the river. Because the discharge of tailings and overburden continues, the impact to vegetation occurs along the Tedi River downstream of the mine and into the Fly River system. To date, some 400 square kilometers have been impacted and studies show that over time this may grow to 1,350 square kilometers.</p>	<p>The deposition of tailings also smothers vegetation and trees within the ADA levee system. As a result, the impacted area will be limited to 450 square kilometers over the life of the mine. Again, these impacted areas will be reclaimed for multiple use after consultation with the local people and government. No gardens were displaced, as the local people had never used the ADA area for gardening, having better locations nearer their villages.</p>

<p>BHP published information early on about the baseline conditions in the river and their projections of “reduced fisheries during the period of the cyanide leaching of the gold cap.” From the portsite at Kiunga (which is only 20 meters above sea level) it is still 800 kilometers to the sea. This river is much larger, wider, deeper and meandering and offers a very large area of prime fishery habitat. Various published studies discussed the toxicity of their tailings, and gave projected distances downstream for both acute and chronic effects from cyanide and copper to the junction with the Fly River. These reports also listed chronic effects for total suspended solids well down the Fly river. BHP reports that fish catches have declined 90% from baseline levels in the Tedi River and 70% in the Upper Middle Fly River. Villagers no longer fish in the main Tedi River channel.</p>	<p>Chemical extraction, (e.g. cyanide, acid or other leaching elements) was never used at the PT-FI mines. Comprehensive water quality sampling shows that the water in the ADA meets U.S. EPA and WHO drinking water standards for metals, including copper. Monitoring also shows that a viable fishery of sediment-tolerant fish such as barramundi and catfish is present downstream of the ADA. PT-FI is also conducting an Ecological Risk Assessment of the Tailings Management Program, including a human health risk component, and the results will be made public. Because the tailings are managed, following closure of the mine, the river system will revert to natural sediment transport and deposition, and the tailings management area will be reclaimed to productive uses or appropriate natural systems.</p>
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Signed: David B. Lowry

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