THE OMAI GOLD MINE DISASTER IN GUYANA

A TEST CASE OF PUBLIC AWARENESS AND THE NEEDS OF ENVIRONMENTAL EDUCATION

<u>Darrell Sequeira</u>, Lic. Agric. & Forestry, BSc (Hons) Biol. Sciences. Independent Consultant in Environmental Ecology. Kirstintie 30 B 40, 02760 Espoo, Finland.

Given that gold mining is poised to play a major role in the economic development and the quality of the natural environment in Guyana, my paper is based on the premise that public awareness about this important aspect of the utilization of Guyana's natural resources is an undisputed democratic right and is crucial to sustaining the well being of the population.

Omai Gold Mine (OGML) is located about 320 km from the capital Georgetown and extends over an area of some 65 sq km, actual excavation for gold, occurring on a small part of this area. The disaster occurred between $19 - 24^{\text{th}}$ August 1995 when a dam of a tailings holding pond collapsed releasing 3.2 million cubic metres cyanide laced tailings effluent and slurry into the Essequibo river. This was perceived as such a severe threat to national security that the late President Cheddi Jagan declared the Omai and Essequibo rivers an environmental disaster zone, which was unanomously endorsed by parliament on 24^{th} August, and asked for international assistance.

The rural population living in the vicinity of the Omai Gold Mines and on the banks of the Essequibo river were immediately informed of the disaster by OGML and advised not to drink water from the Essequibo river. The residents easily understood that the water of the Essequibo river was unpotable and the fish inedible. They were supplied with drinking water by OGML up to 30th August 1995.

The highest level of cyanide, 16.56 ppm, was recorded in the Omai river on 21^{st} August by OGML but no person was exposed to cyanide levels in the water of the Essequibo above the 2 mg/L (2 ppm) accepted Canadian guideline for drinking water. There were no documented deaths from cyanide poisoning neither were there any documentation of anybody showing symptoms of cyanide ingestion.

The long term economic affects of the accident remained unclear and led to wild speculation. Even among the educated population were those who displayed a remarkable ignorance of the scientific details. Pro government observers have pointed out to the attempts of opposition political parties to capitalise on the general ignorance of the population and propagate rumours and mis-information, capitalising on democratic rights and press freedom for political advantage or from shear innate ignorance of the scale of the event and the extent and duration of the adverse impact of cyanide in the natural environment. Such confusion could have been minimised with appropriate and timely environmental education. Soon after the accident the Omai Gold Mines organised radio and tv broadcasts about the preventive measures that have been taken to avoid a recurrance of such an event. The Government of Guyana set up a Commission of Enquiry on 7 October 1995 and their report of 5th January 1996 was put on sale.

The Omai disaster was an unprecedented opportunity to test the status quo of public awareness to the actual and potential impact of gold mining on the economic and environmental security of the nation, and to project from that experience, the future needs of public environmental education in Guyana.

I was in a good position to observe public awareness because, at that time, I was, a consultant to UNDP, Environmental Field Specialist, based in the Environmental Protection Agency (EPA), Office of the President, and had also participated, as a government representative, in several of the interactions of the Government of Guyana with Omai Gold Mines, prior to the disaster. Accept for two short periods abroad, the second one being at the time of the disaster, I was in Guyana from August 1993 to August 1996 and my paper is based on my observations and experience during that period.

In the absence of a scientific study on my topic, I am obliged to base my judgement of public awareness on the dissemination of reports, mass media coverage, public workshops, discussions with stake holders and my own observations of public access to crucial information prior to and after the Omai disaster, the response of the public to the disaster, and to developments in public environmental education after the disaster.

Guyanese society is not homogenous in its capability to absorb environmental information and education nor in its interest in such education, although environmental quality can have such a significant impact on their survival and economic security. The reasons for this apparent lethargy are partly historical, partly rooted in the low level of basic education of the general population; and partly their lack of awareness of the importance of the impact of gold mining and other such land use activities on their health, survival and economic well being.

A comparison of the public's response to the Omai cyanide spill and the use of cyanide by Omai Gold Mines Ltd. with the indolent attitude to the immediate and long term impact of environmental destruction and mercury pollution in the Essequibo and its tributaries arising from dredging for gold from the river bottoms and banks illustrates the above point.

Guyana has now adopted a truly democratic system of government and the new administration is not repressive but it will take time before the people adapt to a truly democratic frame of mind and be able to separate issues from persons and politics. Until that happens the success in environmental education will be adversely influenced and therefore it must be accampanied by methods of instilling the peoples' confidence that their democratic rights will truly be honoured.

In Guyana, public environmental education currently occurs through mass media coverage, mostly in newspapers, public workshops and seminars, practically all

occurring in the capital, Georgetown, and except for a small trickle down effect, does not reach the majority of the Guyanese population, particularly those living in the countryside. There are also complaints that access to public documents are difficult and often too late for full participation in public hearings or only made available to selected individuals. All this has resulted in a bias in the dissemination of environmental information and education to the better educated sectors of the population, well off stake-holders, mining companies' personnel, and to small scale gold miners; participation depending on their vested interests and appreciation of its importance to national well being. This bias was evident in the differenct responses of various sectors of the population to the Omai disaster.

Environmental education of the rural population still remains rudimentary if not nonexistent. Several obstacles can be sited: lack of trained manpower, finance, infrastructure, organisation, level of priority attributed to environmental education and limited capability and funding of NGOs. The Omai disaster has hopefully awakened the public to their right to be appropriately informed and to the value of taking a keen interest in environmental information and education.

The long-term future is bright because the Ministry of education has developed a national programme to integrate environmental education in primary and secondary education and the University of Guyana offers a degree course in Environmental Science. Similar education probably occurs in vocational colleges. The demand for environmental education can therefore be expected to increase when these individuals enter society.

The Government appointed Commission of Enquiry on the Omai disaster recommended that "the Government and OGML should jointly plan and implement a protocol for educating the populace to a sensible and rational understanding of cyanide and its effects". This has already been done and there is need for similar public education on, for example, the hazards of mercury in the environment, water quality issues and health, and the effects of pesticides. The EPA has determined a protocol on dealing with future environmental emergencies and is attempting to remedy the bias in propagation of environmental information and education.

The requirement of an EIA on new projects, reduction in the environmental impact of existing industries, monitoring of compliance with national environmental standards and the collection of base line data on the quality of the natural environment, and the installation of a computerised environmental data base and information system, to which the public will have excess, are all promising actions, which are already being implemented, could materialize if the finance and manpower becomes available, and would become the basis for a sound environmental education of the public and increased environmental awareness.

The above points will be developed with some illustrations and supported with a list of references.