

## Placer Dome Case Study: Marcopper Mines Catherine Coumans – April 2002

### **MINE:** Tapan Pit and San Antonio Mine – Marcopper Mining Corporation

**Location:** Marinduque, Philippines

**Ownership:** 39.9%. Placer Dome managed and guaranteed the loans for the two Marcopper Mines 1969-1996.<sup>1</sup>

**Product and Reserves:** Copper, with gold and silver as by-products. The mine has been suspended since 1996.

**Type:** Open pit at two mines, the Tapan Pit and the San Antonio Mine, metal extraction through flotation and leaching.

**Operating Dates:** 1969 – 1996

**Employment:** Around 800 people

**HISTORY:** As early as 1956, Placer Dome, then Placer Development Limited, became involved in an exploration project on the island of Marinduque in the Philippines, undertaking extensive geological mapping and drilling. In 1964, Marcopper Mining Corporation (Marcopper) was established. In 1969, Marcopper started mining operations in Marinduque. Placer Development Ltd. secured and guaranteed more than US\$ 40 million in loans for the new copper mining company from a consortium of American banks and “Placer undertook the responsibility for open pit planning, design and construction...”<sup>2</sup> Placer Dome always owned 39.9% of the shares in Marcopper, the maximum amount of shares that could, until recently, be legally held by a foreign company in the Philippines. Placer Dome managed the two Marcopper mines on the island. All Presidents and Resident Managers of Marcopper, from 1969 until 1996 (when the mine was shut down) were seconded from Placer Dome. Marcopper was “under design and management control” of Placer Development Ltd.<sup>3</sup> This management arrangement was established in agreements Placer Dome had with the banks whose loans Placer Dome guaranteed. Placer Dome guaranteed the loans for two successive Marcopper copper mines on the island. Placer Dome provided the technical expertise for the two mines. Placer Dome was the only mining company involved in Marcopper from 1969-1994. Placer Dome’s secret partner in the mine (50%) until 1986, when he was overthrown, was the Philippine dictator Ferdinand Marcos. After 1986, Marcos’s shares were taken over and held by successive Philippine governments (Corazon Aquino, Fidel Ramos) until 1994, when they were privatized.

### **A 30-year History of Mining Disasters and Social Opposition**

In 30 years of mining under Placer Dome’s management, Marinduquenos endured one mining-related environmental disaster after another. For 16 years, from 1975 to 1991, Placer Dome oversaw the dumping, via surface disposal, of more than 200 million tons of mine tailings directly into the shallow waters of **Calancan Bay**, covering corals and seagrasses and the bottom of the bay with 80 square kilometers of tailings. The food security of 12 fishing villages around the bay has been severely impacted for the past 27 years. A large portion of the tailings are exposed in the bay and regularly blow

---

<sup>1</sup> Zandee, Dick. 1985. Tailing disposal at Marcopper Mining Corporation. In *Asia Mining '85*, The Institution of Mining and Metallurgy, pp. 35-45.; *Philippine Mining Journal*, October 1969:38.

<sup>2</sup> *Philippine Mining Journal*, October 1969:38.

<sup>3</sup> Zandee, Dick. 1985. Tailing disposal at Marcopper Mining Corporation. In *Asia Mining '85*, The Institution of Mining and Metallurgy, pp. 35-45

into nearby villages. The tailings also leach metals into the bay<sup>4</sup> and are suspected to be the cause of lead contamination found in children from villages around the bay. In 1998, the Philippine Government declared a State of Calamity for health reasons for Calancan Bay villages because of lead contamination. Children from the area have been undergoing detoxification treatments in Manila. Calancan Bay villagers were never asked for their permission for the dumping and have never been compensated for their losses. They protested the dumping vehemently for 16 years and continue to demand that the bay be rehabilitated and that they be compensated for their losses. Placer Dome executives met regularly with Canadian NGOs during the 1980s over this issue but the dumping was not halted until the Tapian Mine was depleted in 1991. Placer Dome continues to deny damage to the bay and nearby villagers as a result of the tailings.<sup>5</sup>

In 1991, an earthen dam was built in the mountainous headwaters of the Mogpog River. The dam was supposed to keep silt, from a waste dump for the new San Antonio mine, out of the Mogpog River. The people of the town of Mogpog vigorously opposed the building of the dam, fearing impacts on the river they use for food, watering animals, washing themselves and their clothes. In 1993, the dam burst, flooding downstream villages and the town of Mogpog so severely that houses were swept away, water buffaloes and other livestock killed and crops destroyed. According to the families, two children were swept to their deaths. Marcopper's Resident Manager, Placer Dome's Steve Reid, denied any responsibility blaming unusual rainfall from a typhoon.<sup>6</sup> However, when the dam was rebuilt an overflow was added for the first time, in an implicit acknowledgement of faulty engineering. Within two years the toxic waste behind the dam was so high again that it flowed freely through the overflow into the river as it continues to do to this day. The Mogpog River is severely affected by the toxic waste flowing through the dam.<sup>7</sup> A species of crab (called Bagtuk) that people used to eat has completely disappeared. According to a letter of August 23, 2001, by Vancouver-based engineering firm Klohn Crippen, "failure of the dam is a virtual certainty in the near term under current conditions." In the letter Klohn Crippen warns that failure of the dam will result in "significant downstream property damage" and "the potential for loss of life."

### **The Boac River Tailings Spill Disaster of 1996**

On March 24, 1996, another massive tailings spill at the Marcopper Mine filled the 26-kilometer-long Boac River on the island of Marinduque with 3-4 million tons of metal enriched and acid generating tailings. The spill happened when a badly sealed drainage tunnel at the base of the Tapian Pit burst. The mined out pit, high in the central mountains of Marinduque, had been used as a storage place for tailings from the adjacent San Antonio mine since 1992. An investigative team from the United Nations visited the island shortly after the tailings spill and noted: "...it is unclear why an environmental impact assessment of the Tapian Pit option was never carried out; why no apparent efforts had been made to find an alternative disposal method and site...why no monitoring of the portal area was being carried out even though it was reported to the U.N. Mission that the mine tailings had been escaping in some quantity for a considerable period of time. (...) The unconventional use of the Tapian Pit as a containment system for tailings, particularly because of the presence of a disused drainage tunnel near its bottom, should have been sufficient to ensure that risk assessment and contingency planning were carried out. Furthermore, it is clear from cross-sectional diagrams of the drainage tunnel that were

---

<sup>4</sup> USGS report: <http://geology.cr.usgs.gov/pub/open-file-reports/ofr-01-0441>

<sup>5</sup> Globe and Mail: April 16, 1998; Cooney, James. February 2001. Letter to Fabien Leboeuf, Canadian Catholic Organization for Development and Peace.

<sup>6</sup> Reid, S. June 29, 1994. Letter to Mayor Ruben Tan of Mogpog.

<sup>7</sup> USGS report: <http://geology.cr.usgs.gov/pub/open-file-reports/ofr-00-0397>

reviewed at the mine site that fracture zones and ground water seepage were likely to occur along its length.”<sup>8</sup> The UN team noticed unrelated leaks in other mine structures and concluded, “it is evident that environmental management was not a high priority for Marcopper.”<sup>9</sup>

In a letter dated April 11, 1996, then-CEO John Willson made a written commitment to then-President of the Philippines, Fidel Ramos, stating, “I have authorized the following commitments by Placer Dome: The residents of Marinduque who have suffered personal inconvenience or damage to their property as a result of the Marcopper event will be quickly and fairly compensated. ... Placer Dome recognizes its responsibility to rehabilitate all areas impacted by the tailings flow.... This program will include: 1) the rehabilitation of the river system; 2) the remediation of off-river impacts; ....6) the development and undertaking of a program of river and ocean rehabilitation.” A wholly owned subsidiary called Placer Dome Technical Services Ltd. was set up with offices in Manila and Marinduque to manage the clean up and compensation arrangements. In 1997, Placer Dome divested from Marcopper through a wholly owned Cayman Island holding company called MR Holdings. Critical details of this transaction remain secret. Placer Dome maintained that the commitments made by CEO Willson would still be met.

### **Placer Dome Flees Philippines, Abandons Responsibilities and Threats to Human Life**

Now, six years after the spill there are still approximately 821,380 cubic meters of tailings in the river, half the originally spilled amount.<sup>10</sup> These tailings are leaching out acid and heavy metals.<sup>11</sup> The burst tunnel that Placer Dome said it had plugged “in perpetuity” in 1996 is leaking again. Thousands of villagers have not yet received compensation.<sup>12</sup> The clean up of the river was delayed for years because Placer Dome ignored repeated government directives to stop seeking a permit for Submarine Tailings Disposal as a clean up option and to find a suitable on-land disposal option.<sup>13</sup>

On October 8<sup>th</sup>, an August 23, 2001 letter from Vancouver-based consulting firm Klohn Crippen was leaked to Congressman Reyes of Marinduque. The urgent letter refers to conclusions from Klohn Crippen’s June 14, 2001 report, commissioned by Placer Dome, in which Klohn Crippen warn that five dams holding back thousands of tons of waste in the mountains on the island need immediate remediation. The Klohn Crippen letter refers twice to potential for “loss of life” downstream as a result of collapse of these structures and notes that collapse of a pit containing mine waste “would threaten the safety of any mine personnel that might be in the vicinity when the failure occurred.” Three days after the leaked letter was made public, the Philippine government ordered Placer Dome to implement the recommendation of the Klohn Crippen report.<sup>14</sup> Instead, Placer Dome pulled its personnel out of the Philippines just before Christmas. Before leaving Placer Dome drafted new confidential agreements with the current owners of Marcopper that make Marcopper responsible for the further clean up of the

---

<sup>8</sup> UNEP, September 1996. Final Report of the United Nations Expert Assessment Mission to Marinduque Island, Philippines. P. 68.

<sup>9</sup> UNEP, September 1996. Final Report of the United Nations Expert Assessment Mission to Marinduque Island, Philippines. P. 69.

<sup>10</sup> Mines and Geosciences Bureau, 2001.

<sup>11</sup> USGS report: <http://geology.cr.usgs.gov/pub/open-file-reports/ofr-00-0397>

<sup>12</sup> Resolution No. 2002-05, February 2, 2002. A RESOLUTION URGING MARCOPPER/PLACER DOME TO IMMEDIATELY CONTINUE THE PAYMENTS OF DAMAGE CLAIMS FOR THE REMAINING BARANGAYS AFFECTED BY THE 1996 MINE SPILL.

<sup>13</sup> Ramos, V. Secretary, Department of Environment and Natural Resources (DENR), 1997; Cerilles, A. Secretary, DENR 1999.

<sup>14</sup> Alvarez, H. Secretary Department of the Environment and Natural Resources, October 11, 2001. Directive to Jay Taylor, CEO Placer Dome, and others.

river and compensation for villagers under contract to Placer Dome. Placer Dome says the tailings will be returned to the same pit that Klohn Crippen has subject to imminent collapse under the waste already there. Through another Congressional Inquiry a “redacted” copy of the agreements Placer Dome made with Marcopper were made available. This redacted copy omits all financial and timeline information, as well as the page with the signatories.

## **ISSUES:**

### **1) Placer Dome Consistently Ignores Best Practice, Consultants’ Advice, and Government Directives.**

Calancan Bay – Surface disposal of tailings into the sea was unacceptable by “best practice” standards by 1975. As early as 1971, Island Copper in Placer Dome’s home province in Canada and the Atlas Mine in the Philippines were using submerged marine dumping systems. Placer’s consultants, Rescan (who also advised on Island Copper), advised Placer to use submerged disposal in Marinduque, off a deep coastal shelf in Torrijos. Placer Dome’s first permit for ocean dumping explicitly stipulated that the dumping had to be submerged to protect marine resources. Placer attempted a submerged system in 1975 in shallow Calancan Bay; the system failed and Placer reverted to surface disposal into the bay in violation of its permit.

Mogpog River – The earthen siltation dam built at the top of the Mogpog River, in 1991, was inadequate and burst with the first major typhoon in 1993. It was repaired with an overflow, which it had previously lacked. Within a year waste was flowing through the overflow. The dam has continued to leak acidic and metal enriched waste since 1994 and is now in danger of collapse according to Klohn Crippen.

Boac River – No risk assessments or Environmental Impact Assessment were conducted on the Tapan Pit before using it as an impoundment for tailings in 1992. No international consultants were consulted for the plugging of the tunnel at the bottom of the pit. No monitoring of the tunnel was carried out. The clean up of the river was delayed for years because Placer Dome ignored repeated government directives to stop seeking a permit for Submarine Tailings Disposal as a clean up option and to find a suitable on-land disposal option.

Dams and Structures – Klohn Crippen reported to Placer Dome on June 14, 2001 that five dams and structures were unstable and two posed an immediate threat to human life. Placer Dome did not act on this information. On October 11, 2001 the Philippine Government ordered Placer Dome to begin to fix the faulty dams and structures. Instead, Placer Dome left the country.

### **2) Placer Dome Not Transparent, Fails to Disclose to Local Stakeholders “information relevant to their concerns”<sup>15</sup>**

There is a long history in this case of information that was of critical importance to local people, local and national government in the Philippines and to shareholders being kept confidential. In fact, most important information that has become available has come out as a result of legal action, Congressional Inquiries and leaks. For example, information on Placer Dome’s Cayman Island holding company, MR Holdings, came out through legal action, information on the low level of insurance held by Marcopper

---

<sup>15</sup> Placer Dome, 1998. Sustainability Policy.

came out through a Congressional Inquiry, as did information on the agreements Placer Dome originally entered into with Marcopper after the spill. Information about the Klohn Crippen report (June 14, 2001) was leaked before a Congressional Inquiry in 2001, as was the information that Placer Dome has provided \$13 million dollars to Marcopper to continue the clean up of the Boac River. There is a lot of critical information that Placer Dome still refuses to supply such as evidence of Placer's divestment from MR Holdings and the contents of the recent agreements with Marcopper that Placer Dome signed before leaving the Philippines. A "redacted" copy of this agreement was finally provided through a Congressional Inquiry in 2002 but this has had all relevant information removed including the signatories to the agreement.

### **3) Placer Dome Insists on Marine Dumping Against the Wishes of Local Stakeholders**

Placer Dome delayed the clean up of the Boac River for 6 years by insisting on dumping the tailings in the ocean against the express wishes of the people of Marinduque and the Philippine Government.

**4) Placer Dome left the Philippines in December 2001 without fulfilling commitments made to the Office of the President following the tailings disaster in 1996, and in disregard of a government order of October 2001 to fix dams and structures whose collapse threatens another ecological disaster and loss of human life in Marinduque.**