Mercury pollution threatens tourist sites in NTB, C. Sulawesi

Mercury contamination from artisanal and small-scale gold mining (ASGM) in Sekotong, West Nusa Tenggara (NTB) province, and in Poboya, Central Sulawesi province, threatens the surrounding tourist areas, rice fields, forests and parks, environmental NGO BaliFokus Foundation has stated based on recent findings.The joint report of BaliFokus, Arnika Association and the International Persistent Organic Pollutants Elimination Network's (IPEN) heavy metals working group states that the average mercury level in hair samples from both hotspots is more than three times higher than the US Environmental Protection (EPA) Agency reference dose of 1 ppm.

The three-month long research project that ran between May and July 2012 took 20 hair samples from a mixed group of respondents, including miners, housewives, students, fish vendors and farmers, leading to findings of an average mercury level of 5.01 ppm in Poboya and 3.63 ppm in Sekotong. Sekotong, a district located in West Lombok about 28.7 kilometers southwest of the NTB capital, Mataram, is a popular site for tourism, particularly surfing, diving and snorkeling. The mining and gold processing activities have occurred in the past five years in Sekotong's Buwun Mas, Kerato and Pelangan villages, an area of about 1,200 hectares. There, about 5,000 miners are operating some 100 ball mill units in the backyards of their houses and near rice fields.

Meanwhile, Poboya sees a larger amount of ASGM activity located in the grand forest park, about 12.5 kilometers from Palu city, Central Sulawesi. About 35,000 miners, residents of Poboya, Kawatuna, Tanamodindi and Lasoani, have been operating around 200 ball mills in the 7,000 hectare area since 2004.

"The mercury vapor in the air at the Poboya ball-mill plants was measured as high as 45,000 nanograms/m3, while the US EPA and WHO standard for safe levels of air-borne mercury is 1,000 ng/m3. A US EPA reference said that in areas with a mercury air level of between 1,000 and 10,000 ng/m3, [residents should] prepare to evacuate; while for values above 10,000 ng/m3, [residents should] evacuate," Yuyun Ismawati, advisor of BaliFokus and IPEN research leader for ASGM said over the weekend. At present, BaliFokus is the Indonesian NGO representative attending the final negotiations on the International Mercury Treaty hosted in Geneva, Switzerland, on Jan. 13-18.

The report is also in accordance with the conclusion of an assessment on environmental mercury discharge at Sekotong, published in the 2012 Journal of Environmental Monitoring, that followed mercury levels in rice produced in Sekotong and concluded that the recorded methylmercury values represented a potential threat to the health of the local residents. Exposure to high levels of mercury can permanently damage the brain and the kidneys, while harmful effects on a developing fetus include brain damage, mental retardation, blindness, seizures and the inability to speak.

The head of the West Lombok Tourism Agency, Gde Renjane, said that there had been a decrease in ASGM activities since last year, while the West Lombok regency administration was currently preparing to implement a zoning regulation for mining activities."In previous years, there were tens of thousands of local miners, but now I believe there are only about a thousand left," said Renjane. While the closest tourist beach to the mining site is Pelangan, Renjane cited that over the past three years, administration agencies overseeing tourism, mining and environment, had all advocated training to local miners to prevent the disposal of mining waste into the rivers and sea.

BaliFokus reported that certain places in Sekotong had been offering gold mining tours for tourists. "[The tour] lets the guests pan for or extract gold and take it home. Of course, there is no protection or mention about mercury ever raised by the tour guides," said Yuyun.