

“Rare Earth” Hopes in Jamaica

The Jamaica Bauxite Institute has signed a Memorandum of Understanding with Nippon Light Metal of Japan to set up a pilot project to extract rare earth elements from red mud in the country, according to Mining Minister Phillip Paulwell.

The project has been approved by Jamaica’s National Environment and Planning Agency, though it still requires approval from several other government agencies. The plan, which was first agreed to in September, is being done to “determine the scope of the proposed commercial project of the rare earth elements,” according to a government release. Nippon Light Metal’s ultimate goal is to extract 1,500 metric tonnes each year from red mud in Jamaica, he said. According to Paulwell, the concentration of rare earth elements in Jamaican red mud is “significantly greater” than what is known about other red mud sites in the world. “Rare earth oxides, the commodity that will be extracted are currently being traded at rates of up to US\$3,500 per kilogram, he said. “When we compare that to alumina, which is now being traded at US\$330 per tonne, it is clear that this source presents an opportunity Jamaica must pursue, and which must be managed in such a way that Jamaica and Jamaicans benefit significantly.” The pilot project will begin with an initial investment of \$3 million, funded by Nippon, which will cover buildings and equipment. “Like many important technologies, rare earth elements source development may have environmental implications that must be identified and managed,” he said. “The pilot plant study will seek to specifically map the potential impact on land, water, and air and the effect of neutralizing the by-products of rare earth element extractions.” Jamaica and Nippon will each have a 50 percent share of the results of the project, he said. “This development has had the active involvement of the government of Japan through its Embassy in Jamaica and its Ministry of Economy, Trade and Industry,” Paulwell said. “Both the government of Jamaica and the government of Japan are fully behind this project.” Jamaica will eventually begin negotiations with Nippon for “full commercialization” of the project. “The government of Jamaica perceives the extraction of the rare earth elements that are present in Jamaica, to be an exciting new opportunity to earn much needed foreign exchange and create jobs,” he said. Red mud is a byproduct of the process of refining bauxite, which is in strong supply in Jamaica. Rare earth elements are used for a number of purposes, particularly in technologies like hybrid car batteries. Caribbean Journal