

Lynas Malaysia and the rare earth controversy

Contributed by John Berthelsen
Tuesday, 14 June 2011

Lynas should win, but maybe after elections

Two decades ago, Mitsubishi Chemical established a rare earth plant in an area called Bukit Merah west of the city of Ipoh in Malaysia. And for the last two decades, both Mitsubishi and Malaysia have been paying the price.

It has cost RM300 million (US\$99.2 million) so far to clean up the closed plant, and the cleanup has not been completed yet. The deaths of eight plant workers from leukemia have been laid at the plant's door because thorium, a byproduct of the refining process, was allegedly thick in the air.

Today a wholly-owned Australian company, Lynas Corp is seeking to open another rare earth plant in Malaysia near the east-coast city of Kuantan. It is reaping the results of the mess left by Mitsubishi and its subsidiary, Asian Rare Earths. Environmentalists and Malaysia's opposition parties, particularly the Democratic Action Party, have been warning that Lynas has the potential to create the same kind of environmental and public health problems that the workers and residents of Bukit Merah endured.

The fight over the plant has implications well beyond either Malaysia or its warring political parties in the expected run-up to an election sometime in the next year. China produces 97 percent of the world's rare earth metals, crucial for the manufacture of a wide variety of products including wind turbines, disk drives, cell phones, flat panel displays and many others.

Now facing a rash of illegal mining and widespread environmental disasters, China said it has cut its first-half 2011 export quota by 35 percent year on year. Lynas says it will provide the first new source of supply to the world outside China, making Malaysia, if the plant goes ahead, a strategic player in the industry.

Lynas Malaysia Sdn Bhd, a subsidiary of Lynas Australia, says it plans to import rare earth ore from Mount Weld in Western Australia, said to be the richest rare earth deposit on the planet. The company plans to truck the ore to Fremantle, send it by containership to Kuantan, then process it at a RM700 million (US\$231.9 million) facility which is 40 percent completed at the Gebing Industrial Estate nearby in Pahang state.

It is unlikely that the plant will go ahead before projected national elections late this year or early next, analysts say, because of the emotional impact of the waste byproducts of the plant, which contain the radioactive element thorium.

Although Lynas has been granted most of the permits to start production, the government has forbidden the import of raw materials for processing until all of the concerns have been met. Lynas reportedly offered to set aside part of its earnings from the plant in Gebeng to help sponsor research into disposal of the waste. The company told the Kuala Lumpur-based website Malaysian Insider that it had deposited funds "to ensure safe management of any remaining residues as required by the Atomic Energy Licensing Board."

The question is whether Lynas chose Kuantan for the same reason Mitsubishi chose Bukit Merah: because Australia is a putatively first-world country that wants to export its environmental troubles overseas. Norman Moore, the minister for mines and petroleum and the leader of the Western Australia government, told the state parliament on June 9, in response to a question from a Green Party member, that his government would refuse to take back any radioactive waste produced from the processing plant.

Although Prime Minister Najib Tun Razak is eager to see the plant go ahead because of the implications for his so-called 1Malaysia plan to draw foreign investment as well as for the strategic implications of making Malaysia a player in the rare earths game, he has publicly stated that all health and safety concerns must be addressed first.

The International Atomic Energy Agency says the plant has been built to international standards. However, the government has requested a second international panel, which conducted a six-day visit to Malaysia, meeting members of the public, community associations, NGOS and professional bodies. The panel is expected to complete its work by the end of June. Approval is expected.

The facility still faces a difficult fight, one that has grown more difficult with the Western Australian government's announcement last week. Some 700,000 people live within a 30-km radius of the plant. A local protest group, the Kuantan Concerned Citizen Group, delivered a petition charging that the organization has no faith in the safeguards the company claims to have put in place and "We do not want to face a radioactive problem in our backyard and we do not want to subject ourselves or our family members to severe health problems."

A major part of the concern, brought up frequently by the opposition, stems from the history of the Bukit Merah plant, which was an accident ready to happen, and it did. This reporter visited the plant in the 1980s to witness open drains being eaten away by corrosive materials. The operators had bulldozed two or three football field-sized trenches to hold the low-grade nuclear waste, then covered the walls with shotcrete or gunite. It was possible to peel the gunite off the walls with one's fingers, hardly inspiring confidence that the facility would hold nuclear materials for the recommended 800 years before their radiation deteriorated.

In this case, Lynas says it has permission from the Malaysian government to store the material onsite in Malaysia and that the waste produces uniquely low levels of radiation.

The Pahang authorities are banking on the plant as a part of efforts to turn the region into an east-coast industrial hub.

Malaysia in 2005 identified Kuantan as a future focal point for trade, commerce, transportation and tourism due to its location on the South China Sea. The government has sited a petroleum manufacturing area in Pekan, a neighboring town, and is seeking to allocate funds to enhance industrial growth. Indeed, Lynas says it chose the Pahang site because of its proximity to the Kuantan port, the availability of gas, water and chemical supplies and the availability of skilled workers.

It should be a considerable benefit for the Kuantan area if the safety concerns can be met. Worldwide demand is increasing rapidly at a time when China has a virtual lock on rare earth metals. Nonetheless, 2,200 tonnes of radioactive waste are expected to be produced by the plant annually. As with the Bukit Merah plant, that has raised the storm of health and safety concerns. NIMBY—"not in my backyard" — is a watchword in Malaysia now, along with nationalistic concerns over rich-nation dumping of its environmental problems overseas.

The Federation of Malaysian Consumer Associations is demanding that no thorium -- a major problem at the Bukit Merah site — be stored in the country. Lynas has answered that it would seek to recycle as much of the thorium as possible although in an earlier statement it said it had permission from the government "to store it onsite, safely, forever" if its recycling plans prove not to be commercial, a fact that the Western Australia government has now made an imperative.

Lynas says it expects no delay to its plans to begin operations in September as it maintains the plant is safe despite the uncertain political situation. The company says it anticipates a windfall of RM8 billion a year from 2013 onwards from the rare earth metals it is scheduled to produce, and Kuantan authorities — not to mention the federal government in Kuala Lumpur and a world anticipating a new source of rare metals — are eager for that to happen. But they are likely to have to wait after elections first.