Chatham Rock Phosphate – an example of a sustainable development of seabed mineral resources while minimising the environmental impact and using ground breaking technology

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Abstract

A deposit of phosphate nodules is on the Chatham Rise approximately 450 kilometres to the east of New Zealand. The deposit contains sufficient rock phosphate to supply New Zealand’s phosphate fertilizer needs for at least 20 years. It was first investigated commercially 50 years ago by Global Marine, followed by JBL Minerals in the early 1970’s. NZ and German government research and industry groups then took it up again, with major field programs in 1978 and in the early 1980s.

Due to difficult global and local economic conditions the project ground to a halt in 1984. The project was resurrected in 2007 when Chatham Rock Phosphate applied for a prospecting licence. This was granted in 2010 and a successful subsequent mining permit approval followed in 2013. The initial application for the separately required environmental permit was declined in February 2015.

The picture has changed significantly since Chatham’s initial application was declined in March 2015.

Changes have occurred in terms of, how the application will be prepared, the EPA’s operating procedures, helpful changes to the governing Act, legal precedents, relevant environmental issues, particularly water quality, evolving health and safety standards, and phosphate rock ethical supply issues.
Further, Chatham now has the support of the local iwi (Maori tribe) who will be most affected by our operation. This is unprecedented in New Zealand.

These changes in combination strongly support the logic of reapplying for the environmental permit.

**Keywords:** Marine Mining, Boskalis, rock phosphate, carbon emissions, cadmium, reactive phosphate rock, water quality, Ngati Mutunga

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