Opinion   **Open Access**

Deep Sea Mining Efforts

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Opinion

In the last decade, a new phase of deep-sea mining has begun. Increasing demand for precious metals in Japan, China, South Korea and India has led these countries to look for new sources [1]. Recently, there has been a shift in interest in hydrothermal vents as a source of metal rather than scattered nodules. The current trend towards power-based information and transportation infrastructure in Western societies is driving demand for precious metals. The resurgence of current interest in mining phosphorus lobes on the ocean floor comes from phosphorus-based fertilizers, which are essential to global food production. As the world's population grows the need for artificial fertilizers increases and the incorporation of organic systems into agricultural infrastructure increases [2]. The mining of the world's first "large" deposits at the Hydrothermal vent was carried out by Japan in August 2017. Japan Oil, Gas and Metals Mining Co., Ltd. (JOGMEC) has carried out this operation according to the research vessel Hakurei and Inter Ridge Vents Database conducted at the "Isenaana / Cauldron" bent field in the hydrothermally active back-arc basin called the Okinawa Trough. Did. Contains 15 confirmed bent fields.

The Solwara 1 project, a deep-sea mining company in Papua New Guinea, has been granted mining permits to begin mining high-grade copper-gold resources from low-activity hydrothermal vents [3]. This controversial project has sparked tremendous backlash from communities and environmental activists. The Solwara 1 project was located at a depth of 1600 meters in the Bismarck Sea, New Ireland. It uses ROV (Remotely Operated Underwater Vehicle) technology developed by Nautilus Minerals Inc, Soil Machine Dynamics, UK. Was the first company of its kind to announce plans to initiate large-scale underwater exploration of ore deposits. However, due to a conflict with the Government of Papua New Guinea, production and operations were postponed until early 2018. In September 2019, it was announced that the project had collapsed as Nautilus Minerals Inc. filed for bankruptcy and its key creditors sought to recover millions of dollars. To get back what they put into the project [4]. The Prime Minister of Papua New Guinea called the project a "total failure" and triggered a call from Pacific counterparts for a moratorium on deep-sea mining. Another potential location for deep sea mining being investigated and considered is the Clarion Clipperton Fracture Zone (CCZ). The CCZ spans 4.5 million square kilometres of the North Pacific Ocean between Hawaii and Mexico. The abyssal plain is dotted with trillions of multi-metal nodules and potato-sized rocky deposits containing minerals such as magnesium, nickel, copper, zinc, and cobalt . The technology developed for collecting multi-metal nodules at CCZ was developed in the 1970s when oil, gas, and mining companies such as Shell, Rio Tinto (Kenecot), and Sumitomo Corporation conducted pilot tests and recovered more than 10,000 tons of baby boomers Started [5]. The Central Indian Ridge and the Peruvian Basin are also rich in polymetal nodules. Mining claims registered with the International Seabed Authority (ISA) are primarily in the CCZ, most commonly in the manganese nodule area. ISA has signed 18 different contracts.

Conclusion

The Central Indian Ridge and the Peruvian Basin are also rich in polymetal nodules. Mining claims registered with the International Seabed Authority (ISA) are primarily in the CCZ, most commonly in the manganese nodule area. ISA has signed 18 different contracts The Solwara 1 project, a deep-sea mining company in Papua New Guinea, has been granted mining permits to begin mining high-grade copper-gold resources from low-activity hydrothermal vents.

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Conflicts of Interest

The author has no known conflicts of interested associated with this paper.

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