FACT SHEET
DSHMRA 101

WHAT IS DSHMRA?

The **Deep Seabed Hard Mineral Resources Act (DSHMRA)** is U.S. domestic legislation. U.S. Congress enacted DSHMRA in 1980 as a temporary legal framework (while the United Nations Convention on the Law of the Sea was negotiated) for exploration and commercial recovery of minerals in areas beyond national jurisdiction.[1]

Under U.S. law, DSHMRA addresses issuance of mining permits in areas beyond national jurisdiction, while the Outer Continental Shelf Lands Act (OCSLA) governs mining within the U.S. national jurisdiction (on the U.S. Outer Continental Shelf). DSHMRA covers mining of polymetallic nodules.[2] It does not cover cobalt-rich ferromanganese crusts or polymetallic sulfides.

Under DSHMRA, the National Oceanic and Atmospheric Administration (NOAA) can issue **exploration permits** and **commercial recovery licenses**.

One stated purpose of DSHMRA is to accelerate the program of environmental assessment of exploration and commercial recovery of deep seabed hard mineral resources to assure such activities are conducted in a way that will encourage "the conservation of such resources, protect the quality of the environment, and promote the safety of life and property at sea."[3]

Environmental Safeguards

Exploration plans and commercial recovery plans must include measures to protect the environment and monitor environmental safeguards. The NOAA Administrator can refuse to approve the size and location of the area included in the plan if "the commercial recovery activities in the proposed location would result in a **significant adverse impact on the quality of the environment**" which could not be avoided through reasonable restrictions.[4]

Each license or permit shall require the holder to monitor the environmental effects of their activities and to submit information to the Administrator to assess the impacts and develop possible mitigation methods against adverse environmental effects.[5]

EXPLORATION LICENSE

Exploration includes:

- any at-sea observation and evaluation activity that seeks to document hard mineral resources and the factors that must be taken into account to achieve commercial recovery; and
- the taking of any minerals that are necessary to design, fabricate, and test equipment intended to be used in commercial recovery.[6]

License regulations were published in 1981 under 15 CFR 970. Licenses are issued for 10 years, and 5-year extensions can be issued.[7]

COMMERCIAL RECOVERY PERMIT

Commercial recovery includes:

- any activity engaged in at sea to recover any hard mineral resource at a substantial rate for the primary purpose of marketing or commercially using such resource to earn a net profit;
- processing, if it occurs at sea;
- disposal of related waste at sea.[8]

Permit regulations were published in 1989 under 15 CFR 971. Permits are issued for 20 years (recovery must be underway within 10 years), and can be extended as needed with approval from the Administrator.[9]

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APPLICATION PROCESS

DSHMRA designates NOAA to issue licenses and permits.

Applicants must be U.S. citizens (either individuals or corporations).[10]

Each application must include (among other things): a statement about financial resources, a statement about technological expertise and capabilities, an exploration plan, marine environmental information (for Environmental Impact Statement) and use conflict analysis, vessel safety information, a statement of ownership, antitrust information, and justification for processing outside the U.S., if applicable.[11]

↳ For a commercial recovery permit, the applicant must also include a resource assessment.[12]

Opportunity for Comment

During the subsequent consultation processes, there are opportunities for a public hearing and written comments.[13]

Environmental Impact Statement

The issuance of any license or permit is considered a major Federal action significantly affecting the quality of the human environment under NEPA and requires completion of an **Environmental Impact Statement (EIS)**.[14]

The Administrator must make written findings on the following:

- freedom of the high seas;
- international obligations of the US;
- breach of international peace and security involving armed conflict;
- environmental effects;
- safety at sea[15]

The Administrator can then issue a final determination on the application, which can include terms, conditions, and restrictions for holding the license or permit.[16]

- Terms, conditions, and restrictions shall address conservation of natural resources and protection of the environment.[17]
- Terms, conditions, and restrictions can be modified to protect the environment[18] or suspended to prevent a significant adverse effect on the environment.[19]
- Restrictions, if necessary, can ensure prevention of interference with other uses of the high seas.[20]

CURRENT AND PENDING LICENSES AND PERMITS

NOAA has issued four total exploration licenses and zero commercial recovery permits under DSHMRA.[22]

↳ Two of the licenses were surrendered and two remain active (USA-1 and USA-4 in the Clarion-Clipperton Zone) and are held by Lockheed Martin.[23]

Many companies, including the Metals Company (TMC),[24] Deep Sea Rare Minerals,[25] American Metal Resources, and SeaX,[26] have announced active applications for exploration licenses.

TMC also submitted the first consolidated application for an exploration license and commercial recovery permit under the new process established on January 21, 2026.[27]

In addition, TMC is pursuing parallel applications for exploitation licenses for the same areas through the international law regime of the United Nations Convention on the Law of the Sea, implemented by the International Seabed Authority.

Revised NOAA Regulations

Previously, an applicant had to obtain an exploration license prior to applying for a commercial recovery permit.

↳ NOAA finalized revisions to existing regulations on January 21, 2026, which now allow for consolidated applications for licenses and permits.[21]

See ELI's DSHMRA Flow Chart for a more detailed explanation.

FOOTNOTES

[1] 30 USC §1401(b)

[2] 30 USC §1403(6)

[3] 30 USC §1401(b)(4)

[4] 30 USC §1413(a)(D)(ii)

[5] 30 USC §1424

[6] 30 USC §1403(5)

[7] 30 USC §1417(a)

[8] 30 USC §1403(1)

[9] 30 USC §1417(b)

[10] 30 USC §1413(a)(1)

[11] 5 CFR 970.201-208; 15 CFR 971.201-9

[12] 15 CFR 971.501

[13] 15 CFR 970.212; 15 CFR 970.501; 15 CFR 971.212 ; 15 CFR 971.401

[14] 30 USC §1419(d)

[15] 30 USC §1415(a)

[16] 30 USC §1415(b)

[17] 30 USC §1419(b); 30 USC §1420

[18] 30 USC §1415(c)

[19] 30 USC §1416(c)

[20] 30 USC §1421

[21] https://www.federalregister.gov/documents/2026/01/21/2026-01044/deep-seabed-mining-revisions-to-regulations-for-exploration-license-and-commercial-recovery-permit

[22] https://www.congress.gov/crs_external_products/IF/PDF/IF12608/IF12608.14.pdf

[23] https://www.federalregister.gov/documents/2022/08/29/2022-18518/deep-seabed-mining-approval-of-exploration-license-extensions

[24] https://www.federalregister.gov/documents/2025/12/23/2025-23795/deep-seabed-mining-notice-of-receipt-of-applications-for-deep-seabed-mining-exploration-licenses-and

[25] https://www.accessnewswire.com/newsroom/en/metals-and-mining/deep-sea-rare-minerals-inc.-receives-noaa-determination-of-%22substantial-complianc-1125506

[26] https://www.federalregister.gov/documents/2026/03/23/2026-05599/deep-seabed-mining-notice-of-receipt-of-applications-for-deep-seabed-mining-exploration-licenses-and

[27] https://investors.metals.co/news-releases/news-release-details/noaa-determines-tmc-usas-consolidated-deep-seabed-mining/