MODULE EIA, LESSON 5

MARINE MINERAL RESOURCES: SCIENTIFIC ASPECTS

READING LIST

REQUIRED READING

Petersen, S., Krätschell, A., Augustin, N., et al., 2016. News from the seabed – Geological characteristics and resource potential of deep-sea mineral resources. Marine Policy 70, 175–187. doi:10.1016/j.marpol.2016.03.012.

OPTIONAL READING

Hannington, M., Petersen, S., Krätschell, A., 2017. Subsea mining moves closer to shore. Nature Geoscience 10, 158–159. doi:10.1038/ngeo2897

Hein, J.R., Mizell, K., Koschinsky, A., Conrad, T.A., 2013. Deep-ocean mineral deposits as a source of critical metals for high- and green-technology applications: Comparison with land-based resources. Ore Geology Reviews 51, 1–14. doi:10.1016/j.oregeorev.2012.12.001.

Hein, J.R., Koschinsky, A., Kuhn, T., 2020. Deep-ocean polymetallic nodules as a resource for critical materials. Nature Reviews Earth & Environment 1–12. doi:10.1038/s43017-020-0027-0.

Jamieson, J.W., Gartman, A., 2020. Defining active, inactive, and extinct seafloor massive sulfide deposits. Marine Policy 117, 103926. doi:10.1016/j.marpol.2020.103926

Lusty, P.A.J., Hein, J.R., Josso, P., 2018. Formation and occurrence of ferromanganese crusts: Earth's storehouse for critical metals. Elements 14, 313–318. doi:10.2138/gselements.14.5.313

Van Dover, C.L., Colaço, A., Collins, P.C., et al., 2020. Research is needed to inform environmental management of hydrothermally inactive and extinct polymetallic sulfide (PMS) deposits. Marine Policy 121, 104183. doi:10.1016/j.marpol.2020.104183