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Policy Topics and Background Related to Mining on Federal Lands

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Analyst in Energy Policy

March 19, 2020

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SUMMARY

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Policy Topics and Background Related to Mining on Federal Lands

The 116th Congress is considering multiple proposed changes to U.S. mineral policy. Currently certain types of mineral production on federal lands provide the federal government and some states and industries with sources of revenue, while other production does not generate similar revenue. Proposed changes to federal mineral policy could impact these revenue streams, industries, and states in a variety of ways.

The processes and requirements to mine on federal lands vary by mineral category, surface/subsurface management agencies, and estate ownership. Three main statutes create the three categories of minerals applicable to mining on federal lands. The General Mining Law of 1872 covers locatable (or hardrock) minerals, which are now defined as those minerals not defined by other statutes; typical examples include gold, silver, copper, and gemstones, when not found on acquired lands. Leasable minerals are defined by the Mineral Leasing Act of 1920, and include coal, phosphate, potassium, and sodium, among others (leasable minerals also include otherwise locatable minerals on acquired land, per the Mineral Leasing Act for Acquired Lands of 1947). Salable minerals are defined by the Materials Act of 1947, and include common minerals such as sand and gravel.

Additional processes and requirements apply when the surface rights above the federal mineral estate are privately owned (i.e., split estate), commonly resulting from the Stock Raising Homestead Act of 1916. Similarly, coordination is required between the surface management agency and the agency managing the mineral estate. Two statutes generally apply to mining on federal lands, including the Surface Mining Control and Reclamation Act of 1977 (only applicable to coal) and the Federal Mine Safety and Health Act of 1977, while others may apply, including the Federal Land Policy Management Act of 1976; the National Environmental Policy Act of 1969; the Clean Water Act of 1972; the Clean Air Act; the Endangered Species Act of 1973; and the National Historic Preservation Act of 1966, among others.

Data regarding mineral production for locatable minerals on federal lands are not collected by the federal government. This lack of data can hinder the development and analysis of policies intending to affect mineral production on federal lands. The 116th Congress is considering H.R. 2579, the Hardrock Leasing and Reclamation Act of 2019, which would, among other provisions, require mining operations on federal lands to report production volumes and values, with these data made public.

Locatable mineral production on federal lands is not subject to royalties. Some interested parties see not charging royalties as a means of encouraging mineral exploration and production, while others may argue the public is not recovering fair market value for the transfer of a public asset to a private entity. H.R. 2579 would also establish a federal royalty policy for all new hardrock mineral mining operations on federal lands, and use these and other fees for the reclamation of abandoned hardrock mines and other environmental conservation activities on lands and waters affected by past hardrock mining.

Federal land withdrawals may close a given area to mining. Advocates for a specific land withdrawal generally see the proposed use (e.g., military base, national park, national monument, wilderness area) as superseding the potential use of the public land by other interests (e.g., for mining). Proponents of mining generally advocate for limited withdrawals from the mineral estate, as access to public lands for mining represents opportunities for ongoing and future operations. H.R. 1373 would permanently withdraw about one million acres surrounding the Grand Canyon National Park from new mineral entry; it passed the House, and a companion bill, S. 3127, has been introduced in the Senate. H.R. 5598 would withdraw 234,328 acres of federal lands in the Superior National Forest, including lands covered by previously disputed mineral leases.

Several bills in the 116th Congress would address U.S. critical mineral supply (i.e., those minerals defined by the U.S. Geological Survey that meet certain net import dependence criteria and perceived necessity to the U.S. economy). For example, S. 1317 would instruct the U.S. Geological Survey (USGS) to publish information regarding domestic critical mineral resources and would authorize an ongoing research and development program for critical minerals in the Department of Energy. The text of S. 1317 was incorporated into a substitute amendment to S. 2657. Another example is H.R. 4410, which would establish a federal cooperative and a federal corporation to process and sell certain critical minerals commonly found with thorium, which is radioactive.

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Introduction

The 116th Congress is considering multiple proposed changes to U.S. mineral policy. Currently certain types of mineral production on federal lands provide the federal government and some states and industries with sources of revenue, while other production does not generate similar revenue. Proposed changes to federal mineral policy could impact these revenue streams, industries, and states in a variety of ways.

The North American Industry Classification System (NAICS) defines the term *mining* to "include ore extraction, quarrying, and beneficiating (e.g., crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site."[1] Mineral mining in the United States had a *value added*[2] of $60.6 billion in 2018, which was about 0.3% of total U.S. value added (i.e., GDP).[3] The value-added contribution to total economic output of minerals mined on *federal lands*[4] is not known, as not all of the underlying data are recorded by the Bureau of Land Management (BLM) or reported by mine operators.[5] Using available data, the U.S. Department of the Interior (DOI) estimates that coal and solid minerals mined on federal lands supported $13.9 billion in value added, $24.2 billion in economic output, and 81,700 jobs in FY2018.[6]

This report offers an introduction to the framework created by federal statutes applicable to mining on federal lands. It also highlights some topics in the mining sector that may be relevant to the issue of mining on federal lands for the 116th Congress, such as the availability of mineral production data; royalties assessed on federal minerals; federal land withdrawals; and critical minerals on federal lands. While the focus of this report is on mining on federal lands, some related topics and concepts are included within this focus.

Statutory Framework for Mining on Federal Lands

The statutory framework applicable to mining on federal lands is a combination of mineral laws, land laws, and laws that impact mining directly or indirectly. These combinations can be complex when discussing specific minerals and mineral topics, as the statutes applying to one situation may be different for another situation.

This introduction to the statutory framework is presented in four subsections: "Laws Establishing Mineral Categories," "Land Laws Applicable to Mining," "Laws That Apply to Mining on Federal and Non-Federal Lands," and "Selected Federal Laws That May Impact Mining on

[1] Executive Office of the President, Office of Management and Budget, *North American Industry Classification System*, United States, 2017, p. 106.

[2] "Value added is defined as the value of the industry's output to other industries and final users (gross output) less the value of its purchases from other industries (intermediate inputs)." U.S. Department of Commerce, Bureau of Economic Analysis, *Measuring the Nation's Economy: An Industry Perspective*, 2011, p. 3.

[3] Bureau of Economic Analysis, "Value Added by Industry: Mining, Except Oil and Gas," release date October 29, 2019, available at https://apps.bea.gov/iTable/iTable.cfm?reqid=56&step=2&isuri=1#reqid=56&step=2&isuri=1.

[4] One definition of *federal lands* is "lands owned by the United States, without reference to how the lands were acquired or what Federal agency administers the lands, including surface estate, mineral estate and coal estate, but excluding lands held by the United States in trust for Indians, Aleuts or Eskimos." 43 C.F.R. §3400.0(o).

[5] Values are known for mineral production in the leasable and saleable categories, but not for locatable minerals; these mineral categories are explained below. To read more about mining data not collected by the BLM, see U.S. Government Accountability Office, *Hardrock Mining: Availability of Selected Data Related to Mining on Federal Lands*, GAO-19-435R, 2019.

[6] U.S. Department of the Interior, *U.S. Department of the Interior Economic Report, Fiscal Year 2018*, 2019, p. 2.

Federal Lands." This section presents the statutory framework for mining on federal lands; the section "Processes Related to Mining on Federal Lands" presents more detail on the regulated processes to mine the different categories of minerals on federal lands.

Laws Establishing Mineral Categories

General Mining Law of 1872

The present regulatory framework applicable to mining on federal lands generally places minerals into three categories: *locatable* (or *hardrock*), *leasable*, and *salable*. The latter two categories stem from two major changes to the General Mining Law of 1872,[7] which encompassed all mineral deposits on federal lands that were considered valuable.[8] The mining of leasable minerals requires lease and royalty payments; salable minerals generally only require a payment for the quantity purchased. The laws that define the leasable and salable categories are explained in the next two subsections.

Locatable minerals originally included all minerals, but now this category includes only those minerals not covered by other laws: a locatable mineral is a mineral that is not leasable or salable.[9] Locatable minerals are typically high-value minerals; some examples include gold, copper, lead, gypsum, and gemstones. An otherwise locatable mineral is a leasable mineral if it is on acquired land (see "Mineral Leasing Act for Acquired Lands").[10] Locatable minerals mined on federal lands are not subject to federal royalties.

Mineral Leasing Act of 1920

Leasable minerals are defined by the Mineral Leasing Act of 1920,[11] and include minerals such as coal, phosphate, potassium, and sodium. Pursuant to this act, mining of these minerals on federal land is conducted under a statutory and regulatory framework similar to that of producing oil and natural gas, including lease payments and production royalties. The leasing process may be competitive, and the resulting leases are required to obtain *fair market value* for the public.[12]

Materials Act of 1947

Salable minerals (or mineral materials) are defined by the Materials Act of 1947,[13] and include low-value, common minerals and materials (i.e., not considered locatable minerals due to their low value), such as sand, gravel, and pumice. Salable minerals from federal lands are sold to the public at fair market value from community pits, common resource area, or under more formal arrangements for large quantities. Salable minerals can be obtained for free by some entities,

[7] 17 Stat. 91. This law has no official short title. This is a commonly used title for the act.

[8] "Valuable" is used in the U.S. Code and in the Code of Federal Regulations in reference to minerals, but it is not defined.

[9] 43 C.F.R. §3830.11.

[10] Otherwise locatable minerals are generally leasable if found on acquired lands; specific legislation could allow for different treatment of such minerals (phone call with Congressional Liaison, BLM, March 16, 2020).

[11] P.L. 66-146.

[12] As determined by the BLM. For an explanation of how the BLM determines fair market value, see "MS-3630 Mineral Material Fair Market Value (FMV) Evaluation (P)," available at https://www.blm.gov/sites/blm.gov/files/MS%203630.pdf.

[13] P.L. 80-291. This law has no official short title. This is a commonly used title for the act.

including government entities and non-profit organizations.[14] Unless found in unusually valuable deposits,[15] salable minerals are no longer covered by the General Mining Law of 1872.

Land Laws Applicable to Mining

Federal Lands Overview

The present land area of the United States, excluding territories and possessions, is approximately 2.4 billion acres, and is the culmination of land purchases, cessions, and acquisitions.[16] As the country's land area grew, public policies were enacted to encourage settlement and private land ownership of previously federal lands. These and other policies resulted in changes to the acreage of federal lands; these changes continue, although more slowly in recent years.[17] Four federal land management agencies include the BLM, the Fish and Wildlife Service (FWS), and the National Park Service (NPS) in the DOI, and the Forest Service (FS) in the Department of Agriculture.[18] The BLM managed 244.4 million acres of surface lands (about 10% of the total surface area) and 708.5 million acres of the federal mineral estate (about 29% of the total surface area) of the United States in 2018.[19]

The laws and regulations applicable to mining on federal lands vary for different arrangements of surface and subsurface ownership, and if the lands are part of the *public domain*.[20] The following examples illustrate some of the potential complexities related to mining on federal lands for different situations.

- Mining may be allowed in a national forest, whose surface is managed by the U.S. Forest Service and whose subsurface is managed by the BLM.
- New mining claims are not allowed in national parks.[21]
- Regulations for mining on *acquired lands*[22] may be different from regulations for mining on other federal lands, depending on the mineral.

[14] 43 C.F.R. §§3601-3604.

[15] 30 U.S.C. §611 distinguishes between deposits of common varieties and uncommon varieties.

[16] U.S. Department of the Interior, Bureau of Land Management, *Public Land Statistics 2018*, vol. 203, August 2019, p. 3, https://www.blm.gov/sites/blm.gov/files/PublicLandStatistics2018.pdf.

[17] See Table 1-4 in *Public Land Statistics 2018* (2019, pp. 10-11) for acquisitions, restorations, disposals, and withdraws of lands managed by the BLM from FY2017 to FY2018.

[18] For additional information on federal land management, see CRS Report R43429, *Federal Lands and Related Resources: Overview and Selected Issues for the 116th Congress*, coordinated by Katie Hoover.

[19] U.S. Department of the Interior, Bureau of Land Management, *Public Land Statistics 2018*, vol. 203, August 2019, pp. 3-7, https://www.blm.gov/sites/blm.gov/files/PublicLandStatistics2018.pdf. In general, the federal government manages roughly 650 million acres of surface land.

[20] "*Public domain lands* means lands, including mineral estates, which never left the ownership of the United States, lands which were obtained by the United States in exchange for public domain lands, lands which have reverted to the ownership of the United States through the operation of the public land laws and other lands specifically identified by the Congress as part of the public domain." 43 C.F.R. §3000.0(g).

[21] For background and detail regarding mining in national parks, including how an existing claim can be brought into production, see https://www.nps.gov/subjects/energyminerals/mining-claims.htm.

[22] "Acquired lands means lands which the United States obtained by deed through purchase or gift, or through condemnation proceedings, including lands previously disposed of under the public land laws including the mining laws." 43 C.F.R. §3000.0(h).

- The Department of Energy manages and leases about 25,000 acres of federal land that was withdrawn from the public domain for mining uranium, which would otherwise be a locatable mineral.[23]
- Mineral production data for a given mineral may or may not be publicly available, depending on the type of federal land on which it is found.

The following three subsections highlight statutes related to federal lands that directly impact mining on federal lands.

Federal Land Policy Management Act of 1976

The Federal Land Policy Management Act (FLPMA)[24] establishes statutory guidance for DOI and BLM management of federal lands, including the federal mineral estate. FLPMA directs the BLM to manage federal lands according to the principles of *multiple use* and *sustained yield*.[25] FLPMA codifies the policy that public lands remain in federal ownership, unless the DOI determines disposal of public lands is in the national interest, and that fair market value is to be obtained for use of federal lands. Under FLPMA, the BLM prepares *resource management plans* (or *land use plans*) through a defined process that incorporates public input, including environmental, historical, and societal values, from a variety of stakeholders.[26] Where the BLM is not the surface management agency of a proposed mining operation, FLPMA directs the BLM to coordinate with the surface management agency. FLPMA provides authority to DOI to withdraw lands from mineral entry (i.e., no new mining is allowed).

Mineral Leasing Act for Acquired Lands

Acquired lands are lands that federal agencies purchased, received by donation or exchange, or acquired through eminent domain; millions of acres have been acquired by the federal government.[27] Generally, minerals that would otherwise be considered locatable are leasable if they are on acquired lands, per the Mineral Leasing Act for Acquired Lands, as amended, which became law in 1947.[28] Specific legislation could allow for different treatment of such minerals on acquired lands.[29]

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[23] See the U.S. Department of Energy website for background and current status of its uranium leasing program at https://www.energy.gov/lm/services/property-management/uranium-leasing-program. For more information regarding the regulation of uranium mining, which is not discussed further in this report, see https://www.nrc.gov/materials/uranium-recovery.html.

[24] P.L. 94-579. For a background on FLPMA, see U.S. Department of the Interior, Bureau of Land Management, *The Federal Land Policy and Management Act of 1976, as amended*, September 2016, available at https://www.blm.gov/sites/blm.gov/files/AboutUs_LawsandRegs_FLPMA.pdf.

[25] Ibid., pp. 2-3.

[26] Ibid., p. 5. For more information on the BLM's planning process, see https://www.blm.gov/programs/planning-and-nepa/what-informs-our-plans.

[27] 43 C.F.R. §3000.0(h). One example of a federal land acquisition program is the Land and Water Conservation Fund. For more background and discussion of this program, see CRS Report RL33531, *Land and Water Conservation Fund: Overview, Funding History, and Issues*, by Carol Hardy Vincent, and U.S. Government Accountability Office, *Land and Water Conservation Fund*, GAO-19-346, May 2019.

[28] 30 U.S.C. §§351-359. For a brief discussion of this act by the BLM, see https://www.blm.gov/programs/energy-and-minerals/mining-and-minerals/about.

[29] Phone call with Congressional Liaison, BLM, March 16, 2020.

Stock Raising Homestead Act of 1916

The Stock Raising Homestead Act of 1916[30] allowed settlers to claim the surface rights of 640 acres of federal land, while the subsurface rights remained with the federal government. When the surface owner does not own the subsurface rights, the joint ownership is designated *split estate*. No new split estate lands have been created under the Stock Raising Homestead Act since 1976.[31] The process to explore and claim mineral deposits on split estate lands requires additional steps, as the surface owner must be notified, and compensated in the case of damage to the surface resulting from the mining operation.[32]

Laws That Apply to Mining on Federal and Non-Federal Lands

Two laws are discussed in this subsection. The first is applicable to all mining, including all mining on federal lands. The second is applicable to all coal mining, about 43% of which was produced on federal lands in 2018. [33]

Federal Mine Safety and Health Act of 1977

The Federal Mine Safety and Health Act (FMSHA),[34] as amended, created the Mine Safety and Health Administration (MSHA) within the Department of Labor. MSHA develops and enforces safety and health rules for all U.S. mines regardless of size, number of employees, commodity mined, method of extraction, or land ownership.

Surface Mining Control and Reclamation Act of 1977

The Surface Mining Control and Reclamation Act (SMCRA),[35] as amended, established the Office of Surface Mining Reclamation and Enforcement (OSMRE) within the Department of the Interior. SMCRA applies to all coal mining operations, including those on federal and Native American lands. OSMRE's objectives "are to ensure that coal mines are operated in a manner that protects citizens and the environment during mining and assures that the land is restored to beneficial use following mining, and to mitigate the effects of past mining by aggressively pursuing reclamation of abandoned coal mines."[36] Among other requirements, SMCRA establishes that, as a prerequisite for obtaining a coal mining permit, the applicant is required to post a reclamation bond.

[30] 43 U.S.C. §§291-302.

[31] For additional background on mining and split estates, see https://www.blm.gov/programs/energy-and-minerals/mining-and-minerals/split-estate.

[32] 43 C.F.R. §3838.

[33] CRS calculations based on 2018 data for total coal production from the Energy Information Administration, found at https://www.eia.gov/coal/annual/, and 2018 data for federal and Native American coal production from the U.S. Department of the Interior, found at https://revenuedata.doi.gov/?tab=tab-production.

[34] A summary of the Federal Mine Safety and Health Act, 30 U.S.C. §801, et seq., is available at https://www.msha.gov/1977-%E2%80%93-mine-safety-and-health-administration-msha-created.

[35] 30 U.S.C. §1201, et seq. See more information at Office of Surface Mining Reclamation and Enforcement, "Laws, Regulations, and Guidance," https://www.osmre.gov/LRG.shtm.

[36] See OSMRE, "Our Mission and Vision," at https://www.osmre.gov/about/MissionVision.shtm.

Selected Federal Laws That May Impact Mining on Federal Lands

Other laws and statutes may apply to mining on federal lands in certain situations. Below is a selected list of such statutes with a reference for more information; a range of other federal and state laws may also apply on a case-by-case basis. Application of these laws and statutes vary widely for different mining operations; further discussion is beyond the scope of this report.

- National Environmental Policy Act of 1969 (NEPA)[37]
- Clean Water Act of 1972 (CWA)[38]
- Clean Air Act (CAA)[39]
- Endangered Species Act of 1973 (ESA)[40]
- National Historic Preservation Act of 1966 (NHPA)[41]

Processes Related to Mining on Federal Lands

The process to mine on federal lands generally begins with the interested person identifying the surface management agency (or owner, if the land is split estate) and the subsurface management agency, if different. The surface management agency can assist with the process to determine whether the area targeted for mining has been previously claimed, leased, or withdrawn from the federal mineral estate. This can occur when lands are designated as national parks, monuments, or military bases, among others. The agency can also ensure that the targeted area and mineral estate are still under federal control, as changes can occur that would give control to private entities, state governments, or Indian governments. The managing agency can also indicate whether the targeted area is acquired land, for which, in most cases, mineral leasing applies. Further, the managing agency can indicate the required information and processes to explore and potentially mine in a given area; such requirements can vary among agencies and within agency offices.[42] Aside from special cases, the BLM is the subsurface management agency for mining on federal lands.

Additional considerations and regulations may apply to Indian territories, which number more than 300 territories and cover more than 56 million acres.[43] Indian tribes and persons retain the

[37] National Environmental Policy Act of 1969, as amended, 42 U.S.C. §§4321-4347, available at http://www.nepa.gov. For more background information, see CRS Report RL33152, *The National Environmental Policy Act (NEPA): Background and Implementation*, by Linda Luther.

[38] A summary of the Clean Water Act of 1972, as amended, 33 U.S.C §§1251-1388, is available at https://www.epa.gov/laws-regulations/summary-clean-water-act. For more background information, see CRS Report RL30030, *Clean Water Act: A Summary of the Law*, by Laura Gatz.

[39] A summary of the Clean Air Act, as amended, 42 U.S.C. §§7401-7671, is available at https://www.epa.gov/laws-regulations/summary-clean-air-act. For more background information, see CRS Report RL30853, *Clean Air Act: A Summary of the Act and Its Major Requirements*, by James E. McCarthy.

[40] A summary of the Endangered Species Act, as amended, 16 U.S.C. §1531 et seq., can be found at https://www.fws.gov/endangered/laws-policies. For more background information, see CRS Report RL31654, *The Endangered Species Act: A Primer*, by Pervaze A. Sheikh.

[41] A summary and history of the National Historic Preservation Act, as amended, 54 USC §300101 et seq., is available at https://www.nps.gov/subjects/historicpreservation/national-historic-preservation-act.htm. For more background information, see CRS Report R45800, *The Federal Role in Historic Preservation: An Overview*, by Mark K. DeSantis.

[42] U.S. Department of the Interior, Bureau of Land Management, *Mining Claims and Sites on Federal Lands*, available at https://www.blm.gov/sites/blm.gov/files/PublicRoom_Mining_Claims_Brochure-2019.pdf.

[43] For background information on Indian territories, see U.S. Department of the Interior, Bureau of Indian Affairs,

right to develop or allow others to develop mineral resources on their lands. The BLM may be invited to provide assistance, in which case "the BLM's authorities and responsibilities include, but are not limited to, resource evaluation, approval of drilling permits, mining and reclamation, production plans, mineral appraisals, inspection and enforcement, and production verification."[44]

The subsequent steps in the process to open a new mine on federal lands depend on the type of mineral to be mined (i.e., locatable, leasable, or salable), as the processes vary by mineral category.

Locatable Minerals

If the mineral of interest is locatable and on federal lands open to mineral entry not previously claimed, exploration that does not result in surface disturbances (e.g., rock-hounding or use of hand-operated tools) can begin without a permit; a permit may be required if surface disturbance is expected. Establishing or staking a *claim* is the statutorily defined process of physically indicating and publicly recording the specific boundaries of the area containing the mineral(s).[45] The local field office of the applicable surface management agency can assist with this process, but the person exploring is responsible for knowing if a specific area is subject to being claimed (i.e., there is not an existing prior claim on that area, and that the area is open to mineral entry). If a *reasonable quantity*[46] of a locatable mineral is found on public land that is open to mineral entry and has not yet been claimed, the area can be claimed.

The two types of mineral claims defined by statute are lode claims and placer claims. Lode claims pertain to valuable minerals in an undisturbed state or location (i.e., rock in place); placer claims refer to valuable minerals that have been moved and deposited in a location different from the mineral's formation, typically due to erosion (e.g., sediment bars along streams).[47] A lode claim cannot be longer than 1,500 feet along the main axis and wider than 300 feet on each side of the axis; an individual placer claim cannot exceed 20 acres.[48]

If the BLM is both the surface and subsurface manager, it then works with the operator to approve a required *notice* or a *plan of operation*.[49] The mine operator is required to submit an estimate of the reclamation costs[50] to the BLM for approval, after which the mine operator provides a financial guarantee equal to that amount to the BLM. The financial guarantee is held until operations have ceased and the site has been acceptably reclaimed, as determined by the BLM. A claimant must pay a location fee when first recording the claim. An annual maintenance

"Frequently Asked Questions," https://www.bia.gov/frequently-asked-questions.

[44] See U.S. Department of the Interior, Bureau of Land Management, "Programs: Energy and Minerals: Oil and Gas: About: Indian Tribes," https://www.blm.gov/basic/programs-energy-and-minerals-oil-and-gas-about-indian-tribes.

[45] 30 U.S.C. §§21-54.

[46] The BLM uses the *prudent man rule* (*Chrisman v. Miller*, 197 U.S. 313 (1905)) to determine if the demonstrated amount of a given mineral is an economically viable amount warranting a claim; see https://www.blm.gov/programs/energy-and-minerals/mining-and-minerals/locatable-minerals/discovery.

[47] U.S. Department of the Interior, Bureau of Land Management, "Explanation of Location," https://www.blm.gov/programs/energy-and-minerals/mining-and-minerals/locatable-materials/explanation-of-location.

[48] 43 C.F.R. §3832.22.

[49] See 43 C.F.R. §§3809.300-3809.424 for more detail regarding the requirements of a notice and a plan of operation.

[50] Reclamation costs refer to the costs of restoring lands or waters adversely affected by mining to a condition that would mitigate potential hazards to public health, safety, and the environment.

fee is also required.[51] Claim holders may be required to file annual documentation required by FLPMA.[52] More detailed processes need to be followed if exploring on split-estate lands.

Under the General Mining Law, mining claims meeting certain conditions are allowed to be *patented*, which typically transfers all rights to the claim holder.[53] However, starting in 1994, Congress, through appropriations laws, has continually placed one-year moratoria on the patent process.[54]

Leasable Minerals: Other Than Coal

If the mineral of interest is leasable, which generally includes otherwise locatable minerals on acquired lands, exploration requires a permit or license

- a *prospecting permit*[55] is required to identify valuable deposits of leasable minerals in areas where valuable deposits have not yet been identified;
- an *exploration license*[56] is required if additional information is desired by the prospective miner regarding a known deposit.

If a valuable deposit is identified by a prospecting permit holder (and other conditions are met), the BLM may issue the holder a *preference right lease*.[57] The BLM may issue a notice for a *competitive lease*[58] sale on unleased, leasable parcels known to contain valuable mineral deposits.

Some leasable minerals are subject to minimum royalties, including 5% of the value of gross output for sulfur and phosphate; 2% of the value of gross output for potassium and sodium; and 25 cents per ton of marketable production for asphalt.[59] Unless otherwise indicated by the BLM, leases require the payment of rent, royalties, and the posting of a reclamation bond; reclamation includes removal of machinery and structures, in addition to required grading and re-vegetation.[60] Many of the steps needed to obtain mining permits, leases, or licenses require the payment of cost-recovery fees to agencies and local governments.[61]

Leasable Minerals: Coal

Coal is a leasable mineral and follows the general process for leasable minerals. However, coal exploration and coal leasing on federal lands are subject to specific regulations and statutes.[62] Coal exploration begins with a designation that the land in question is suitable for coal leasing.

[51] See 43 C.F.R. §3834 for information regarding fees and fee adjustments.

[52] 43 C.F.R. §3835.30.

[53] 30 U.S.C. §29.

[54] The Further Consolidated Appropriations Act, 2020 (P.L. 116-94, Division D, Title IV, §404) contains the most recent statutory prohibition.

[55] 43 C.F.R. §3505.

[56] 43 C.F.R. §3506.

[57] 43 C.F.R. §3507.

[58] 43 C.F.R. §3508.

[59] Other leasable minerals are not subject to a defined minimum royalty, but the BLM may assign a royalty in the terms of a specific lease. See 43 C.F.R. §3504 for information pertaining to royalties on leasable minerals.

[60] 43 C.F.R. §3504.

[61] For a table of fees, see 43 C.F.R. §3830.21.

[62] Coal leasing on federal land is governed by Sections 2-8A of the Mineral Leasing Act of 1920 (30 U.S.C. §201, et seq.) and by the Mineral Leasing Act for Acquired Lands of 1947 (30 U.S.C. §351, et seq.).

Coal exploration requires an exploration license, an exploration bond, and conformance with various federal statutory obligations, and also includes conformance of the regulations promulgated by SMCRA.[63] After any party expresses interest in exploring for coal, the BLM is to publish a *notice of invitation*[64] calling for other interested parties to jointly explore the indicated tract of federal land.

Existing coal regions on federal lands may have tracts available for lease that do not require additional exploration. While some exceptions exist,[65] coal leases are to be issued through the competitive process *lease by application.*[66] This process begins when an interested party files an application of interest with the BLM for a tract of land previously identified as suitable for coal mining by the BLM. The BLM publishes notices of the lease sale and invites others to submit sealed bids for the lease. The lease is awarded to the highest bid that is at least equal to the fair market value of the lease (conditional on other requirements being met).[67]

Only U.S. citizens, associations, corporations, and public bodies are able to obtain coal leases. No entity is permitted to own or control coal leases on federal lands exceeding 75,000 acres in any one state or 150,000 acres in the United States.[68] Coal leases require an annual rental payment of a minimum of $3 per acre, to be specified in the lease. Coal mining on federal lands requires the payment of royalties. The royalty for surface mined coal is a minimum of 12.5% of the gross value of coal produced, and the royalty for coal mined by underground mining methods is 8%.[69] A coal lease also requires that the successful bidder post a lease bond to the BLM.[70]

Salable Minerals

An individual planning to mine or remove salable minerals must contact the local BLM office and secure a sales contract before conducting any operations. Generally, the BLM authorizes the removal (i.e., disposition) of salable minerals on federal lands by a *sales contract*; a *free use permit* may be available to certain government entities or non-profit organizations.[71] If a mine operator desires to open a new deposit of a salable mineral, exploration and mining follow the general processes for leasable minerals. However, *common use areas* or *community pits* may be available for immediate mineral removal, eliminating the need for exploration and other

[63] See 43 C.F.R. §3410 and the various pages on the BLM website pertaining to coal exploration at https://www.blm.gov/programs/energy-and-minerals/coal/land-use-planning/coal-exploration-licenses.

[64] 43 C.F.R. §3410.2-1.

[65] Some exceptions to this process include when a party holds a prospecting permit issued prior to the Federal Coal Leasing Amendments Act of 1976; when contiguous acres are added to an existing lease; or when the BLM concludes that conditions are suitable for an Emergency Lease.

[66] 43 C.F.R. §3425 labels this process "Leasing on Application," while the BLM uses "Lease by Application."

[67] For general information on the "lease by application" process, see U.S. Department of the Interior, Bureau of Land Management, "Fair Market Value," https://www.blm.gov/programs/energy-and-minerals/coal/land-use-planning/fair-market-value.

[68] 43 C.F.R. §3472. For general information on lessee requirements, see U.S. Department of the Interior, Bureau of Land Management, "Lessee Qualifications and Limitations," https://www.blm.gov/programs/energy-and-minerals/coal/land-use-planning/lessee-qualifications.

[69] See 43 C.F.R. §3473 for information pertaining to royalties and rents on coal leases.

[70] 43 C.F.R. §3422.4.

[71] 43 C.F.R. §3604.12.

processes.[72] The BLM is to identify the fair market value of the mineral at the specific location, required payment, and limitation on surface disturbances, among other specifications.

Policy Topics and Legislative Activity

Four policy areas related to mining on federal lands that have been raised in legislation in the 116th Congress are presented and discussed below.[73] After a brief presentation of the topic, each section presents policy concerns, options, and examples of related current legislation. Unless noted, bills discussed in this section have been introduced in the House or Senate and referred to committee, but have not seen further legislative activity.

Data Availability for Locatable Minerals

The BLM currently collects mineral production data for leasable and salable minerals on federal lands, but not for locatable minerals.[74] Locatable mineral production information could be useful for some policy considerations; conversely, the lack of such information could limit policy discussion for those considerations.

Concern regarding the collection of these data is not new. In 2008 the U.S. Government Accountability Office (GAO) reported, "according to officials with BLM and the Forest Service, they do not have the authority to collect information from mine operators on the amount of hardrock minerals produced on federal land, or the amount remaining."[75] The GAO also highlighted the limitations of the data collected and reported by the U.S. Geological Survey (USGS) by noting, "it is not possible to determine hardrock mineral production on federal lands from the USGS data."[76] The DOI reports production of some hardrock minerals from federal lands, but notes those values are estimates based on state data.[77]

This lack of locatable mineral production data for federal lands can impact multiple policy areas, including issues discussed in the following sections. Some related policy topics include

- Royalties: Potential changes to existing mining laws to extend royalties to all locatable minerals face the challenge that current production and value of these minerals is not collected. Without this information, analysis of such policy changes may be limited. For example, it may be difficult to estimate increased royalty collection or increased costs to producers.
- Reclamation Bonds: Knowledge of production data could assist the BLM in determining if the posted reclamation bond continues to be adequate, is

[72] 43 C.F.R. §§3601-3604. These terms are discussed in the C.F.R., but they are not defined.

[73] A common policy topic related to mining on federal lands considers the permitting process and resulting time requirements. This topic is not addressed in this report.

[74] See U.S. Government Accountability Office, *Hardrock Mining: Availability of Selected Data Related to Mining on Federal Lands*, GAO-19-435R, 2019, for more information on the information collected and not collected by different agencies involved with mining on federal lands.

[75] U.S. Government Accountability Office, *Hardrock Mining: Information on State Royalties and Trends in Mineral Imports and Exports*, GAO-08-839R, 2008, p. 33.

[76] Ibid.

[77] U.S. Department of the Interior, *U.S. Department of the Interior Economic Report, Fiscal Year 2018*, 2019, p. 9.

excessive, or is inadequate for an ongoing locatable mineral operation on federal lands.[78]

- Critical Minerals: Executive Order (E.O.) 13817 tasked the DOI with coordinating with other executive branch agencies to publish a list of critical minerals. One criterion used to define a critical mineral is *net import reliance*, the calculation of which includes domestic production of the critical mineral commodity.[79] It is unclear how locatable mineral production, which is not required to be reported, is incorporated into the calculation of net import reliance.

Congress could address this question of data availability by requiring the collection of mineral production data from federal lands. For example, Congress could authorize and require a government agency to collect mineral production and production value data, among other operations data. While the BLM could be the agency tasked with this data collection due to its role in managing the federal mineral estate, other agencies could also receive consideration. For example, MSHA currently collects and publicly provides data on all mining operations; the USGS tracks and distributes mineral production from sources around the country; and the Environmental Protection Agency (EPA) administers or oversees certain permits for most domestic mining operations.

H.R. 2579, the Hardrock Leasing and Reclamation Act of 2019 (ordered reported by the House Committee on Natural Resources on October 23, 2019), among other provisions, would establish the requirement that mining operations on federal lands report production volumes and values, and it includes the requirement that these and other data are to be made public.

Royalties

Locatable minerals remain regulated by the General Mining Law and are not subject to federal royalties, unlike leasable minerals.[80] Although the federal government does not assess royalties on locatable minerals, some states assess royalties (i.e., severance taxes) on some minerals mined on federal lands.[81]

Congress might consider establishing a royalty policy for locatable minerals. As viewed by some, locatable minerals represent public assets, and the public should be compensated if any of these assets are removed for private gain. Royalties on locatable minerals could capture this change in ownership, and the revenue streams could be used to fund national priorities. Others view royalty-free access to locatable minerals as a public benefit, given associated mining employment and mining-related economic activity. If set too high, mineral royalties could restrict mining activity and force marginal operations to cease.

Congress could also recognize additional complexities stemming from the different types of royalties and their associated characteristics. Three common royalties are unit-based royalties, ad

[78] See U.S. Government Accountability Office, *Hardrock Mining Financial Assurances*, GAO-19-436R, 2019, for more information on the data issues related to reclamation bonds.

[79] Steven M. Fortier, Nedal T. Nassar, Graham W. Lederer, Jamie Brainard, Joseph Gambogi, and Erin A. McCullough, *Draft Critical Mineral List—Summary of Methodology and Background Information—U.S. Geological Survey Technical Input Document in Response to Secretarial Order No. 3359*: U.S. Geological Survey Open-File Report 2018–1021, 2018, p. 9.

[80] As noted above, salable minerals are subject to sales contracts and/or free use permits.

[81] For more information on state-level royalties and mineral taxes, see U.S. Government Accountability Office, *Hardrock Mining*, GAO-08-849R, 2008 and U.S. Government Accountability Office, *Hardrock Mining: Updated Information on State Royalties and Taxes*, B-330854, 2019.

valorem royalties, and profit-based royalties. Unit-based royalties are assessed on units of volume or weight and ensure that some revenue is collected in exchange for the removal of the mineral. Ad valorem royalties are assessed on the sale of the mineral and are subject to fluctuations in mineral prices. Profit-based royalties are assessed on operator profits, allowing deductions for certain costs. Further complexities can include whether to assign different royalty rates to different minerals and how to treat minerals that are byproducts of other minerals.[82]

As noted above, Congress is currently considering H.R. 2579, the Hardrock Leasing and Reclamation Act of 2019 (ordered reported by the House Committee on Natural Resources on October 23, 2019), which, among other provisions, would close federal lands to new mining claims under the General Mining Law of 1872 and create a hardrock mine reclamation fund. This bill would establish a federal royalty of 12.5% and a displaced materials reclamation fee of 7 cents per ton of displaced materials for all new hardrock mineral mining operations on federal lands. These fees and other revenue generated by provisions in the bill would be deposited into a newly created fund, the Hardrock Minerals Reclamation Fund. The reclamation fund would target reclamation of abandoned hardrock mines and other environmental conservation activities on lands and waters affected by past hardrock mining activity, independent of land owner. The bill would require the collection and public dissemination of data regarding mine production and royalties paid, and regular inspection of all hardrock mines on federal lands.

Federal Land Withdrawals

New mining operations on federal lands require that the federal lands are open for mineral entry. Some federal lands have undergone *withdrawal*, which generally means those lands are closed to or withdrawn from mining and other activities. FLPMA defines withdrawal as

> withholding an area of Federal land from settlement, sale, location, or entry, under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of Federal land, other than "property" ... from one department, bureau or agency to another department, bureau or agency.[83]

As indicated in this definition, a withdrawal does not necessarily close land to mining, and a withdrawal that closes land to mining may not restrict other land uses. A land withdrawal can occur through legislation, executive order, or agency action, and a withdrawal is usually for a specified period of time. In the event a withdrawal impacts existing mining claims or leases, the DOI and the involved agencies may allow the claims or leases to continue, or they may offer other federal land in exchange for the existing claims or leases.[84] Many federal land withdrawals close the land to mining, including NPS lands, which are closed to new mining claims.[85]

The mining industry generally advocates for limited withdrawals from the mineral estate, as access to public lands for mining represents opportunities for ongoing and future operations.

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[82] For more information regarding mining royalties, see James Otto, Craig Andrews, Fred Cawood, et al., *Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society* (Washington, DC: The World Bank, 2006).

[83] 43 U.S.C. §1702(j).

[84] 43 U.S.C. §1716. Also see Bureau of Land Management, *Land Exchange Handbook H-2200-1 (Public)*, 2005, https://www.blm.gov/sites/blm.gov/files/h2200-1.pdf.

[85] 54 U.S.C. §100731 effectively withdrew all national parks and monuments from mineral entry. See 36 C.F.R. §9.10 for information regarding treatment of existing mining claims in these areas.

Advocates for a specific land withdrawal (with closure to mineral entry) generally see the proposed use (e.g., military base, national park, national monument, wilderness area) as superseding the potential use of the public land by other interests (e.g., for mining).

One example of a withdrawal affecting mining on federal lands occurred in 2012 when the Secretary of the Interior withdrew about one million acres of federal land surrounding the Grand Canyon National Park from new mineral development for 20 years. The withdrawn area contained active uranium mining operations and about 3,200 mining claims.[86] H.R. 1373, among other provisions, would permanently withdraw this area from new mineral entry. H.R. 1373 passed the House; a companion bill has been introduced in the Senate as S. 3127.

Another example of a withdrawal with closure to mineral entry is for the Nevada Test and Training Range (NTTR), which is currently comprised of over 2.9 million acres of federal land withdrawn until 2021. The Department of the Air Force is requesting that this land withdrawal be renewed and an additional 300,000 acres be withdrawn to expand the area.[87] The State of Nevada Commission on Mineral Resources has produced a map of the existing and proposed expansion areas, including affected active mining claims.[88] H.R. 5606 and S. 3145, among other provisions, would expand and renew the withdrawn federal land.

A third example involves a planned mine by Twin Metals Minnesota (TMM) in the Superior Nation Forest, near the Boundary Waters Canoe Area Wilderness. The Superior National Forest was withdrawn from mineral entry in 1930,[89] but it was reopened to mineral entry in 1950.[90] TMM holds two leases issued in 1966 (renewed twice); no mineral production has occurred under these leases. TMM applied to renew these leases for a third time in 2012, ahead of their 2016 expiration. In 2016, DOI found that TMM does not have a non-discretionary right to renewal, and the FS did not consent to renewing the leases; DOI canceled the leases.[91] In 2017, the DOI found that TMM has a non-discretionary right to renewal, and it renewed the leases.[92] H.R. 5598, among other provisions, would withdraw 234,328 acres of federal lands in the Superior National Forest, which include the lands covered by the TMM leases.

Critical Minerals

Affordable and reliable access to critical minerals, and materials or products containing critical minerals, has been an issue since before the Great Depression, with the first official list of critical minerals dating to 1921.[93] One recent definition of a critical mineral is

[86] U.S. Department of the Interior, *Secretary Salazar Announces Decision to Withdraw Public Lands near Grand Canyon from New Mining Claims*, January 9, 2012, https://www.doi.gov/news/pressreleases/Secretary-Salazar-Announces-Decision-to-Withdraw-Public-Lands-near-Grand-Canyon-from-New-Mining-Claims.

[87] See Nevada Test and Training Range, "NTTR Military Land Withdrawal Legislative EIS," http://www.nttrleis.com/.

[88] State of Nevada Commission on Mineral Resources, *Nevada Test and Training Range (NTTR) Military Land Withdrawal*, http://minerals.nv.gov/home/features/Information_Related_to_Proposed_Land_Withdrawals/.

[89] 16 U.S.C. §577.

[90] 16 U.S.C. §508(b).

[91] Karen E. Mouritsen, *Lease Renewal Application Rejected*, U.S. Department of the Interior, 2016, https://www.blm.gov/download/file/fid/7652.

[92] U.S. Department of the Interior, *Environmental Assessment, Addition of Terms and Conditions for Renewal of Hardrock Leases, MNES 001352 and MNES 001353*, 2018.

[93] For a discussion of the evolution of such lists, see a U.S. Geological Survey study of 23 mineral commodities considered critical, including antimony, barite, beryllium, cobalt, fluorine, gallium, germanium, graphite, hafnium, indium, lithium, manganese, niobium, platinum-group elements, rare-earth elements, rhenium, selenium, tantalum,

> (i) a non-fuel mineral or mineral material essential to the economic and national security of the United States, (ii) the supply chain of which is vulnerable to disruption, and (iii) that serves an essential function in the manufacturing of a product, the absence of which would have significant consequences for our economy or our national security.[94]

Numerous lists of critical minerals and materials exist, and the creation of such lists is inherently subjective, as the definition of "critical" includes notions of access to markets and costs of possible supply interruptions.[95] Potentially adding further confusion, some agencies and studies conflate or do not clarify distinctions between the related terms critical minerals, critical materials, strategic minerals, and strategic materials.

Discussions of critical minerals often note that the United States has few known locations of critical minerals that could be economically produced, and the United States does not presently have refining capabilities to process those critical minerals into commodities. The United States imports critical minerals (the USGS calculates net import reliance as part of the process to define a critical mineral) or products containing them, resulting in what is sometimes considered vulnerable dependencies.[96] The limitations of using net import reliance to define a critical mineral or critical material are not fully defined, as manufactured products can contain critical minerals of domestic or foreign origin that have been previously imported or exported.[97]

Some known critical mineral deposits lie on federal lands. One example is the Idaho Cobalt Operation, which is a cobalt reserve on federal lands.[98] Another example is the Twin Metals Minnesota mining project, which would mine copper, nickel, platinum group metals, and cobalt in the Superior National Forest.[99]

To provide more information on the likely locations of critical mineral resources, the USGS has begun the Earth Mapping Resources Initiative (Earth MRI).[100] This program has produced a map and dataset covering numerous focus areas for one group of critical minerals: the rare-earth elements.[101] Many of these focus areas occur in the western region and presumably lie on federal lands. As the Earth MRI program continues, it plans to focus on other critical minerals.

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tellurium, tin, titanium, vanadium, and zirconium (*Critical Mineral Resources of the United States- Economic and Environmental Geology and Prospects for Future Supply*, ed. Klaus J. Schulz, John H. DeYoung, Jr., Robert R. Seal II, Dwight C. Bradley (Reston, VA: U.S. Geological Survey, 2017)).

[94] Executive Order 13817, "A Federal Strategy To Ensure Secure and Reliable Supplies of Critical Minerals," December 20, 2017.

[95] For background on past critical mineral supply interruptions, see CRS In Focus IF11259, *Trade Dispute with China and Rare Earth Elements*, by Wayne M. Morrison.

[96] For an overview of critical minerals, see CRS Report R45810, *Critical Minerals and U.S. Public Policy*, by Marc Humphries.

[97] Steven M. Fortier, Nedal T. Nassar, Graham W. Lederer, Jamie Brainard, Joseph Gambogi, and Erin A. McCullough, *Draft Critical Mineral List—Summary of Methodology and Background Information—U.S. Geological Survey Technical Input Document in Response to Secretarial Order No. 3359*: U.S. Geological Survey Open-File Report 2018–1021, 2018, p. 9.

[98] For more information on the Idaho Cobalt Operations by Jervois, see https://jervoismining.com.au/our-assets/idaho-cobalt-operations.

[99] Twin Metals Minnesota, "Bureau of Land Management Renews Twin Metals Minnesota Federal Leases," May 15, 2019, http://www.twin-metals.com/bureau-of-land-management-renews-twin-metals-minnesota-federal-leases.

[100] Jane M. Hammarstrom and Connie L. Dicken, *Focus Areas for Data Acquisition for Potential Domestic Sources of Critical Minerals—Rare Earth Elements*, U.S. Geological Survey, Open-File Report 2019–1023, 2019, p. iii.

[101] The rare earth elements are defined as the 15 lanthanide elements, scandium, and yttrium (ibid., p. 1).

Policy options to address concerns related to critical minerals typically intend to create or increase access to secure quantities of critical minerals. Expanding mineral production on federal and non-federal lands is one option to create increased access to secure quantities of critical minerals. Other policy options can include non-mining options; two such options are mentioned below. One option that could increase access to critical minerals on federal lands includes creating mapping and mineral exploration programs, such as Earth MRI. Such programs can facilitate and lower the private costs of locating critical mineral reserves. While general knowledge of the likelihood of a deposit can assist new mineral developments, policies supporting such programs may have limited impacts on production from known critical mineral deposits.

A policy option not focused on increasing domestic mineral production would focus on reducing potential negative effects of supply shocks by stockpiling additional critical minerals at the National Defense Stockpile. Given the number of critical minerals and the higher number of manufacturing input materials made from critical minerals, the costs and complexity of maintaining substantial supplies could limit the effectiveness of this option. An additional complication is that "the National Defense Stockpile is not to be used for economic or budgetary purposes,"[102] and much demand for critical minerals stems from private consumption, such as motors and batteries for electric vehicles.

A third option, also not focused on increasing domestic mineral production, would be to secure more access to critical minerals by supporting a domestic supply chain based on critical minerals captured through recycling consumer products. Such support could include funding research to develop technology that would reduce the costs of recycling critical minerals to a competitive level. Other support could include tariffs or quotas on imported critical minerals, thus allowing recycled domestic sources to be more cost competitive.

Congress is presently considering bills related to critical minerals and materials, with some containing provisions related to the federal mineral estate. These include

- An amendment in the nature of a substitute to S. 2657 was introduced on February 27, 2020 (including the new title "American Energy Innovation Act of 2020"), and incorporated language from several energy and mineral bills reported by the Senate Committee on Energy and Natural Resources. Cloture was invoked on March 2. This bill includes text from S. 1317 and S. 1052 (discussed below).
- S. 1317, among other provisions, would instruct the USGS to publish information regarding known and unknown domestic critical mineral resources. The USGS may conduct geological surveys to increase this information. This bill would also establish a research and development program in the Department of Energy (DOE) to increase efficiencies in the critical mineral supply chain, to identify substitutes for critical minerals, and to promote the use of recycling as a source of critical minerals. This research also includes producing forecasts related to critical minerals for a 10-year period, including expected demand, market conditions, and possible substitutes for critical minerals. This bill would repeal the National Critical Materials Act of 1984 and authorize $50 million per year for 10 years to fund its activities. This bill also includes identical language to S. 1052 (discussed below).
- H.R. 4410, among other provisions, would establish a federal cooperative and a federal corporation related to rare-earth minerals and thorium; both federal

[102] 50 U.S.C. §98a(c).

charters would be privately funded and operated. The cooperative would process domestic and international sources of rare-earth minerals and materials into products for sale. The corporation would accept all radioactive material (e.g., thorium) produced by the cooperative, sell any valuable materials, and could conduct research on new uses of such materials.

- S. 1052, among other provisions, would direct the DOE to authorize an ongoing program to develop technologies for the extraction of rare-earth elements (REE) from coal and coal byproducts. The bill would authorize $23 million per year for eight years to fund this program. According the committee report accompanying this bill, "Congress appropriated funding in 2014 for [the National Energy Technology Lab] to develop extraction technologies for REEs from coal byproducts. S. 1052 formally authorizes the program."[103]
- H.R. 2531, among other provisions, would treat mineral exploration and mining projects related to critical minerals as high-priority infrastructure projects, as defined by E.O. 13807, and would attempt to reduce the time to issue permits to 30 months by allowing the lead agency to determine that NEPA requirements have been met or do not apply to the project.
- H.R. 3405, among other provisions, would instruct the Secretary of the Interior to remove uranium from the list of critical minerals, as prepared by the USGS pursuant to E.O. 13817. A previous version of this bill, introduced on June 21, 2019, finds that the United States has reserves of uranium, and that 52% of uranium is imported from stable trading partners.
- H.R. 3567, among other provisions, would direct the Under Secretary of Defense for Acquisition and Sustainment, in consultation with others, to establish guidance for the acquisition of items containing rare-earth materials and the supply chain of rare-earth materials from countries that are not U.S. adversaries. The bill would also direct the National Defense Stockpile Manager to dispose of an additional three million pounds of tungsten and to use available funds to acquire approximately $37 million of critical materials over five years; tantalum would be added to the list of critical materials.
- S. 3356, among other provisions, would require the DOE to award grants to encourage battery recycling research, development, and demonstration projects. Separately, grants would be awarded to state and local governments and battery retailers to enhance battery recycling collection programs. The bill would authorize $10 million for one year for the existing Lithium-Ion Battery Recycling Prize competition at the DOE, and would authorize to be appropriated $30 million per year for five years.

[103] The committee report for S. 1052 can be found at https://www.congress.gov/congressional-report/116th-congress/senate-report/74/1?overview=closed.

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