

December 24, 2010

A new rare earth bill has been introduced into the Senate at the very end of the 111th Congress. Bill S.4031, introduced by retiring Senators Bayh and Bond, is also called the 'Rare Earths Supply-Chain Technology and Resources Transformation Act of 2010' or the 'RESTART Act', a name identical to the bill introduced into the House and Senate earlier this year by Representative Mike Coffman and Senator Lisa Murkowski.

The bills are very similar, but the new Bayh-Bond RESTART Act has two major differences. First is the requirement for the Department of Energy to institute a Rare Earth Materials Program "to ensure the long-term, secure, and sustainable supply of rare earth materials in quantities that are sufficient to satisfy the national security, economic well-being, and industrial production needs of the United States."

The Program would include activities:

(1) to better characterize and quantify virgin stocks of rare earth materials using theoretical geochemical research;

(2) to explore, discover, and recover rare earth materials using advanced science and technology;

(3) to improve methods for the extraction, processing, use, recovery, and recycling of rare earth materials;

(4) to improve the understanding of the performance, processing, and adaptability in

engineering designs of rare earth materials;

(5) to identify and test alternative materials that could be substituted for rare earth materials in particular applications;

(6) to engineer and test applications that--

a. use recycled rare earth materials;

b. use alternative materials; or

c. seek to minimize rare earth materials content;

(7) to collect, catalogue, archive, and disseminate information on rare earth materials, including scientific and technical data generated by the research and development activities supported under this section;

(8) to assist scientists and engineers in making the fullest possible use of the data holdings described in paragraph (7);

(9) to facilitate information-sharing and collaboration among program participants and stakeholders; and

(10) to assess, and subsequently provide for, the appropriate protection of intellectual property regarding research, processing, and use of rare earth materials, including--

- a. applications in magnetic materials and catalysts;
- b. processing of proprietary materials; and
- c. techniques used in solvent extraction.

The Bayh-Bond Bill also recommends the creation of a cooperative to facilitate the creation of a refinery, funded by the government.

Finally the bill would repeal Title II of the Arctic Research and Policy Act of 1984, which was introduced by Senator Frank Murkowski and was signed into law by President Ronald Reagan on July 31, 1984. This would eliminate the National Critical Materials Council in the Executive Office of the President. The Council exists to:

- (1) advise the President on national policy concerning critical materials;
- (2) coordinate Federal policies and activities concerning such materials;
- (3) evaluate Government activities according to the policy and directions provided under the National Materials and Minerals Policy, Research and Development Act of 1980;
- (4) evaluate the critical materials needs of basic and advanced industries and the Government;
- (5) initiate studies to resolve national critical materials problems;
- (6) prepare, biennially update, and submit to Congress a report providing a domestic inventory

of critical resources with projections on the needs for such resources; and

(7) recommend necessary changes in policies, regulations, and legislation to Congress.