 Highlights of GAO-16-335, a report to congressional committees

CRITICAL DEFENSE MATERIALS

Government Collected Data Are Sufficiently Reliable to Assess Tantalum Availability

Why GAO Did This Study
The United States relies on foreign mine production of tantalum, a corrosion-resistant metal that is used in commercial and defense applications. Having reliable information on the global supply of tantalum is important for defense planning, particularly in determining if it is necessary to stockpile in case of future shortages. The House Armed Services Committee Report on a bill for the National Defense Authorization Act for Fiscal Year 2016 included a provision for GAO to examine the global tantalum supply chain, with a focus on why data reported by the government and by industry vary.

This report addresses (1) how tantalum supply data reported by government sources differ from industry data, and (2) the extent to which DOD has assessed the availability of tantalum during emergency planning scenarios. GAO reviewed data compiled by the USGS—DOD’s primary source for tantalum production data—and by a tantalum industry organization that makes its information publicly available. GAO interviewed DOD and industry officials about the reporting and collection methods for the data; examined the data DOD uses to determine potential shortfalls of materials, including data for its biennial Strategic and Critical Materials Reports on Stockpile Requirements; and discussed with DOD officials steps they have taken to assess the reliability of the data used in the analyses.

What GAO Found
Data published by government and industry on the global supply of tantalum vary due to differences in forms of tantalum reported and data collection methods. For example, government data prepared by the United States Geological Survey (USGS) on tantalum production reports information on tantalum ore from mining. Industry data GAO obtained from the Tantalum-Niobium International Study Center includes additional forms of processed tantalum, such as synthetic concentrates and slags and recycled tantalum materials. In collecting data, the USGS employs specialists to estimate production data by country of origin for government agencies, including the Department of Defense (DOD), by conducting annual surveys of foreign governments on mine production and relying on country specialists. In contrast, industry data compiled by the Tantalum-Niobium International Study Center is based on aggregated data voluntarily reported by its member companies as a service to those members rather than in support of the federal government. The table below summarizes the differences in USGS and industry data.

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<tr>
<th>Data reporting</th>
<th>United States Geological Survey</th>
<th>Tantalum-Niobium International Study Center</th>
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<tbody>
<tr>
<td>Mining</td>
<td>●</td>
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<tr>
<td>Processed and secondary sources</td>
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<td>Data on processor purchases</td>
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What GAO Recommends
GAO is not making recommendations. Neither DOD nor the Department of the Interior provided written comments.

DOD assesses the availability of tantalum, among other materials, for selected planning scenarios for the National Defense Stockpile’s biennial assessment process. Further, DOD takes steps to help ensure that tantalum supply data used in its stockpile analyses are reliable. For example, USGS provides the Defense Logistics Agency-Strategic Materials (DLA-Strategic Materials)—the stockpile program manager—with the data it collects and validates. Consistent with internal control standards, DLA-Strategic Materials officials said they then verify sources and check calculations to ensure that data are reliable before conducting their stockpile analyses. Since 2013, DLA-Strategic Materials has identified potential shortfalls for tantalum and recommended stockpiling. Given DLA-Strategic Materials’ interest in using the most accurate information available, it is taking additional steps to review and analyze existing industry tantalum data sources to better inform its stockpile analyses.

View GAO-16-335. For more information, contact Marie A. Mak (202) 512-4841 or makm@gao.gov.