



**U.S. Department of Commerce,
Bureau of Industry and Security (BIS)
Defense Industrial Base Strategic Materials Assessment:
Rare Earth Elements
Survey Dropdown Menu Options**

Section 1.a: Organization Information

A. Type of Organization

- Commercial Company
- Non-Profit Organization
- U.S. Government Organization
- University

B. From the dropdown, indicate whether this survey response captures the operations of your whole organization or that of an individual business unit/division.

- Corporate/Whole Organization
- Business Unit/Division
- Facility

C/D. Provide the following information for the level at which your organization is responding to this survey.

- State - List of States
- Country - List of Countries

E. From the dropdown, indicate whether your organization is publicly traded or privately held?

- Publicly Traded
- Privately Held

F. Point of Contact regarding this survey:

- State - List of States

Section 1b: Organization Information

A. Market Segments

- Yes
- No

B. Defense-related Market Segments

- Yes
- No

Section 1.c: Organization Information

A. Business Lines

- Primary
- Additional
- Complete

B. Rare Earth Elements

- Yes

REE Survey Dropdown Menu Options – For Reference Purposes

- No
- C. Business lines and/or current capabilities
 - Yes
 - No
- D. Small Business
 - Yes
 - No

Section 1.d: Organization Information

- A. Provide the following information for your company.
- Location
 - State - List of States
 - Country – List of Countries
 - Operations
 - Business Line/Current Capability
 - Dropdown of business lines from 1.cA
 - Dysprosium/Erbium/Neodymium/Terbium/Ytterbium/Other REE
 - Yes
 - No
 - Outlook
 - Operational Changes in next 5 years?
 - Yes
 - No
 - Unknown

Section 2.a: Products and Services

Please complete the table below to describe your organization's **Dysprosium, Erbium, Neodymium, Terbium, Ytterbium, and other REE-related** capabilities.

- Product or Service
 - Product
 - Service
- Type of Product/Service
 - Alloy
 - Battery
 - Catalyst
 - Ceramic
 - Chemical
 - Electronic Component
 - Electronic Finished Product
 - Glass
 - Integration/Install
 - Lamp/Bulb

- Laser Gain
- Laser
- Magnet
- Material
- Mechanical Component
- Mechanical Finished Product
- Neutron Absorption
- Optics
- Phosphor
- Rare Earth Mineral Concentrate
- Rare Earth Ore
- Refined Rare Earth
- Research and Design
- Testing/Quality Control
- Other
- Sole Source
 - Sole U.S. Source
 - Sole Global Source
 - Not Sole Source
 - Not Sure
- Dysprosium/Erbium/Neodymium/Terbium/Ytterbium/Other REE
 - Yes
 - No
- REE Ore/Compound/Material Type
 - Ore - Bastnaesite
 - Ore - Monazite
 - Ore - Xenotime
 - Ore - Eudialyte
 - Ore - Ancylyte
 - Ore - Allanite
 - Ore - Churchite
 - Ore - Limorite
 - Ore - Kaisonite
 - Ore - Fergusonite
 - Ore - Apatite
 - Ore - Other
 - Mixed Compound - Concentrate
 - Mixed Compound - Chloride
 - Mixed Compound - Nitrate
 - Mixed Compound - Inorganic Rare Earth Compounds
 - Mixed Compound - Organic Rare Earth Compounds
 - Mixed Compound - Fluoride
 - Mixed Compound - Hydroxide
 - Mixed Compound - Oxide
 - Mixed Compound - Sulfate
 - Mixed Compound - Rare Earth Garnet

- Mixed Compound - Other
- Mixed Metal - Mischmetal
- Mixed Metal - Rare Earth Silicide
- Mixed Metal - Rare Earth Metal
- Mixed Metal - Mixed Metal Rare Earth Alloy
- Mixed Metal - Didymium
- Mixed Metal - Lanthanum Silicide
- Mixed Metal - Cerium Silicide
- Mixed Metal - Other
- Inorganic Purified Compound
- Organic Purified Compound
- Purified Metal
- Unknown
- Not Applicable
- REE Refinement/Production Method
 - Distillation
 - Electromagnetic Separation
 - Electro-Transport Processing
 - Flotation Process/Froth Flotation
 - Fractional Crystallization
 - Gravity Concentration
 - Hydrometallurgy
 - Ion Exchange
 - Milling/Beneficiation
 - Solvent Extraction
 - Sublimation
 - Vacuum Casting
 - Zone Refining
 - Other
 - Unknown
 - Not Applicable

Section 2.b: Products and Services

Please complete the table below to describe your organization's **Dysprosium, Erbium, Neodymium, Terbium, Ytterbium-related** products and services.

- Sector End Use
 - Academic/University
 - Commercial/Industrial
 - Defense
 - Non-Defense Government
 - Non-Profit/FFRDC
 - Other
- Market Segment Served
 - Dropdown of market segments from 1.B.a

REE Survey Dropdown Menu Options – For Reference Purposes

- Material Application
 - Dropdown of business lines and/or current capabilities from 1.C.c

Section 3.a: Suppliers

Provide information on Dysprosium, Erbium, Neodymium, Terbium, and Ytterbium-related suppliers.

- Input Type
 - Alloy
 - Battery
 - Catalyst
 - Ceramic
 - Chemical
 - Electronic Component
 - Electronic Finished Product
 - Glass
 - Integration/Install
 - Lamp/Bulb
 - Laser Gain
 - Laser
 - Magnet
 - Material
 - Mechanical Component
 - Mechanical Finished Product
 - Neutron Absorption
 - Optics
 - Phosphor
 - Rare Earth Mineral Concentrate
 - Rare Earth Ore
 - Refined Rare Earth
 - Research and Design
 - Testing/Quality Control
 - Other
- REE Ore/Compound/Material Type
 - Ore - Bastnaesite
 - Ore - Monazite
 - Ore - Xenotime
 - Ore - Eudialyte
 - Ore - Ancylyte
 - Ore - Allanite
 - Ore - Churchite
 - Ore - Limorite
 - Ore - Kaisonite
 - Ore - Fergusonite
 - Ore - Apatite

- Ore - Other
- Mixed Compound - Concentrate
- Mixed Compound - Chloride
- Mixed Compound - Nitrate
- Mixed Compound - Inorganic Rare Earth Compounds
- Mixed Compound - Organic Rare Earth Compounds
- Mixed Compound - Fluoride
- Mixed Compound - Hydroxide
- Mixed Compound - Oxide
- Mixed Compound - Sulfate
- Mixed Compound - Rare Earth Garnet
- Mixed Compound - Other
- Mixed Metal - Mischmetal
- Mixed Metal - Rare Earth Silicide
- Mixed Metal - Rare Earth Metal
- Mixed Metal - Mixed Metal Rare Earth Alloy
- Mixed Metal - Didymium
- Mixed Metal - Lanthanum Silicide
- Mixed Metal - Cerium Silicide
- Mixed Metal - Other
- Inorganic Purified Compound
- Organic Purified Compound
- Purified Metal
- Unknown
- Not Applicable
- Product/Service 1
 - Dropdown of products/services from 2.A
- Product/Service 2
 - Dropdown of products/services from 2.A
- Product/Service 3
 - Dropdown of products/services from 2.A
- Product/Service 4
 - Dropdown of products/services from 2.A
- Product/Service 5
 - Dropdown of products/services from 2.A

Section 3.b: Suppliers

Provide information on Dysprosium, Erbium, Neodymium, Terbium, and Ytterbium-related suppliers.

- State
 - List of States
- Country
 - List of Countries
- REE Country of Origin

REE Survey Dropdown Menu Options – For Reference Purposes

- List of Countries
- Supplier Type
 - Academic/University
 - Commercial/Industrial
 - Defense
 - Non-Defense Government
 - Non-Profit/FFRDC
 - Other
- Single/Sole Source
 - Single Source Supplier
 - Sole Source Supplier
 - Neither Single or Sole Supplier
 - Not Sure
- Alternative Supplier
 - Readily Available
 - Not Readily Available
 - Captive/Internal Capability
 - No Alternative
 - Not Sure

Section 3.c: Inventory of Inputs Supporting Business Lines

- Number of weeks maintained
 - List with Less than 1 through 500
- Number of Weeks Current Inventory would Last if Operating at 100% Capacity Utilization Rate
 - List with Less than 1 through 500
- Number of Weeks Required to Return Inventory to Current Levels if Suddenly Exhausted
 - List with Less than 1 through 500
- Supply Disruption? (since 2012)
 - Yes
 - No

Section 3.d: Inputs and Sourcing of Materials

- A. Does your organization utilize any of the identified materials in support of its Dysprosium, Erbium, Neodymium, Terbium, and/or Ytterbium-related business lines? If no, proceed to Section 4.
- Yes
 - No
- B. If yes, indicate Operational Use, Sourcing Problems, Direct/Immediate Source, and Primary/Original Source
- Operational Use
 - Supports REE or Non-REE-Related Business Lines?
 - REE-Related

- Non-REE-Related
 - Both
 - Neither/Do Not Use
 - Dysprosium/Erbium/Neodymium/Terbium/Ytterbium/Other REE
 - Yes
 - No
- Sourcing Problems
 - Concerned about Material's Availability to support Ongoing Operations?
 - Yes
 - No
 - Supply Disruption? (since 2012)
 - Yes
 - No
- Direct/Immediate Source
 - Type
 - Distributor
 - Mine
 - Original Manufacturer
 - Recycler
 - Other
 - Location
 - List of Countries
- Primary/Original Source (Country)
 - List of Countries

Section 4.a: U.S. Government Defense and Non-Defense Participation

A. Vulnerability to demand

- Type of Business Line – REE-related/Non-REE-related
 - 1--Not Vulnerable
 - 2--Slightly Vulnerable
 - 3--Moderately Vulnerable
 - 4--Vulnerable
 - 5--Highly Vulnerable
 - Do Not Know
 - Not Applicable
- If there is a sudden or steep decline in U.S. Government demand for REE-related products and/or services, can your organization readily convert its relevant government business lines to commercial ones?
 - Yes
 - No
 - Don't Know

- Estimate the percentage of your current U.S. Government REE-related products and/or services that are readily compatible with non-government business lines.
 - List 0%-100%

B. Dependence on U.S. Government programs

- Does your organization consider itself dependent upon U.S. Government programs for its continued viability?
 - Yes
 - No
 - Don't Know
 - Not Applicable
- If your organization's REE-related business lines support Department of Defense (DOD) programs, whether directly or indirectly, are those business lines integrated or separate from your commercial-based operations?
 - Integrated
 - Separated
 - Not Applicable
- Is your organization capable of simultaneously supporting DOD and commercial requirements?
 - Yes
 - No
 - Don't Know
 - Not Applicable

C. Impacts of U.S. Government demand

- Impact of decreased U.S. Government demand for your organization's REE-related business lines
 - Increase
 - Decrease
 - No Change
 - Not Applicable
- Impact of increased U.S. Government demand for your organization's REE-related business lines
 - Increase
 - Decrease
 - No Change
 - Not Applicable

D. From 2010-2014, has your organization a rated order from a U.S. Government agency and/or affiliated contractor?

- Yes
- No

Section 4.a: U.S. Government Defense and Non-Defense Participation

To the best of your knowledge, identify any U.S. Government agencies your organization **directly and/or indirectly** supports from the list below. *(Multiple Drop Downs)*

- A. Since 2010, has your organization directly or indirectly supported any U.S. Government agencies or programs in any capacity?
- Directly
 - Indirectly
 - Both
 - No
- B. Specific agency support
- REE-Related Support
 - Non-REE Related Support
 - Both
 - Do Not Support
 - Maybe/Not Clear
- C. Product specific support
- Agency Name
 - Agencies from part B.
 - Product/Service 1-6
 - Dropdowns from 2.A

Section 5.a: Challenges and Organizational Outlook – Issues

Identify the issues impacting your organization's REE-related business lines.

- Impact?
 - Current
 - Future
 - Both
 - No
- Rank only 5 Yes answers, 1-5

Section 5.b: Challenges and Organizational Outlook – Competitiveness

Describe your organization's competitiveness and any challenges to the sustainment of its REE-related business lines.

- A. Actions Taken – Actions Taken Since 2010/Actions Planned for
- Business Restructuring
 - Capital Investment
 - Customer Service/Quality Control Improvements
 - Innovation, R&D and Design Improvements
 - Marketing Improvements
 - Patent Protection/Investment in IPR and Legal
 - Staff Adjustments
 - Other
- B. Supply

- Face supply constraints?
 - Yes
 - No
 - Don't Know
 - Not Applicable
- If yes, affecting future operations?
 - Yes
 - No
 - Don't Know
 - Not Applicable
- Increase in REEs will make your organization more competitive?
 - Yes
 - No
 - Don't Know
 - Not Applicable
- Benefit from an increase in domestic and Non-US aggregate demand?
 - Yes
 - No
 - Don't Know
 - Not Applicable

C. Scenarios – Effect on Sustainment of Business Lines

- 1--Negative Long-Term Impact
- 2--Negative Short-Term Impact
- 3--No Impact
- 4--Positive Short-Term Impact
- 5--Positive Long-Term Impact
- Don't Know

D. REEs: Next 12-24 Months

- Increase
- Decrease
- No Change
- Not Applicable

Section 5.c: Challenges and Organizational Outlook – Recycling

Respond to the following question concerning your organization's REE-related recycling practices.

A. Recycling

- Recycle REEs or REE-related products?
 - Yes
 - No
- If no, does your organization plan to recycle in the next 5 years?
 - Yes
 - No

- If no, identify the primary constraint
 - Brand
 - Cost
 - Environmental/Waste
 - Expertise
 - Infrastructure/PP&E/Tooling
 - Lead/Cycle Time
 - Product Performance
 - QA/QC/Standards
 - ROI
 - Technology
 - Other (specify)
 - Not Applicable
- If no, indicate the feasibility of recycling.
 - 1--Feasible/Evident
 - 2--Moderately Feasible
 - 3--Difficult
 - 4--Moderately Difficult
 - 5--Impossible/Not Applicable

B. Use of Recycled REEs

- Does your organization use recycled REEs or REE-related products?
 - Yes
 - No
- If no, does your organization plan to in the next 5 years?
 - Yes
 - No
- If no, identify the primary constraint
 - Brand
 - Cost
 - Environmental/Waste
 - Expertise
 - Infrastructure/PP&E/Tooling
 - Lead/Cycle Time
 - Product Performance
 - QA/QC/Standards
 - ROI
 - Technology
 - Other (specify)
 - Not Applicable
- If no, indicate the feasibility of using recycled REEs or REE-related products
 - 1--Feasible/Evident
 - 2--Moderately Feasible
 - 3--Difficult
 - 4--Moderately Difficult
 - 5--Impossible/Not Applicable

C. Rare Earth Element Recycling Processes

- Primary recycling technique/process adopted or planned to use
 - Dry Process (Hydrogen Separation)
 - Electrometallurgy Recycling
 - Hydrometallurgy Recycling
 - Microbe Capsules
 - Pyrometallurgy Recycling
 - Tailings Recycling
 - Titanium Dioxide Process
 - Other (specify)
 - Not Applicable
- Recycling improving overall competitiveness?
 - Yes
 - No
 - Don't Know
 - Not Applicable

Section 5.d: Challenges and Organizational Outlook – Substitution

Respond to the following question concerning your organization's REE-related substitution practices.

A. Recycling

- Substitute REEs with different REEs or non-REE materials?
 - Different REE
 - Non-REE Material
 - Both
 - No
 - Not Applicable
- If no, does your organization plan to substitute in the next 5 years?
 - Different REE
 - Non-REE Material
 - Both
 - No
 - Not Applicable
- If no, identify the primary constraint
 - Brand
 - Cost
 - Environmental/Waste
 - Expertise
 - Infrastructure/PP&E/Tooling
 - Lead/Cycle Time
 - Product Performance
 - QA/QC/Standards
 - ROI
 - Technology
 - Other (specify)

- Not Applicable
- If no, indicate the feasibility of substituting
 - 1--Feasible/Evident
 - 2--Moderately Feasible
 - 3--Difficult
 - 4--Moderately Difficult
 - 5--Impossible/Not Applicable

B. Use of REE Substitutes/Related Products

- Does your organization use products containing REE substitutes?
 - Yes
 - No
 - Don't Know
 - Not Applicable
- If no, does your organization plan to in the next 5 years?
 - Yes
 - No
 - Don't Know
 - Not Applicable
- If no, identify the primary constraint
 - Brand
 - Cost
 - Environmental/Waste
 - Expertise
 - Infrastructure/PP&E/Tooling
 - Lead/Cycle Time
 - Product Performance
 - QA/QC/Standards
 - ROI
 - Technology
 - Other (specify)
 - Not Applicable
- If no, indicate the feasibility of using REE substitutes or products containing REE substitutes
 - 1--Feasible/Evident
 - 2--Moderately Feasible
 - 3--Difficult
 - 4--Moderately Difficult
 - 5--Impossible/Not Applicable

C. Rare Earth Element Substitution Processes

- Primary substitution technique/process adopted or planned to use
 - Chemical Vapor Deposition
 - Design-Out
 - Electron-Beam Evaporation
 - Metal-Organic Decomposition
 - Pulsed Laser Deposition
 - Sputtering

- Other (specify)
 - Not Applicable
- Substitution improving overall competitiveness?
 - Yes
 - No
 - Don't Know
 - Not Applicable
 -

Section 6.a: Imports

A. Has your organization imported REEs?

- Yes
- No
- Don't Know

B. REE Imports

- Country – List of Countries
- Dysprosium/Erbium/Neodymium/Terbium/Ytterbium/Other REE
 - Yes
 - No
- REE Ore/Compound/Material Type
 - Ore - Bastnaesite
 - Ore - Monazite
 - Ore - Xenotime
 - Ore - Eudialyte
 - Ore - Ancylyte
 - Ore - Allanite
 - Ore - Churchite
 - Ore - Limorite
 - Ore - Kaisonite
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 - Ore - Apatite
 - Ore - Other
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 - Mixed Compound - Organic Rare Earth Compounds
 - Mixed Compound - Fluoride
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 - Mixed Compound - Sulfate
 - Mixed Compound - Rare Earth Garnet
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 - Mixed Metal - Rare Earth Silicide
 - Mixed Metal - Rare Earth Metal

- Mixed Metal - Mixed Metal Rare Earth Alloy
 - Mixed Metal - Didymium
 - Mixed Metal - Lanthanum Silicide
 - Mixed Metal - Cerium Silicide
 - Mixed Metal - Other
 - Inorganic Purified Compound
 - Organic Purified Compound
 - Purified Metal
 - Unknown
 - Not Applicable
 - Quantity Unit of Measure
 - Ounces
 - Pounds
 - Tons
 - Grams
 - Kilograms
 - Metric Tons
- C. Future of Imports
- Increasing imports over next 5 years?
 - Yes
 - No
 - Don't Know
 - If yes, anticipate challenges?
 - Yes
 - No
 - Don't Know

Section 6.b: Imports

- A. Has your organization exported REEs?
- Yes
 - No
 - Don't Know
- B. REE Exports
- Country – List of Countries
 - Dysprosium/Erbium/Neodymium/Terbium/Ytterbium/Other REE
 - Yes
 - No
 - REE Ore/Compound/Material Type
 - Ore - Bastnaesite
 - Ore - Monazite
 - Ore - Xenotime
 - Ore - Eudialyte
 - Ore - Ancylyte
 - Ore - Allanite
 - Ore - Churchite

- Ore - Limorite
- Ore - Kaisonite
- Ore - Fergusonite
- Ore - Apatite
- Ore - Other
- Mixed Compound – Concentrate
- Mixed Compound – Chloride
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- Mixed Compound - Organic Rare Earth Compounds
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- Mixed Compound – Hydroxide
- Mixed Compound – Oxide
- Mixed Compound – Sulfate
- Mixed Compound - Rare Earth Garnet
- Mixed Compound – Other
- Mixed Metal – Mischmetal
- Mixed Metal - Rare Earth Silicide
- Mixed Metal - Rare Earth Metal
- Mixed Metal - Mixed Metal Rare Earth Alloy
- Mixed Metal – Didymium
- Mixed Metal - Lanthanum Silicide
- Mixed Metal - Cerium Silicide
- Mixed Metal – Other
- Inorganic Purified Compound
- Organic Purified Compound
- Purified Metal
- Unknown
- Not Applicable
- Quantity Unit of Measure
 - Ounces
 - Pounds
 - Tons
 - Grams
 - Kilograms
 - Metric Tons

C. Future of Exports

- Increasing exports over next 5 years?
 - Yes
 - No
 - Don't Know
- If yes, anticipate challenges?
 - Yes
 - No
 - Don't Know

Section 7: Sales

- Source of Sales Data/Reporting Schedule
 - Source of Sales Data
 - Corporate/Whole Organization
 - Business Unit/Division
 - Facility
 - Reporting Schedule
 - Calendar year
 - Fiscal year
- A. Total Sales – U.S. Non-U.S. (2010-2012)
 - Decline reduction
 - List 0% - 100%
 - > 100%
- B. Total REE-related Sales, all customers – U.S. Non-U.S. (2010-2012)
 - REE-related Non-Government and Government (2010-2012)
 - Decline reduction
 - List 0% - 100%
 - > 100%
 - REE-related U.S. Government Defense/Non-Defense
 - Proportional Increase
 - Proportional Decrease
 - No Change in Proportion
 - Not Applicable
- C. Follow-up Questions
 - Dependent on REE-related sales for ongoing viability?
 - Yes
 - No
 - Degree of compatibility between REE and non-REE business lines
 - List 0% - 100%

Section 8: Customers

- Type of Customer
 - Academic/University
 - Commercial/Industrial
 - Defense
 - Non-Defense Government
 - Non-Profit/FFRDC
 - Other
- Market Segment of Customer
 - Dropdown of market segments in tab 1.B.a
- REE Product/Service 1 - 3
 - Dropdown of products/services in tab 2.A
- Customer location
 - State – list of states

- Country – list of countries

Section 9: Financials

- Source of Sales Data/Reporting Schedule
 - Source of Sales Data
 - Corporate/Whole Organization
 - Business Unit/Division
 - Facility
 - Reporting Schedule
 - Calendar year
 - Fiscal year

Section 10: Employment

- Source of Employment Reporting/Employment Reporting Schedule
 - Source of Employment Reporting
 - Corporate/Whole Organization
 - Business Unit/Division
 - Facility
 - Employment Reporting Schedule
 - Calendar year
 - Fiscal year

A. Professional Occupations 2-10

- List 0% -100%

B. Estimate of Total FTEs working on REE-related business lines

- List 0% -100%

C. Hiring/retaining employees

- Difficulty?
 - Yes
 - No
- If yes, primary reason(s)
 - Cuts to DOD funding
 - Field requires highly specialized skills
 - Lack of funding for qualified hires
 - Lack of qualified domestic candidates
 - Remote location of organization
 - Security clearances required
 - Other (specify)
 - Not Applicable

D. Apprenticeship programs

- Offer apprenticeship programs?
 - Yes
 - No
- Preferred workforce development program

- Apprenticeship
 - Certification
 - Detail/Rotation
 - Fellowship
 - Internship
 - On-The-Job Training
 - Reimbursement/Subsidized Education
 - Specialized Coursework
 - None
 - Not Applicable
 - Participation in identified workforce development programs
 - Yes
 - No
 - Planning to Adopt/in Future
- E. Essential unique skills/competencies
- Design skill/competency
 - Engineering skill/competency
 - Management/Legal/Finance skill/competency
 - Production/Manufacturing skill/competency
 - Quality Control/Testing skill/competency
 - Programming/Analytical skill/competency
 - Scientific/Laboratory skill/competency
 - Other skill/competency (specify)

Section 11: Research and Development

- Source of Employment Reporting/Employment Reporting Schedule
 - Source of Employment Reporting
 - Corporate/Whole Organization
 - Business Unit/Division
 - Facility
 - Employment Reporting Schedule
 - Calendar year
 - Fiscal year
- A. R&D Expenditures 1-5
- List 0% -100%
- B. R&D Funding Sources 1-5
- List 0% -100%
- C. Compatibility/Constraints to REE-related R&D
- Defense-related R&D shape commercial products
 - Yes
 - No
 - Don't Know
 - Not Applicable
 - If yes, estimate the degree of compatibility

- List 0% -100%
- D. Compatibility/Constraints to REE-related R&D
 - Issue of cost
 - Yes
 - No
 - Don't Know
 - Not Applicable
 - Limited availability
 - Yes
 - No
 - Don't Know
 - Not Applicable
 - China Quotas effect
 - Yes
 - No
 - Don't Know
 - Not Applicable
 - Efforts to “deign or engineer out” REEs effect incentive
 - Reduced
 - Increased
 - No Impact
- E. REE-related R&D for Recycling/Substitution – Recycling/Substitution
 - R&D Activities
 - Yes
 - No
 - If yes, overall proportion
 - List 0% -100%
 - Plan to increase R&D?
 - Yes
 - No

Section 12: Capital Expenditures

- Source of Capital Expenditure Data/Capital Expenditure Reporting Schedule
 - Source of Capital Expenditure Data
 - Corporate/Whole Organization
 - Business Unit/Division
 - Facility
 - Capital Expenditure Reporting Schedule
 - Calendar year
 - Fiscal year
- A. Total Capital Expenditures 2010-2013
 - List 0% - 100%

B. Organization's capital expenditures impacted due to reductions in USG defense spending?

- Impacted in Past Only
- Impacted in Future Only
- Impacted in Both Past and Future
- No

C. Barriers to entry or expansion in REE-related fields

- Obstacles to future procurement
 - Yes
 - No
 - Not Applicable
- Own the following machinery/equipment?
 - Currently Own
 - Seek to Own
 - Both
 - Neither
 - Not Applicable

D. Type of Equipment, Infrastructure, or Facility

- Equipment
- Infrastructure
- Facility
- Other Type (specify)

Section 13.a: U.S. Government Outreach

A. More information on federal and state government programs and services

- Yes
- No