

112TH CONGRESS  
1ST SESSION

# S. 1270

To prohibit the export from the United States of certain electronic waste,  
and for other purposes.

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IN THE SENATE OF THE UNITED STATES

JUNE 23, 2011

Mr. WHITEHOUSE (for himself, Mr. BROWN of Ohio, and Ms. MURKOWSKI)  
introduced the following bill; which was read twice and referred to the  
Committee on Environment and Public Works

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## A BILL

To prohibit the export from the United States of certain  
electronic waste, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Responsible Elec-  
5 tronics Recycling Act”.

6 **SEC. 2. ELECTRONIC WASTE EXPORT RESTRICTIONS.**

7 (a) AMENDMENT.—Subtitle C of the Solid Waste  
8 Disposal Act (42 U.S.C. 6921 et seq.) is amended by add-  
9 ing at the end the following new section:

1 **“SEC. 3024. ELECTRONIC WASTE EXPORT RESTRICTIONS.**

2 “(a) IN GENERAL.—Beginning on the date that is 24  
3 months after the date of enactment of this section, no per-  
4 son shall export restricted electronic waste to a country  
5 described in subsection (e).

6 “(b) DEFINITIONS; RULE OF CONSTRUCTION.—For  
7 purposes of this section:

8 “(1) CONSIGNEE.—The term ‘consignee’ means  
9 the ultimate repair, refurbishment, treatment, stor-  
10 age, or disposal facility in a receiving country to  
11 which restricted electronic waste will be sent.

12 “(2) COVERED ELECTRONIC EQUIPMENT.—

13 “(A) IN GENERAL.—The term ‘covered  
14 electronic equipment’ means the following used  
15 items, whole or in fragments, including parts,  
16 components, or assemblies thereof:

17 “(i) Computers.

18 “(ii) Central processing units.

19 “(iii) Mobile computers (including  
20 notebooks, netbooks, tablets, and e-book  
21 readers).

22 “(iv) Computer accessories (including  
23 input devices, webcams, speakers, data  
24 storage devices, servers, and monitors).

25 “(v) Televisions (including portable  
26 televisions and portable DVD players).

1           “(vi) Video display devices (including  
2           digital picture frames and portable video  
3           devices).

4           “(vii) Digital imaging devices (includ-  
5           ing printers, copiers, facsimile machines,  
6           image scanners, and multifunction ma-  
7           chines).

8           “(viii) Television peripheral devices  
9           (including video cassette recorders, DVD  
10          players, video game systems, game control-  
11          lers, signal converter boxes, and cable and  
12          satellite receivers).

13          “(ix) Digital cameras and projectors.

14          “(x) Digital audio players.

15          “(xi) Telephones and electronic com-  
16          munication equipment (including cellular  
17          phones and wireless internet communica-  
18          tion devices).

19          “(xii) Networking devices (including  
20          routers, network cards, modems, and  
21          hubs).

22          “(xiii) Audio equipment.

23          “(xiv) Portable video game systems.

24          “(xv) Personal digital assistants.

1           “(xvi) Portable global positioning sys-  
2           tem navigation devices.

3           “(xvii) Other used electronic products  
4           the Administrator determines to be similar  
5           under the procedures promulgated in ac-  
6           cordance with subsection (c).

7           “(B) EXCEPTION.—The term ‘covered elec-  
8           tronic equipment’ shall not include parts of a  
9           motor vehicle.

10          “(3) RESTRICTED ELECTRONIC WASTE.—

11           “(A) IN GENERAL.—The term ‘restricted  
12           electronic waste’ means—

13           “(i) items of covered electronic equip-  
14           ment, that include, contain, are derived  
15           from, or consist of—

16           “(I) cathode ray tubes or cathode  
17           ray tube glass in any form, or cathode  
18           ray tube phosphor residues or dusts in  
19           any form;

20           “(II) a lamp or other device con-  
21           taining mercury phosphor;

22           “(III) batteries containing—

23           “(aa) lead, cadmium, or  
24           mercury; or

1                   “(bb) organic solvents exhib-  
2                   iting the characteristic of ignit-  
3                   ability, as defined in section  
4                   261.21 of title 40, Code of Fed-  
5                   eral Regulations;

6                   “(IV) switches or any other de-  
7                   vices containing mercury;

8                   “(V) hexavalent chromium;

9                   “(VI) other than batteries de-  
10                  scribed in subclause (III), items con-  
11                  taining antimony, barium, cadmium,  
12                  lead, thallium, beryllium, arsenic, or  
13                  selenium, including—

14                   “(aa) circuit boards;

15                   “(bb) printer drums;

16                   “(cc) liquid crystal displays;

17                   “(dd) flatscreen glass; and

18                   “(ee) light emitting diodes;

19                   or

20                   “(ii) any other covered electronic  
21                  equipment, or materials derived therefrom,  
22                  containing any other toxic material, in ele-  
23                  mental or compound form, identified by  
24                  the Administrator under subsection (c).

1           “(B) EXCEPTIONS.—The term ‘restricted  
2 electronic waste’ shall not apply to items de-  
3 scribed in this subparagraph.

4           “(i) DE MINIMIS.—Covered electronic  
5 equipment described in subparagraphs  
6 (A)(i)(VI) and (A)(ii), including separated  
7 component streams (such as plastics or  
8 metals), which does not exceed de minimis  
9 levels set by the Administrator under sub-  
10 section (d).

11          “(ii) REUSE.—Covered electronic  
12 equipment that is—

13           “(I) tested prior to export pursu-  
14 ant to subsection (i)(1), and found to  
15 be—

16           “(aa) functional for the pur-  
17 pose for which the equipment  
18 was designed, or, in the case of  
19 multifunction devices, fully func-  
20 tional for at least one of the pri-  
21 mary purposes for which the  
22 equipment was designed; and

23           “(bb) appropriately pack-  
24 aged for shipment to prevent the  
25 equipment from losing

1 functionality due to damage dur-  
2 ing transit; and

3 “(II) appropriately labeled or  
4 marked pursuant to subsection  
5 (i)(3)(A).

6 “(iii) CERTAIN CATHODE RAY TUBE  
7 GLASS.—Furnace-ready cathode ray tube  
8 glass cullet, cleaned of all phosphors, to be  
9 used as a direct feedstock in a lead-glass  
10 manufacturing furnace without further  
11 processing or preparation required other  
12 than quality control, which the competent  
13 authority in the importing country states  
14 in writing is not waste.

15 “(iv) WARRANTIES.—Customer re-  
16 turns, to point of sale, to original equip-  
17 ment manufacturers, or to contractual  
18 warranty collectors, of recently purchased  
19 covered electronic equipment that is ei-  
20 ther—

21 “(I) under original equipment  
22 manufacturer warranty to customers;  
23 or

24 “(II) under warranty from the  
25 original design manufacturer or origi-

1           nal component manufacturer to the  
2           original equipment manufacturer, or  
3           otherwise returned by the original  
4           purchaser of the electronic equipment,  
5           due to defect or customer dissatisfac-  
6           tion, and the manufacturer accepts  
7           such returns for the purposes of re-  
8           pair or replacement in order to return  
9           to the customer a functional working  
10          product or part of the same type and  
11          model, except that products and parts  
12          covered in this subparagraph shall not  
13          include—

14                   “(aa) covered electronic  
15                   equipment accepted for return  
16                   from individuals or businesses  
17                   under general takeback, recy-  
18                   cling, trade-in (for purposes of  
19                   recycling, disposal, sales pro-  
20                   motions, or obtaining credit for  
21                   product purchases or leases) or  
22                   buy-back programs, events, or  
23                   policies designed to collect used  
24                   or waste electronic equipment;



1                   “(bb) covered electronic  
2                   equipment returned at the end of  
3                   leases to customers; or

4                   “(cc) covered electronic  
5                   equipment collected by asset re-  
6                   covery programs.

7                   “(v) RECALLS.—Recalls of covered  
8                   electronic equipment by an original equip-  
9                   ment manufacturer, original design manu-  
10                  facturer, or original component manufac-  
11                  turer where—

12                  “(I) the covered electronic equip-  
13                  ment is subject to recall notice issued  
14                  by the Consumer Product Safety  
15                  Commission or other pertinent Fed-  
16                  eral authority;

17                  “(II) the original design manu-  
18                  facturer or original component manu-  
19                  facturer requires the defective covered  
20                  electronic equipment to be physically  
21                  returned to that manufacturer as a  
22                  term of the warranty; and

23                  “(III) any export of recalled cov-  
24                  ered electronic equipment is to a  
25                  country from whose competent au-

1                   thority the Administrator receives  
2                   written consent pursuant to sub-  
3                   section (h)(2).

4                   “(4) RULE OF CONSTRUCTION REGARDING  
5                   CHEMICAL ELEMENTS.—Any reference to a chemical  
6                   element shall be construed to be a reference to that  
7                   element in compound or elemental form.

8                   “(c) ADDITIONAL COVERED ELECTRONIC EQUIP-  
9                   MENT AND RESTRICTED MATERIALS.—Not later than 18  
10                  months after the date of enactment of this section, the  
11                  Administrator shall, after notice and opportunity for pub-  
12                  lic comment, and after consultation with appropriate Fed-  
13                  eral and State agencies, develop and promulgate proce-  
14                  dures for identifying—

15                  “(1) similar electronic equipment to add to the  
16                  list of covered electronic equipment under subsection  
17                  (b)(2); and

18                  “(2) additional restricted toxic materials to add  
19                  to the list in subsection (b)(3)(A)(ii), the presence of  
20                  which in covered electronic equipment poses a poten-  
21                  tial hazard to human health or the environment.

22                  Such procedures shall include a method for any interested  
23                  party to propose a new product or material for review by  
24                  the Administrator.

1       “(d) DE MINIMIS LEVELS.—Not later than 18  
2 months after the date of enactment of this section, the  
3 Administrator shall, after notice and opportunity for pub-  
4 lic comment, and after consultation with appropriate Fed-  
5 eral and State agencies, develop and promulgate proce-  
6 dures for identifying de minimis levels for restricted elec-  
7 tronic waste described in subparagraphs (A)(i)(VI) and  
8 (A)(ii) of subsection (b)(3), below which such waste is de-  
9 termined by the Administrator not to pose a potential haz-  
10 ard to human health or the environment.

11       “(e) COUNTRIES TO WHICH PROHIBITION AP-  
12 PLIES.—The countries referred to in subsection (a) are all  
13 countries which are not—

14               “(1) members of the Organization for Economic  
15 Co-operation and Development or the European  
16 Union; or

17               “(2) Liechtenstein.

18       “(f) NOTICE TO ADMINISTRATOR.—No person shall  
19 export covered electronic equipment described in sub-  
20 section (b)(3)(B) to a country described in subsection (e)  
21 unless, not later than 60 days before the initial export  
22 shipment, such person transmits to the Administrator  
23 written notice of an intended export. Such a notification  
24 may cover export activities extending over a maximum of  
25 12 months for the same type of covered electronic equip-

1 ment, exported to the same facility via the same transit  
2 countries. The notification shall include the following in-  
3 formation:

4           “(1) The name, mailing address, telephone  
5           number, and if applicable, the Environmental Pro-  
6           tection Agency or Resource Conservation and Recov-  
7           ery Act identification number.

8           “(2) Documentation of licensing of the exporter  
9           under subsection (g).

10           “(3) The name and site address of the con-  
11           signee and any alternate consignee.

12           “(4) A statement from the exporter that in-  
13           cludes—

14                   “(A) a description of the type and total  
15                   quantity of covered electronic equipment that  
16                   will be exported to the consignee;

17                   “(B) the estimated frequency or rate at  
18                   which such covered electronic equipment is to  
19                   be exported, and the period of time over which  
20                   such covered electronic equipment is to be ex-  
21                   ported;

22                   “(C) all points of entry to and departure  
23                   from each country through which the covered  
24                   electronic equipment will pass in transit;

1           “(D) a description of the means by which  
2           each shipment of the covered electronic equip-  
3           ment will be transported, including the mode of  
4           transportation and type or types of container;  
5           and

6           “(E) a description of the manner in which  
7           the covered electronic equipment will be treated,  
8           stored, or disposed of in the receiving country.

9           “(5) A list of all transit countries through  
10          which the covered electronic equipment will be trans-  
11          ported, and a description of the approximate length  
12          of time the covered electronic equipment will remain  
13          in each country and the nature of its handling while  
14          there.

15          “(g) LICENSE.—Covered electronic equipment may  
16          only be exported to a country described in subsection (e)  
17          under the exceptions to restricted electronic waste in sub-  
18          section (b)(3)(B) by an entity licensed by the Adminis-  
19          trator under regulations issued under subsection (i)(2).

20          “(h) ADDITIONAL EXPORT CONDITIONS FOR WAR-  
21          RANTIES AND RECALLS.—

22                 “(1) IN GENERAL.—No person shall export cov-  
23                 ered electronic equipment to a country described in  
24                 subsection (e) under the exceptions to restricted

1 electronic waste in subsections (b)(3)(B)(iv) or (v)  
2 unless—

3 “(A) the export is made by an original  
4 equipment manufacturer or its contractual  
5 agent to the original design manufacturer or  
6 original component manufacturer’s site of last  
7 assembly, or to a company contracted to make  
8 warranty repairs, for the purposes of business  
9 credit to the original equipment manufacturer,  
10 repair or refurbishment and subsequent reuse,  
11 or replacement;

12 “(B) the original equipment manufacturer  
13 has a presence and assets in the United States;  
14 and

15 “(C) the person who exports the covered  
16 electronic equipment—

17 “(i) keeps copies of normal business  
18 records, such as contracts, demonstrating  
19 that each shipment of exported covered  
20 electronic equipment is intended for repair  
21 or refurbishment and subsequent reuse, or  
22 replacement, which documentation shall be  
23 retained for a period of at least 3 years  
24 after the date of export; and

1           “(ii) submits an annual report to the  
2 Administrator on the amount and types of  
3 waste resulting from the refurbishment or  
4 replacement process, and how it was dis-  
5 posed of or recycled, which shall include—

6                   “(I) number and weight of units  
7 of products returned by the original  
8 equipment manufacturer for repair,  
9 refurbishment, or replacement listed  
10 by category and country of destina-  
11 tion; and

12                   “(II) the covered electronic  
13 equipment, or materials derived there-  
14 from, sent onward to further reuse,  
15 disposal, or recycling following repair,  
16 refurbishment, or replacement, listed  
17 by weight, a description of the wastes,  
18 and the ultimate country destination.

19           “(2) ACKNOWLEDGMENT OF CONSENT.—

20                   “(A) REQUIREMENT.—No person shall ex-  
21 port covered electronic equipment to a country  
22 described in subsection (e) under the exceptions  
23 to restricted electronic waste in subsections  
24 (b)(3)(B)(iv) or (v) until the Administrator—

1           “(i) obtains the written consent of the  
2           competent authority of the receiving coun-  
3           try, and of each country through which the  
4           covered electronic equipment will pass in  
5           transit; and

6           “(ii) transmits to the exporter an Ac-  
7           knowledgment of Consent reflecting receipt  
8           of each country’s consent.

9           “(B) COUNTRY NOTIFICATION.—In co-  
10          operation with other appropriate agencies, the  
11          Administrator shall provide notification in writ-  
12          ing of an intended export submitted under sub-  
13          section (f) to the receiving country and any  
14          transit countries.

15          “(C) CONSENT AND EXPORTER NOTIFICA-  
16          TION.—When the receiving country and all  
17          transit countries consent in writing to the re-  
18          ceipt or transit of the covered electronic equip-  
19          ment, the Administrator shall transmit an Ac-  
20          knowledgment of Consent to the exporter. The  
21          consent from a receiving or transit country may  
22          be for a notice of multiple shipments or a speci-  
23          fied duration as described in subsection (f). The  
24          exporter shall attach a copy of the Acknowledg-  
25          ment of Consent to the shipping papers or



1 equivalent documents to ensure that the Ac-  
2 knowledgment of Consent accompanies the ship-  
3 ment of covered electronic equipment.

4 “(3) WITHDRAWAL OF CONSENT.—Where the  
5 receiving country or a transit country objects to re-  
6 ceipt or transit of the covered electronic equipment,  
7 or withdraws a prior consent, the Administrator  
8 shall notify the exporter in writing.

9 “(i) REGULATIONS.—Not later than 18 months after  
10 the date of enactment of this section, the Administrator  
11 shall issue regulations for carrying out this section, includ-  
12 ing—

13 “(1) testing requirements for covered electronic  
14 equipment proposed to be exported under subsection  
15 (b)(3)(B)(ii);

16 “(2) establishing a process for licensing entities  
17 under subsection (g);

18 “(3) in consultation with the appropriate Fed-  
19 eral agency or agencies, provisions for an efficient  
20 export control regime which will allow for—

21 “(A) requiring a person exporting under  
22 this section to use appropriate labeling or  
23 marking, distinguishing among—

24 “(i) covered electronic equipment as  
25 permitted under this section;

1           “(ii) restricted electronic waste de-  
2           scribed in this section; and

3           “(iii) tested working covered electronic  
4           equipment as permitted under this section;  
5           and

6           “(B) enforcement mechanisms, tests, and  
7           procedures in coordination with enforcement  
8           procedures administered by other appropriate  
9           Federal agencies; and

10          “(4) establishing a registry of violators, where-  
11          by any person or entity found to be exporting re-  
12          stricted electronic waste in violation of this section  
13          shall be listed on a public registry on a website  
14          maintained by the Administrator for a period of 5  
15          years after each violation.

16          “(j) CIRCUIT BOARDS.—For the purposes of export  
17          to Organization for Economic Co-operation and Develop-  
18          ment member countries, circuit boards shall be subject to  
19          the Amber Control Procedure as described in the Organi-  
20          zation for Economic Co-operation and Development Con-  
21          trol System for waste recovery.”.

22          (b) TABLE OF CONTENTS AMENDMENT.—The table  
23          of contents for the Solid Waste Disposal Act is amended  
24          by adding after the item relating to section 3023 the fol-  
25          lowing new item:

“Sec 3024. Electronic waste export restrictions.”.

1 **SEC. 3. ENFORCEMENT.**

2 (a) **CRIMINAL PENALTIES.**—Section 3008(d) of the  
3 Solid Waste Disposal Act (42 U.S.C. 6928(d)) is amend-  
4 ed—

5 (1) by striking “or” at the end of paragraph  
6 (6);

7 (2) by inserting “or” at the end of paragraph  
8 (7)(B); and

9 (3) by inserting after paragraph (7) the fol-  
10 lowing new paragraph:

11 “(8) knowingly exports restricted electronic  
12 waste in violation of section 3024;”.

13 (b) **INSPECTIONS.**—Section 3007(a) of the Solid  
14 Waste Disposal Act (42 U.S.C. 6927(a)) is amended—

15 (1) by inserting “or restricted electronic  
16 wastes” after “or has handled hazardous wastes”;  
17 and

18 (2) by inserting “or restricted electronic  
19 wastes” after “or other place where hazardous  
20 wastes”.

21 **SEC. 4. RARE EARTH MATERIALS RECYCLING RESEARCH**  
22 **INITIATIVE.**

23 (a) **DEFINITIONS.**—In this section:

24 (1) **ADMINISTRATOR.**—The term “Adminis-  
25 trator” means the Administrator of the Environ-  
26 mental Protection Agency.

1           (2) INITIATIVE.—The term “Initiative” means  
2 the Rare Earth Materials Recycling Research Initia-  
3 tive established under subsection (b).

4           (3) RARE EARTH MATERIAL.—The term “rare  
5 earth material” means any of the following chemical  
6 elements in any physical form or chemical combina-  
7 tion:

8                   (A) Scandium.

9                   (B) Yttrium.

10                  (C) Lanthanum.

11                  (D) Cerium.

12                  (E) Praseodymium.

13                  (F) Neodymium.

14                  (G) Promethium.

15                  (H) Samarium.

16                  (I) Europium.

17                  (J) Gadolinium.

18                  (K) Terbium.

19                  (L) Dysprosium.

20                  (M) Holmium.

21                  (N) Erbium.

22                  (O) Thulium.

23                  (P) Ytterbium.

24                  (Q) Lutetium.

1 (R) Other elements identified by the Sec-  
2 retary as rare or in critical supply.

3 (4) SECRETARY.—The term “Secretary” means  
4 the Secretary of Energy.

5 (b) ESTABLISHMENT.—Not later than 120 days after  
6 the date of enactment of this Act, the Secretary, in con-  
7 sultation with the Administrator and the heads of other  
8 appropriate Federal agencies, shall establish the Rare  
9 Earth Materials Recycling Research Initiative to assist in  
10 and coordinate the development of research in the recy-  
11 cling of rare earth materials found in electronic devices.

12 (c) GRANTS.—Under the Initiative, the Secretary  
13 shall establish a competitive research application program  
14 under which the Secretary shall provide grants to appli-  
15 cants to conduct research on one or more of the following  
16 activities:

17 (1) The safe removal, separation, and recycling  
18 of rare earth material from electronics.

19 (2) Technology, component, and material design  
20 of electronics more suitable for disassembly and re-  
21 cycling of rare earth material.

22 (3) Collection, logistics, and reverse supply  
23 chain optimization as related to recycling rare earth  
24 materials from electronics.

1       (d) GRANT REQUIREMENTS.—The Secretary shall  
2 issue requirements for applying for grants under the Ini-  
3 tiative.

○