MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 12th May, 2011

S.O. 1035(E).—Whereas, the draft rules, namely the e-waste (Management and Handling) Rules, 2010 were published by the Government of India in the Ministry of Environment and Forests vide number S.O.1125 (E), dated 14th May, 2010 in the Gazette of India, Extraordinary Part II, Section 3, Sub-section (ii) dated 14th May, 2010 inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of the period of sixty days from the date on which copies of the Gazette containing the said notification were made available to the public;

AND WHEREAS the copies of the said Gazette were made available to the public on the 14th day of May, 2010;

AND WHEREAS the objections and suggestions received within the said period from the public in respect of the said draft rules have been duly considered by the Central Government;

NOW, THEREFORE, in exercise of the powers conferred by sections 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules, namely:-

CHAPTER I

PRELIMINARY

1. **Short title and commencement.** –

(1) These rules may be called the e-waste (Management and Handling) Rules, 2011.
(2) They shall come into effect from 1st May, 2012.

2. **Application.** – These rules shall apply to every producer, consumer or bulk consumer involved in the manufacture, sale, purchase and processing of electrical and electronic equipment or components as specified in Schedule-I, collection centre, dismantler and recycler of e-waste and shall not apply to-

(a) batteries as covered under the Batteries (Management and Handling) Rules, 2001 made under the Act;
(b) Micro and small enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006); and
(c) radio-active wastes as covered under the provisions of the Atomic Energy Act, 1962 (33 of 1962) and rules made there under.

3. **Definitions.** – (1) In these rules, unless the context otherwise requires, -

(a) 'Act' means the Environment (Protection) Act, 1986 (29 of 1986);
(b) 'authorisation' means permission for handling, collection, reception, storage, transportation, dismantling, recycling, treatment and disposal of e-waste granted under sub-rule (3) of rule 9;
(c) 'bulk consumer' means bulk users of electrical and electronic equipment such as Central Government or State Government Departments, public sector undertakings, banks, educational institutions, multinational organizations, international agencies and private companies that are registered under the Factories Act, 1948 and Companies Act, 1956;
(d) 'central pollution control board' means the Central Pollution Control Board constituted under sub-section (1) of section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
(e) 'collection centre' means a centre established, individually or jointly or a registered society or a designated agency or a company or an association to collect e-waste;
(f) 'consumer' means any person using electrical and electronic equipment excluding the bulk consumers;
(g) 'dismantler' means any person or registered society or a designated agency or a company or an association engaged in dismantling of used electrical and electronic equipment into their components;
(h) 'disposal' means any operation which does not lead to recycling, recovery or reuse and includes physico-chemical or biological treatment, incineration and deposition in secured landfill;
(i) 'environmentally sound management of e-waste' means taking all steps required to ensure that e-waste are managed in a manner which shall protect health and environment against any adverse effects, which may result from hazardous substance contained in such wastes;
(j) 'electrical and electronic equipment' means equipment which is dependent on electric currents or electro-magnetic fields to be fully functional;
(k) 'e-waste' means waste electrical and electronic equipment, whole or in part or rejects from their manufacturing and repair process, which are intended to be discarded;
(l) 'extended producer responsibility' means responsibility of any producer of electrical or electronic equipment, for their products beyond manufacturing until environmentally sound management of their end-of-life products.
(m) 'facility' means any location wherein the process incidental to the collection, reception, storage, segregation, refurbishing, dismantling, recycling, treatment and disposal of e-waste are carried out;
(n) 'Form' means form appended to these rules;

(o) 'historical e-waste' means e-waste generated from electrical and electronic equipment as specified in Schedule I, which was available on the date from which these rules come into force;

(p) 'orphaned products' means non branded or assembled electrical and electronic equipment as specified in Schedule I or those produced by a company, which has closed its operations or has stopped product support;

(q) 'producer' means any person who, irrespective of the selling technique used;

(i) manufactures and offers to sell electrical and electronic equipment under his own brand; or

(ii) offers to sell under his own brand, assembled electrical and electronic equipment produced by other manufacturers or suppliers; or

(iii) offers to sell imported electrical and electronic equipment;

(r) 'recycler' - means any person who is engaged in recycling or reprocessing of used electrical and electronic equipment or assemblies or their component;

(s) 'Schedule' means the Schedule appended to these rules;

(t) 'State Government in relation to a Union territory' means, the Administrator thereof appointed under article 239 of the Constitution;

(u) 'state pollution control board'- means the concerned State Pollution Control Board or the Pollution Control Committee of the Union Territories constituted under sub-section (1) of section 4 of the Water (Prevention and Control of Pollution) Act, 1974;

(v) 'transporter' means a person engaged in the off-site transportation of e-waste by air, rail, road or water

(2) Words and expressions used in these rules and not defined but defined in the m Act shall have the meanings respectively assigned to them in that Act.

CHAPTER II

RESPONSIBILITIES

4. **Responsibilities of the producer.** – The producer of electrical and electronic equipment listed in Schedule I shall be responsible for,-

(1) collection of e-waste generated during the manufacture of electrical and electronic equipment and channelizing it for recycling or disposal;

(2) collection of e-waste generated from the 'end of life' of their products in line with the principle of 'Extended Producer Responsibility' and to ensure that such e-wastes are channelized to registered dismantler or recycler. Producer shall, as necessary, ensure collection and channelization by authorizing collection agencies;

(3) setting up collection centers or take back systems either individually or collectively;

(4) financing and organizing a system to meet the costs involved in the environmentally sound management of e-waste generated from the 'end of life' of its own products and historical waste available on the date from which these rules come into force. The financing arrangement of such a system shall be transparent. The producer may choose to establish such a system either individually or by joining a collective scheme;

(5) providing contact details such as address, telephone numbers/helpline number of authorized collection centers to consumer(s) or bulk consumer(s) so as to facilitate return of used electrical and electronic equipment;

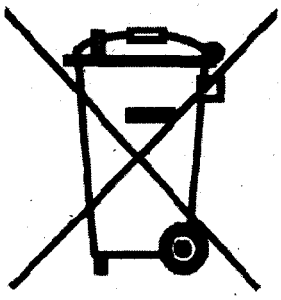
(6) creating awareness through publications, advertisements, posters, or by any other means of communication and information booklets accompanying the equipment, with regard to-

(i) information on hazardous constituents as specified in sub-rule 1 of rule 13 in electrical and electronic equipment;

(ii) information on hazards of improper handling, accidental breakage, damage and/or improper recycling of e-waste;

(iii) instructions for handling the equipment after its use, along with the Do's and Don'ts;

(iv) affixing a visible, legible and indelible symbol given below on the products or information booklets to prevent e-waste from being dropped in garbage bins containing waste destined for disposal;



(7) obtaining an authorization from the concerned State Pollution Control Board or Pollution Control Committee in accordance with the procedure under rule 9;

(8) maintaining records in Form 2 of the e-waste handled and make such records available for scrutiny by the State Pollution Control Board or the Committee concerned.

(9) filing annual returns in Form 3, to the State Pollution Control Board or Pollution Control Committee concerned, on or before the 30th day of June following the financial year to which that return relates.

5. **Responsibilities of collection centers** –Collection centre shall-

(1) obtain an authorization in accordance with the procedure under rule 9 from the State Pollution Control Board or Pollution Control Committee concerned as the case may be and provide details such as address, telephone numbers/helpline number, e-mail, etc. of such collection centre to the general public;

(2) ensure that the e-waste collected by them is stored in a secured manner till it is sent to registered dismantler(s) or recycler(s) as the case may be;

(3) ensure that no damage is caused to the environment during storage and transportation of e-waste;

(4) file annual returns in Form 3, to the State Pollution Control Board or Pollution Control Committee concerned on or before the 30th day of June following the financial year to which that return relates; and

(5) maintain records of the e-waste handled in Form 2 and make such records available for scrutiny by the State Pollution Control Board or the Pollution Control Committee concerned.

6. **Responsibilities of consumer or bulk consumer.** –

(1) Consumers or Bulk consumers of electrical and electronic equipment listed in Schedule I shall ensure that e-waste generated by them is channelised to authorized collection center(s) or registered dismantler(s) or recycler(s) or is returned to the pick-up or take back services provided by the producers; and

(2) bulk consumers shall maintain records of e-waste generated by them in Form 2 and make such records available for scrutiny by the State Pollution Control or the Pollution Control Committee concerned.

7. **Responsibilities of dismantler** – Every dismantler shall-

(1) obtain authorization and registration from the State Pollution Control Board in accordance with the procedure under the rules 9 and 11;

(2) ensure that no damage is caused to the environment during storage and transportation of e-waste;

(3) ensure that the dismantling processes do not have any adverse effect on the health and the environment;

(4) ensure that the facility and dismantling processes are in accordance with the standards or guidelines published by the Central Pollution Control Board from time to time;

(5) ensure that dismantled e-waste are segregated and sent to the registered recycling facilities for recovery of materials;

(6) ensure that non-recyclable/non- recoverable components are sent to authorized treatment storage and disposal facilities;

(7) file a return in Form 3, to the State Pollution Control Board or the Pollution Control Committee concerned as the case may be, on or before 30th June following the financial year to which that return relates;

(8) not process any e-waste for recovery or refining of materials, unless he is registered with State Pollution Control Board as a recycler for refining and recovery of materials.

8. **Responsibilities of recycler**– Every recycler shall-

(1) obtain authorization and registration from State Pollution Control Board in accordance with the procedure under the rules 9 and 11;

(2) ensure that the facility and recycling processes are in accordance with the standards laid down in the guidelines published by the Central Pollution Control Board from time to time;

(3) make available all records to the Central or State Pollution Control Board or Pollution Control Committee of Union territories for inspection;

(4) ensure that residue generated thereof is disposed of in a hazardous waste treatment storage disposal facility;

(5) file annual returns in Form 3, to the State Pollution Control Board or Pollution Control Committee concerned as the case may be, on or before 30th June following the financial year to which that returns relate.

CHAPTER III

PROCEDURE FOR SEEKING AUTHORIZATION AND REGISTRATION FOR HANDLING E-WASTES

9. **Procedure for grant of authorization.–**

(1) Every producer of electrical and electronic equipment listed in Schedule I, collection centre, dismantler and recycler of e-waste shall obtain an authorization from the State Pollution Control Board or Pollution Control Committee of Union territories concerned as the case may be.

(2) Every producer of electrical and electronic equipment listed in Schedule I, collection centre, dismantler and recycler of e-waste shall make an application, within a period of three months starting from the date of commencement of these rules in Form 1 to the State Pollution Control Board or the Pollution Control Committee for grant of authorization:

Provided that any person authorized under the provisions of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008, prior to the date of coming into force of these rules shall not be required to make an application for authorization till the period of expiry of such authorization:

Provided further that a recycler of e-waste who has not been authorized under the provisions of the Hazardous Waste (Management, Handling and Transboundary Movements) Rules, 2008, shall require auhtorization following the procedure mentioned in sub-rule (1) above.

(3) On receipt of the application complete in all respects for the authorization, the State Pollution Control Board or Pollution Control Committee of Union territories may, after such enquiry as it considers necessary and on being satisfied that the applicant possesses appropriate facilities, technical capabilities and equipment to handle e-waste safely, grant within a period of ninety days an authorization in Form-1(a) to the applicant to carry out safe operations in the authorized place only, which shall be valid for a period of five years.

(4) The State Pollution Control Board or Pollution Control Committee of the Union territories after giving reasonable opportunity of being heard to the applicant shall refuse to grant any authorization.

(5) Every person authorized under these rules shall maintain the record of e-waste handled by them in Form-2 and prepare and submit to the State Pollution Control Board or Pollution Control Committee, an annual return containing the details specified in Form 3 on or before 30th day of June following the financial year to which that return relates.

(6) An application for the renewal of an authorization shall be made in Form-1 before sixty days of its expiry and the State Pollution Control Board or Pollution Control Committee may renew the authorization after examining each case on merit and subject to the condition that there is no report of violation of the provisions of the Act or the rules made there under or the conditions specified in the authorization.

(7) Every producer of electrical and electronic equipment listed in Schedule I, collection centre, dismantler and recycler of e-waste shall take all steps, wherever required, to comply with the conditions specified in the authorization.

(8) The State Pollution Control Board in case of a respective State or the Pollution Control Committee in case of Union territories shall maintain a register containing particulars of the conditions imposed under these rules for environmentally sound management of e-waste, and it shall be open for inspection during office hours to any person interested or affected or a person authorized by him on his behalf.

10. **Power to suspend or cancel an authorization**.-

(1) The State Pollution Control Board or Pollution Control Committee of the Union territories may, if in its opinion, the holders of the authorization has failed to comply with any of the conditions of the authorization or with any provisions of the Act or these rules and after giving a reasonable opportunity of being heard and after recording reasons thereof in writing cancel or suspend the authorization issued under these rules for such period as it considers necessary in the public interest.

(2) Upon suspension or cancellation of the authorization, the State Pollution Control Board or Pollution Control Committee of the Union territories may give directions to the persons whose authorization has been suspended or cancelled for the safe storage of the e-waste and such person shall comply with such directions.

PROCEDURE FOR REGISTRATION WITH STATE POLLUTION CONTROL BOARD

11. **Procedure for grant of registration.** –

(1) Every dismantler or recycler of e-waste shall make an application, within a period of three months starting from the date of commencement of these rules, in Form-4 in triplicate to the State Pollution Control Board accompanied with a copy of the following documents for the grant or renewal of registration:-

(i) consent to establish granted by the State Pollution Control Board under Water (Prevention and Control of Pollution) Act, 1974, (25 of 1974) and Air (Prevention and Control of Pollution) Act, 1981(21 of 1981);

(ii) certificate of registration issued by the District Industries Centre or any other government agency authorized in this regard;

(iii) proof of installed capacity of plant and machinery issued by the District Industries Centre or any other government agency authorized in this behalf;

(iv) in case of renewal, a certificate of compliance of effluent and emission standards, treatment and disposal of hazardous wastes as applicable from the State Pollution Control Board or Committee of the Union territories or any other agency designated for this purpose;

Provided that any person registered under the provisions of the Hazardous Wastes (Management, Handling and Transboundary Movements) Rules, 2008, prior to the date of coming into force of these rules shall not be required to make an application for registration till the period of expiry of such registration:

Provided further that a recycler of e-waste who has not been registered under the provisions of the Hazardous Waste (management, Handling and Transboundary Movements) Rules, 2008, shall require registration following the procedure mentioned in sub-rule (1) of rule 11.

(2) The State Pollution Control Board, on being satisfied that the application is complete in all respects and that the applicant is utilizing environmentally sound technologies and possess adequate technical capabilities, requisite facilities and equipment to recycle and process e-waste, may grant registration to such applicants stipulating therein necessary conditions as deemed necessary for carrying out safe operations in the authorized place only.

(3) The State Pollution Control Board shall dispose of the application for registration within a period of ninety days from the date of the receipt of such application complete in all respects.

(4) The registration granted under these rules shall be valid initially for a period of two years and thereafter for a period of maximum five years on subsequent renewals from the date of its issue, unless the operation is discontinued by the unit or the registration suspended or cancelled by the State Pollution Control Board.

(5) The State Pollution Control Board may after giving reasonable opportunity of being heard to the applicant, by order, refuse to grant or renew.

(6) The State Pollution Control Board shall monitor the compliance of conditions stipulated for granting registration.

(7) The State Pollution Control Board may cancel or suspend a registration granted under these rules, if it has reasons to believe that the registered recycler has failed to comply with any of the conditions of registration, or with any provisions of the Act or rules made there under, after giving an opportunity to the recycler to be heard and after recording the reasons there for.

(8) An application for the renewal of registration shall be made in Form-4 before sixty days of its expiry and the State Pollution Control Board or Pollution Control Committee may renew the registration after examining each case on merit and subject to the condition that there is no report of violation of the provisions of the Act or the rules made there under or the conditions specified in the registration.

(9) The dismantler or recycler shall maintain records of the e-waste purchased and processed and shall file annual returns of its activities of previous year in Form 3 to the State Pollution Control Board or Pollution Control Committee on or before 30th day of June of every year.

(10) The Central Government and the Central Pollution Control Board may issue guidelines for standards of performance for recycling processes from time to time.

CHAPTER IV

12. **Procedure for storage of e-waste,-** Every producer, collection centre, dismantler or recyclers may store the e-waste for a period not exceeding one hundred and eighty days and shall maintain a record of collection, sale, transfer, storage and segregation of wastes and make these records available for inspection:

Provided that the State Pollution Control Board may extend the said period up to one year in the following cases, namely:

(i). Collection centers in the States, which do not have any registered dismantling or recycling facility; or Dismantlers in the States, which do not have any registered recycling facility;

(ii). the waste which needs to be specifically stored for development of a process for its recycling or reuse.

CHAPTER V

REDUCTION IN THE USE OF HAZARDOUS SUBSTANCES IN THE MANUFACTURE OF ELECTRICAL AND ELECTRONIC EQUIPMENT

13. **Reduction in the use of hazardous materials in the manufacture of electrical and electronic equipment.–**

(1) Every producer of electrical and electronic equipment listed in schedule I shall ensure that, new electrical and electronic equipment does not contain Lead, Mercury, Cadmium, Hexavalent Chromium, polybrominated biphenyls or polybrominated diphenyl ethers:

Provided that a maximum concentration value of 0.1% by weight in homogenous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers and of 0.01% by weight in homogenous materials for cadmium shall be permitted.

(2) The applications listed in Schedule-II shall be exempted from provisions of sub-rule (1) of rule 13.

(3) The sub-rule(1) of rule 13 shall not apply to components of electrical and electronic equipment manufactured or placed in the market six years before the date of commencement of these rules.

(4) In the event of such reduction in the hazardous materials used in the electrical and electronic equipment, the detailed information on the constituents of the equipment shall be provided in the product information booklet.

(5) Imports or placement in the market for new electrical and electronic equipment shall be permitted only for those which are compliant to provisions of sub-rule (1) of rule 13.

(6) Manufacture and supply of electrical and electronic equipment used for defense and other similar strategic applications shall be excluded from provisions of sub-rule (1) of rule 13.

(7) Such reduction in use of hazardous substances in manufactured or imported electrical and electronic equipment shall be achieved within a period of two years from the date of commencement of these rules.

CHAPTER VI

MISCELLANEOUS

14. **Duties of Authorities.** - subject to other provisions of these rules, the authorities shall perform duties as specified in Schedule-III.

15. **Annual Report.-**

(1) The State Boards and the Committees shall prepare and submit to the Central Pollution Control Board an annual report with regard to the implementation of these rules by the 30th September every year in Form 5.

(2) The Central Pollution Control Board shall prepare the consolidated annual review report on management of e-waste and forward it to the Central Government along with its recommendations before the 30th December every year.

16. **Transportation of e-waste.** –

(1) In case of transportation of e-waste for final disposal to a facility in a State other than the State where the waste is generated/collected, the transporter shall obtain 'No Objection Certificate' from the State Pollution Control Board concerned and shall intimate the State Pollution Control Board of the State(s) of transit.

(2) In case of transportation of e-waste for dismantling or for recycling in a State other than the State where the waste is generated or collected, the transporter shall give prior intimation to the State Pollution Control Boards concerned and the State Pollution Control Boards of the State(s) of transit.

17. **Accident reporting and follow-up.-** where an accident occurs at the facility processing e-waste or during transportation of e-waste, the producer, transporter, dismantler, or recycler, as the case may be, shall report immediately to the State Pollution Control Boards or Committees of Union territories about the accident.

18. The collection, storage, transportation, segregation, refurbishment, dismantling, recycling and disposal of e-waste shall be in accordance with the procedures prescribed in the guidelines published by the Central Pollution Control Boards from time to time.

SCHEDULE I

(see rules 2 (1), 3(j) and (k))

Categories of electrical and electronic equipment covered under the rules

Sr. No.	Categories of electrical and electronic equipment
i.	**Information technology and telecommunication equipment :** Centralised data processing: Mainframes, Minicomputers Personal computing: Personal Computers (Central Processing Unit with input and output devices) Laptop Computers(Central Processing Unit with input and output devices) Notebook Computers Notepad Computers Printers including cartridges Copying equipment Electrical and electronic typewriters User terminals and systems Facsimile Telex Telephones Pay telephones Cordless telephones Cellular telephones Answering systems
ii.	**Consumer electrical and electronics:** Television sets (including sets based on (Liquid Crystal Display and Light Emitting Diode technology), Refrigerator, Washing Machine, Air-conditioners excluding centralised air conditioning plants

SCHEDULE II

[See rule 13(2)]

Applications, which are exempted from the requirements of sub-rule (1) of rule 13 (applicable to categories of electrical and electronic equipment as listed in Schedule I)

	Exemption
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):
1(a)	For general lighting purposes < 30 W:5 mg
1(b)	For general lighting purposes ≥ 30 W and < 50 W:5 mg
1(c)	For general lighting purposes ≥ 50 W and < 150 W:5 mg
1(d)	For general lighting purposes ≥ 150 W:15 mg
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm: 7mg
1(f)	For special purposes: 5 mg
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes

	not exceeding (per lamp):
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter > 9 mm (e.g. T2): 4 mg
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≥ 17 mm (e.g. T5): 3 mg
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 3.5 mg
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg
2(a)(5)	Tri-band phosphor with long lifetime (≥ 25000 h): 8 mg
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):
2(b)(1)	Linear halophosphalte lamps with tube > 28 mm (e.g T 10 and T12): 10 mg
2(b)(2)	Non- linear halophosphate lamps (all diameters): 15 mg
2(b)(3)	Non- linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9):15 mg
2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps): 15mg
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):
3(a)	Short length (≤ 500 mm): 3.5mg
3(b)	Medium length (> 500 mm and ≤ 1500 mm): 5mg
3(c)	Long length (> 1500 mm): 13mg
4(a)	Mercury in other low pressure discharge lamps (per lamp)
4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra>60:
4(b)-I	P ≤ 155 W: 30mg
4(b)-II	155 W < P ≤ 405 W: 40mg
4(b)-III	P > 405 W: 40mg
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):
4(c)-I	P ≤ 155 W: 25mg
4(c)- II	155 W <P≤ 405 W: 30mg
4(c)-III	P> 405 W: 40mg
4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)
4(e)	Mercury in metal halide lamps (MH)
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Schedule
5(a)	Lead in glass of cathode ray tubes
5(b)	Lead in glass of fluorescent tubes not exceeding 0.2 % by weight
6(a)	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight
6(b)	Lead as an alloying element in aluminum containing up to 0.4%lead by weight
6(c)	Copper alloy containing up to 4% lead by weight
7 (a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signaling, transmission, and network management for telecommunications
7(c)- I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher

7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC
8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs.
8(b)	Cadmium and its compounds in electrical contacts
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) application.
11(a)	Lead used in C-press complaining pin connector systems
11(b)	Lead used in other than C-press complaint pin connector systems
12	Lead as a coating material for the thermal conduction module C-ring
13(a)	Lead in while glasses used for optical applications
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards.
14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages.
16	Lead in linear incandescent lamps with silicate coated tubes
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications.
18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as specialty lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr, Ba)2MgSi2O7:Pb)
18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb)
19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm and less
24	Lead in solders for the soldering to machined through hole discoidal an planar array ceramic multilayer capacitors
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring.
26	Lead oxide in the glass envelope of black light blue lamps
27	Lead alloys as solder for transducers used in high- powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers
29	Lead bound in crystal glass
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more
31	Lead in soldering materials in mercury free flat fluorescent lamps(which e.g. are used for liquid crystal displays, design or industrial lighting)
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes

33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers
34	Lead in cermet-based trimmer potentiometer elements
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body
38	Cadmium and cadmium oxide in thick film pastes used on aluminum bonded beryllium oxide
39	Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm^2 of light-emitting area) for use in solid state illumination or display systems.

SCHEDULE III

[See rule 14)]

LIST OF AUTHORITIES AND CORREPONDING DUTIES

Sl No	AUTHORITY	CORRESPONDING DUTIES
1.	Central Pollution Control Board, Delhi	(i) Coordination with State Pollution Control Boards/ Committees of Union territories (ii) Preparation of Guidelines for Environmentally Sound Management of e-waste (iii) Conduct assessment of e-waste generation and processing (iv) Recommend standards and specifications for processing and recycling e-waste (v) Documentation, compilation of data on e-waste and uploading on websites of Central Pollution Control Board (vi) Conducting training & awareness programmes (vii) Submit Annual Report to the Ministry (viii) Any other function delegated by the Ministry under these rules (ix) Enforcement of provisions regarding reduction in use of hazardous substances in manufacture of electrical and electronic equipment (x) Initiatives for IT industry for reducing hazardous substances, (xi) Set targets for compliance to the reduction in use of hazardous substance in manufacture of electrical and electronic equipment (xii) Incentives and certification for green design/products
2.	State Pollution Control Boards/ Committees of Union territories	(i) Inventorization of e-waste. (ii) Grant & renewal of Authorization (iii) Registration of recyclers of e-waste (iv) Monitoring compliance of authorization and registration conditions (v) Maintain information on the conditions imposed for authorization etc. (vi) Implementation of programmes to encourage environmentally sound recycling (vii) Action against violations of these rules (viii) Any other function delegated by the Ministry under these rules

3.	Urban Local Bodies (Municipal Committee/Council/ Corporation)	(i) To ensure that e-waste if found to be mixed with Municipal Solid Waste is properly segregated, collected and is channelized to either authorized collection centre or dismantler or recycler. (ii) To ensure that e-waste pertaining to orphan products is collected and channelized to either authorized collection centre or dismantler or recycler.

FORM – 1

[*See rule 9(2)*]

APPLICATION FOR OBTAINING AUTHORIZATION FOR GENERATION/ COLLECTION/ STORAGE/DISMANTLING/RECYCLING/ OF E-WASTE*

From: .....

.....

To

The Member Secretary,

..... Pollution Control Board or..... Pollution Control Committee

.....

.....

Sir,

I / We hereby apply for authorization/renewal of authorization under rule 11(2) and 11(6) of the E-wastes (Management and Handling) Rules, 2011 for collection/ storage/ transport/treatment/disposal of e-wastes.

For Office Use Only

Code No. :

Whether the unit is situated in a critically polluted area as identified by Ministry of Environment and Forests (yes/no);

To be filled in by Applicant

Part – A: General

1. (a) Name and full address, telephone nos. e-mail and other contact details of the unit :
   (b) Authorization required for (Please tick mark appropriate activity/ies*)
   - (i) Generation* ☐
   - (ii) Collection* ☐
   - (iii) Dismantling* ☐
   - (iv) Recycling* ☐

   (c) In case of renewal of authorization previous authorization no. and date
2. (a) Whether the unit is generating or processing e-waste as defined in the E-wastes (Management and Handling) Rules, 2011

:

- (i) generating* ☐
- (ii) processing* ☐

*strike off whichever is not applicable

3. (a) Total capital invested on the project :
   (b) Year of commencement of production:
   (c) Date of grant of the Consent to Establish:
   (d) Date of grant of the Consent to Operate:

Part – B: e-waste

4. E-waste details:

(a)	Type of e-wastes generated as defined under the e-wastes (Management and Handling) Rules, 2011:	
(b)	Total Quantity e-waste handled generated/collected/dismantled/ recycled :	
(c)	Mode of storage within the plant :	
(d)	Method of treatment and disposal :	
(e)	Installed capacity of the plant :	

Part – C : Dismantling and Recycling Facility

5. Detailed proposal of the facility (to be attached) to include:
   (i) Location of site (provide map).
   (ii) Details of processing technology
   (i) Type and Quantity of waste to be processed per day
   (iv) Site clearance (from local authority, if any)
   (v) Utilization of the e-waste processed
   (vi) Method of disposal of residues (details to be given)
   (vii) Quantity of waste to be processed or disposed per day
   (viii) Details of categories of e-waste to be dismantled/processed
   (ix) Methodology and operational details
   (x) Measures to be taken for prevention and control of environmental pollution including treatment of leachates
   (xii) Investment on Project and expected returns
   (xiii) Measures to be taken for safety of workers working in the plant

Place : _____ Signature _____

(Name_____)

Date : _____

Designation : _____

FORM 1(a)

[*See rule 9(3)*]

FORM FOR GRANTING AUTHORIZATION FOR GENERATION/COLLECTION/ /STORAGE/DISMANTLING/ RECYCLING/ OF E-WASTE*

1. (a) Authorization and (b) date of issue .....

2. .....of.....is hereby granted an authorization for generation, collection, storage, dismantling and recycling of e-waste on the premises situated at.....

3. The authorization granted for generation, collection, storage, dismantling, and recycling of e-wastes.

4. The authorization shall be in force for a period from .....to .....

5. The authorization is subject to the conditions stated below and such conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986.

Signature----------
Designation ---------- Date: ----------

Terms and conditions of authorization

1. The authorization shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board or Committee of Union territories.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the e-wastes without obtaining prior permission of the State Pollution Control Board or Committee of Union territories.
4. Any unauthorized change in personnel, equipment as working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. It is the duty of the authorized person to take prior permission of the State Pollution Control Board or Committee of Union territories to close down the operations.
6. An application for the renewal of an authorization shall be made as laid down in sub-rule (6) of rule 9.

FORM – 2

[See rules 4(8), 5(5) and 9(5)]

FORM FOR MAINTAINING RECORDS OF E-WASTE HANDLED/ GENERATED

Quantity in Metric Tonnes (MT) or Kilograms (Kg) per year

1.	Name & Address: Producer /Collection Centre/Dismantler/ Recycler/ Bulk consumer *		
2.	Date of Issue of Authorization* Registration *		
3.	Validity of Authorization* /Registration*		
4.	Types & Quantity of e-waste handled/ generated	Category	Quantity
		Item Description	
5.	Types & Quantity of e-waste stored	Category	Quantity
		Item Description	
6.	Types & Quantity of e-waste sent to authorized collection centre/ registered dismantler or recycler	Category	Quantity
		Item Description	
7.	Types & Quantity of e-waste transported*	Category	Quantity
		Quantity	
	Name, address and contact details of the destination		
8.	Types & Quantity of e-waste refurbished*	Category	Quantity
		Item Description	
	Name, address and contact details of the destination of refurbished materials		
9.	Types & Quantity of e-waste dismantled*	Category	Quantity
		Item Description	
	Name, address and contact details of the destination		
10.	Types & Quantity of e-waste recycled*	Category	Quantity
	Types & Quantity of materials recovered	Item Description	
		Quantity	
	Name, address and contact details of the destination		
11.	Types & Quantity of waste treated & disposed	Category	Quantity
		Item Description	

* Strike off whichever is not applicable

FORM – 3

[See rules 4(9), 5(4), 6(2), 7(7), 8(5) and 9(5)]

FORM FOR FILING ANNUAL RETURNS

[To be submitted by producer/collection centre/dismantler/recycler by 30th June following to the financial year to which that return relates].

Quantity in Metric Tonnes (MT) or Kilograms (Kg) per year

1	Name and address of the producer/ collection centre/ dismantler/ recycler		
2	Name of the authorized person and complete address with telephone and fax numbers and e-mail address		
3	Total quantity e-waste sold/purchased/ sent for processing during the year for each category of electrical and electronic equipment listed in the Schedule I (Attach list)		
	Details of the above	TYPE	QUANTITY
3(A)*	**DISMANTLERS**: Quantity of e-waste in MT purchased & processed and sent to (category wise):		
3(B)*	**RECYCLERS**: Quantity of e-waste in MT purchased/processed (category wise):		
4	Name and full address of the destination with respect to 3 (A-B) above		
5	Type and quantity of materials segregated/ recovered from e-waste of different categories as applicable to 3(A) &3(B)	Type	Quantity

Note: The applicant shall provide details of funds received (if any) from producers and its utility with an audited certificate

✓ enclose the list of recyclers to whom e-waste have been sent for recycling.

*strike off whichever is not applicable

Place_____

Date_____

Signature of the authorized person

FORM - 4

[see rule 11(1)]

APPLICATION FORM FOR REGISTRATION OF FACILITIES POSSESSING ENVIRONMENTALLY SOUND MANAGEMENT PRACTICE FOR RECYCLING E-WASTE

(To be submitted in triplicate)

1.	Name and Address of the unit			
2.	Contact person with designation, Tel./Fax			
3.	Date of Commissioning			
4.	No. of workers (including contract labour)			
5.	Consents Validity	a. Water (Prevention & Control of Pollution) Act, 1974; Valid up to _____ b. Air (Prevention & Control of Pollution) Act, 1981; Valid up to_____		
6.	Authorization validity	E-wastes (Management and Handling) Rules, 2011; Valid up to _____		
7.	Manufacturing Process	Please attach manufacturing process flow diagram for each product(s)		
8.	Products and Installed capacity of production in (MTA)	Products	Installed capacity (MTA)	
9.	Products manufactured during the last three years (as applicable)	Year	Product	Quantity
10.	Raw material consumption during the last three years (as applicable)	Year	Product	Quantity
11.	Water consumption	Industrial _____m3/day Domestic_____m3 / day		
	Water Cess paid up to (if applicable)			
	Waste water generation as per consent _____m3/day	Actual (avg., of last 3 months) Industrial _____m3 /day Domestic _____m3 /day		
	Waste water treatment (provide flow diagram of the treatment scheme)	Industrial Domestic		
	Waste water discharge	Quantity _____m3/day Location _____ Analysis of treated waste water for pH, BOD,COD, SS, O&G, any other		

		parameter stipulated by SPCB/SPCC (attach details)			
12.	Air Pollution Control				
	a. Provide flow diagram for emission control system(s) installed for each process unit, utilities etc.				
	b. Details for facilities provided for control of fugitive emission due to material handling, process, utilities etc				
	c. Fuel consumption	Fuel	Qty per day/month		
		(i)			
		(ii)			
	d. Stack emission monitoring	Stack attached to	Emission (SPM, SO_2, NOx , Pb etc.) mg/Nm^3		
		(i)			
		(ii)			
	e. Ambient air quality	Location Results ug/m3	Parameters SPM, SO_2, NOx, Pb etc.) $\mu g/m^3$		
		(i)			
		(II)			
13.	Waste Management:				
	a. Waste generation in processing e-waste	S No	Type	Category	Qty
	b. Waste Collection and transportation (attach details)				
	c. Provide details of disposal of residue.	S No	Type	Category	Qty
	d. Name of Treatment Storage and Disposal Facility utilized for				
	e. Please attach analysis report of characterization of hazardous waste generated (including leachate test if applicable)				
14.	Details of e-waste proposed to be procured through sale, contract or import, as the case may be, for use as raw material	(i) Name (ii) Quantity required /year (iii) Basel Convention Number			
15.	Occupational safety and health aspects	Please provide details of facilities			

16.	Remarks:	
	Whether industry has provided adequate pollution control system / equipment to meet the standards of emission / effluent.	Yes/No If Yes, please furnish details
	Whether industry is in compliance with conditions laid down in the Authorization	Yes / No
17.	Any Other Information of relevance: i) ii)	

I hereby declare that the above statements /information are true and correct to the best of my knowledge and belief.

Signature

Date:_____ Name:_____

Place:_____ Designation:_____

Form - 5

[see rule 15 (1)]

FORM FOR ANNUAL REPORT TO BE SUBMITTED BY THE STATE POLLUTION CONTROL BOARD/COMMITTEES TO THE CENTRAL POLLUTION CONTROL BOARD

To,

The Chairman,
Central Pollution Control Board,
(Ministry of Environment And Forests)
Government Of India,
'Parivesh Bhawan', East Arjun Nagar,
Delhi- 110 0032

1. Name of the State/Union territory :
2. Name & address of the State Pollution Control Board / Committee :
3. Number of authorised Producers, Collection Centres, registered Dismantler and Recyclers for management of e-waste in the State or Union territory under these rules :
4. Categories of waste collected along with their quantities on a monthly average basis: : Please attach as Annexure-I

5.	A Summary Statement on Category wise and product wise quantity of e-waste collected	:	Please attach as Annexure-II
6.	Mode of treatment with details	:	Please attach as Annexure-III
7.	Brief details of collection, dismantling and recycling facilities	:	Please attach as Annexure-IV
8.	Any other information	:	

9. Certified that the above report is for the period from ....
.....

Date: _____
Place : _____

Chairman or the Member Secretary
State Pollution Control Board/
Pollution Control Committee

[F. No. 23-71/2009-HSMD]

RAJIV GAUBA, Jt. Secy.

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