New Delhi. the 21st May, 2002

Hazardous Wastes (Management and Handling) Amendment Rules, 2002

S.O. 553 (E).-- In exercise of the powers conferred clause (d) of sub-section (2) of section 6 and sections 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), read with rule 13 of Environment Protection Rules, 1986, the following draft of certain rules further to amend the Hazardous Wastes(Management and Handling) Rules, 1989, is hereby published as draft rules, for information of all persons likely to be affected thereby and notice is hereby given that the said rules will be taken into consideration after the expiry of sixty days from the date on which the Gazette copies containing this notification are made available to the public;

Any objections or suggestions which may be received from any person in respect of the said draft rules before expiry of the period specified above, will be taken into consideration by the Central Government. The objection or suggestion may be addressed to the Secretary, Ministry of Environment and Forests, Paryavaran Bhawan, Central Government Office Complex, New Delhi- 110003.

DRAFT RULES

1. (1) These rules may be called the Hazardous Wastes (Management and Handling) Amendment Rules, 2002;

(2) They shall come into force on the date of their- publication-in the Official Gazette;

2. In the Hazardous Wastes (Management and Handling) Rules, 1989 (herein after referred to as the said rules), in rule 2, after clause (c), the following clauses shall be inserted namely: -

"(d) the bio-medical wastes covered under the Bio-medical Wastes (Management and Handling) Rules, 1998 made under the Act;

(e) wastes covered under the Municipal Solid Wastes (Management and Handling) Rules, 2000 made under the Act; and

(f) the lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001 made under the Act".

3. For rule 3 of the said rules, the following shall be substituted, namely: -

(1) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);

(2) "applicant" means a person or an organisation that applies, in Form 1, for granting of authorisation to perform specific activities connected with handling of hazardous wastes;

(3) "auction" means bulk sale of wastes by invitation of tenders or auction, contract or negotiation by individual(s), companies or government departments.

(4) "auctioneer means a person who auctions wastes;

(5) "authorisation" means permission for collection, reception, treatment, transport, storage'and disposal of hazardous wastes, granted by the competent authority in Form 2;

(6) "authorised person" means a person or an organisation authorised by the competent authority to collect, treat, transport, store or dispose of hazardous wastes in accordance with the guidelines to be issued by the competent authority from time to time;

(7) "Central Pollution Control Board" means the Central Board appointed under subsection (1) of section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974); and under section 3 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 198 1)"

(8) "disposal" means deposit, treatment, storage and recovery of any hazardous wastes;

(9) "export" with its grammatical variations and cognate expressions, means taking out of India to a place outside India:

(10) "exporter' means any person under the jurisdiction of the exporting country who exports hazardous wastes and the exporting country itself, who exports hazardous wastes;

(11) "environmentally sound management of hazardous wastes" means taking all steps to ensure that the hazardous wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes;

(12) "facility" means any location wherein the processes incidental to the waste generation, collection, reception, treatment, storage and disposal are carried out;

(13) "form" means a Form appended to these rules;

(14) "hazardous waste" means, any waste which by reason of any of its physical, chemical, reactive, toxic, flammable, explosive or corrosive characteristics causes danger or is likely to cause danger to health or environment, whether alone or when in contact with other wastes or substances, and shall include:

(a) wastes listed in column (3) of Schedule-1 generated in the process listed in column (2) of the said Schedule;

(b) wastes listed in Schedule (2) unless their concentration is less than the limit indicated therefor in the said Schedule; and

(c) Wastes listed in Lists 'A' and 'B' of Part A Schedule-3 applicable only in case(s) of export/import of hazardous wastes in accordance with rules12, 13 and 14 only if they possess any of the hazard characteristics listed in Part-B of the said Schedule".

"[Explanation: All wastes mentioned in column 3 of Schedule-1 are hazardous wastes, irrespective of concentration limits/classes given in Schedule - 2. Schedule - 2 shall be applicable only for wastes not covered in Schedule 1. Schedule-3 is applicable only in cases of export or import.]"

(15) "hazardous wastes site" means a place for collection, reception, treatment, storage and disposal of hazardous wastes which has been duly approved by the competent authority;

(16) "illegal traffic" means any transboundary movement of hazardous wastes as specified in rule 15;

(17) "import" with its grammatical variations and cognate expressions, means bringing into India from a place outside India;

(18) "importer" means an occupier or any person who imports hazardous wastes;

(19) "manifest" means transporting document originated and signed by the occupier in accordance with rule 7(4) and 7(5);

(20) "non-ferrous metal wastes" means wastes listed in Schedule 4 of these rules.

(21) "operator of facility" means a person who owns or operates a facility for collection, reception, treatment, storage and disposal of hazardous wastes;

(22) "recycler" means an occupier who processes wastes for recovery.

(23) "registered recycler" means a recycler registered with the Ministry of Environment and Forests or an agency designated by it for reprocessing wastes,

(24) "schedule" means Schedule appended to these rules;

(25) "State Government" means State Government and in relation to Union Territory the Administrator thereof appointed under Article 239 of the Constitution;

(26) "State Pollution Control Board/Committee" - means the Board/Committee appointed under sub-section (1) of section 4 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974); and under section 4 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);

(27) "storage" means keeping hazardous wastes for a temporary period, at the end of which the hazardous wastes is treated and disposed off,

(28) "transboundary movement" means any movement of hazardous waste or other wastes from an area under the national jurisdiction of one country to or through an area under the national jurisdiction of another country or to or through an area not under the national jurisdiction of any country, provided at least two countries are involved in the movement;

(29) "transport' means movement of hazardous waste by air, rail, road or water;

(30) "transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, road or water;

(31) "treatment" means a method, technique or process, designed to change the physical, chemical or biological characteristics or composition of any hazardous waste so as to render such wastes harmless;

(32) "used oil" - means any used lubricating oil that has been derived from crude oil and mixtures containing synthetic oil and includes used engine oils, gear oils, hydraulic oils, turbine oils, compressor oils, industrial gear oils, heat transfer oils, transformer oils, spent oils, etc. Used lubricating oils are suitable for re-refining provided the final product meets the specifications laid down in Schedule 5;

(33) "waste oil" - means any oil that is contaminated so as to make it unsuitable for recycling. It includes spills of crude oil, tank bottom sludge, emulsions, etc. and can be used as fuel in furnaces and cement kilns.

4. For Rule 5 of the said rules,

(a) in sub-rule (2), the following shall be substituted namely:-

"(2) Every occupier or a recycler generating or recycling hazardous wastes shall make an application in Form 1 along with an application processing fee, as may be prescribed by the State Pollution Control Board/ Committee to the Member Secretary, State Pollution Control Board/Committee or any officer designated by the Board/Committee for the grant of authorization for any of the above activities:

Provided that an occupier or a recycler not having a hazardous wastes treatment and disposal facility of his own and is operating in an area under the jurisdiction assigned by the State Pollution Control Board/Committee. for a Common Treatment, Storage and Disposal Facility (TSDF) shall become a member of this facility, pay charges as may be required and take all other necessary steps to ensure proper treatment and disposal of hazardous wastes generated failing which the authorization granted to the said occupier or recycler in accordance with sub rule (2) above shall be cancelled after giving a reasonable opportunity to be heard or shall not to ' be granted by the State Pollution Control Board/Committee as the case may be."

(b) in sub-rule (3), the following shall be substituted namely:-

"(3) Any person who intends to be an operator of a facility for the collection, reception, treatment, transport, storage and disposal of hazardous wastes, shall make an application in Form 1 along with A application processing fee as may be prescribed by the State pollution Control Board/Committee to the Member Secretary,

State Pollution Control Board/Committee or any officer designated by the Pollution control Board/Committee for the grant of authorization for any of the above activities".

(c) in sub-rule (6), for clause(i), the following clause shall be substituted namely:-

"(i) An authorization granted under this rule shall unless sooner suspended or cancelled, be in force during the period of its validity as may be prescribed by the State Pollution Control Board/Committee from the date of issue or from the date of renewal."

(d) in sub-rule (8), for clause (ii), the following clause shall be substituted, namely:-

"On steps taken, wherever feasible, for reduction and prevention in the waste generated or recycled or reused";

(e) after sub-rule (8), the following sub-rule shall be inserted, namely:-

"(9) Every State Pollution Control Board/Committee shall maintain a register containing particulars of the conditions Imposed under these rules for any disposal of hazardous wastes, from any land or premises and it shall be open for inspection during office hours by any person interested or affected or a person authorized by him in this behalf The entries in the register shall be conclusive proof of the grant of authorisation for disposal of hazardous wastes from such land or premises and the conditions subject to which it was granted.

5. In rule 12 of the said rules,

(a) in sub-rule (3), for the word and figure "Schedule 4", the word and figure "Schedule 7" shall be substituted".

(b) after sub-rule(6), the following sub-rules shall be inserted, namely:-

"(7) The import or export of hazardous wastes or substances containing or contaminated with such hazardous wastes listed in Schedule 6 is prohibited".

6. In rule 13 of the said rules,

(a) for sub-rule (1), the following sub-rule shall be substituted, namely:-

"(1) Every occupier seeking to import hazardous wastes shall apply to the State Pollution Control Board/Committee 120 days in advance of the intended date of commencement of the shipment in Form 6 for permission to import hazardous wastes along with an application fee, as may be prescribed by the State pollution Control Board/Committee to the Member-Secretary, State Pollution Control Board/Committee or any officer designated by the Pollution Control Bdard/Committee".

(b) in sub-rule (3), clause (e) shall be omitted.

(C) after sub-rule (8), the following sub-rule shall be inserted, namely:-

(9) An occupier importing hazardous wastes listed under Open General Licence of the Directorate General of Foreign Trade is required to be registered with the Ministry of Environment and Forests in accordance with the procedure laid down under rule 19".

7. sub-rule 2 rule 15, in clause (ii), the following shall be added, namely:-

"in accordance with the procedure laid down by the Central Board in consultation with Ministry of Environment & Forests".

8. In rule 16 of the said rules, after sub-rule (3), the following sub-rule shall be added, namely:-

"(4) The occupier and operator of a facility, as the case may be, shall be liable to pay entire cost of remediation/restoration and pay in advance an amount equal to the estimate computed by State Pollution Control

Board/Committee. Thereafter, the Board/committee shall plan and cause to be executed the programme for remediation/restoration. The advance paid to State Pollution Control Board/Pollution Control Committee towards the cost of remediation/restoration shall be adjusted once actual cost of remediation/restoration is finally determined and the remaining if any, shall be recovered from the occupier and/or operator of the facility".

9. In rule 18 of the said rules, after sub-rule (2), the following sub-rule shall be inserted, namely:-

"(3) every appeal filed under the said rule shall be disposed of within a period of sixty days from the date of such filing".

10. After rule 18 of the said rules, the following rules shall be added, namely:-

"19. Procedure for registration/renewal of registration of recyclers:- (1) Registration procedure shall be applicable to recyclers of non-ferrous metal wastes as given in Schedule 4 and used lubricating oil;

(2) Only recyclers registered with the Ministry of Environment & Forests shall be entitled to undertake recycling;

(3) Every recycler of wastes shall make an application in Form II along with the following documents to the Joint Secretary, Ministry of Environment and Forests or any officer or other authority designated by the Ministry for the grant of registration or renewal:

(a) a copy of the valid consents under the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, as amended;

(b) a copy of the valid authorisation under Hazardous Wastes (Management and Handling) Rules, 1989;

(c) a copy of valid certificate of registration with District Industries Centre;

(d) a copy of the proof of installed capacity of plant and machinery issued by either State Pollution Control Board or the District Industries Centre; and

(e) proof of compliance of effluent/emission standards and disposal of treated wastes as stipulated by SPCB.

(4) The Joint Secretary, Ministry of Environment and Forests or any officer or other authority designated by the Ministry shall ensure that the recyclers possess requisite facilities, technical capabilities, and equipment to recycle the wastes and dispose of the hazardous wastes generated;

(5) The Joint Secretary, Ministry of-Environment and Forests or any officer or other authority designated by the Ministry shall dispose of the application for registration within 120 days of receipt of application form with complete details;

(6) The registration granted under this rule shall be in force for a period of two years from the date of issue or from the date of renewal unless suspended or cancelled earlier;

(7) An application for the renewal of registration shall be made in Form II atleast six months before its expiry. The Joint Secretary, Ministry of Environment and Forests or any officer designated by the Ministry or an agency designated by it shall renew the registration of the recycler granted under sub-rule (v) of this rule, after examining each case on merit;

(8) The Joint Secretary, Ministry of Environment and Forests or any officer or other authority designated by the Ministry may, after giving reasonable opportunity to the applicant of being heard, refuse to grant registration;

(9) The Joint Secretary, Ministry of Environment and Forests or any officer or other authority designated by the Ministry may cancel or suspend a registration issued under these rules, if in his/her opinion the registered recycler has failed to comply with any of the conditions of registration, or with any provisions of the Act or rules made thereunder after giving him an opportunity to explain and after recording the reasons therefor;

(10) An appeal shall lie against any order of suspension or cancellation or refusal of registration passed by the Joint Secretary to the Ministry of Environment and Forests or other authority designated by the Ministry. The appeal shall be in writing and shall be accompanied with a copy of-the order appealed against and shall be presented within 30 days of passing of the order.

(11) In pursuance of these rules, recyclers already registered with the Ministry of Environment & Forests -need not apply again.

(12) In case of-units registered with the Ministry of Environment & Forests for items placed under "free category" in Notification nos. 22(RE-99) 1997-2002 dated 3& July, 1999; 26((RE-99) 1997-2002 dated 10'h September, 1999; 38 (RE2000) 1997-2002 dated 10th October, 2000 and 6(RE 200 1) dated 31st March, 2001 issued by the Directorate General of Foreign Trade and other similar notifications issued in future based on the Ministry of Environment & Forests' advice, prior import permission from the Ministry will not be required.

(13) Recyclers registered with MoEF shall maintain a record of wastes purchased, CL processed and sold and shall file six monthly returns in Form-12 to the respective State Pollution Control Board/Pollution Control Committee latest by 30th June and 31st December of every year.

20. Responsibilities of waste generator/auctioneer (i) Waste generators of non-ferrous metal wastes shall ensure that such non-ferrous metal wastes, as given in Schedule 6 auctioned sold to the registered - recyclers only;

(ii) Major used, oil generators namely State Road Transport, Corporations, Railways, fence Establishments, Shipping Companies, Ports, Power Plants, Fertilizer Industry Electricity Boards, etc. shall auction/sell used oil only to registered recyclers. All other generators of used oil generating used oil in quantities equal to or more than tons per annum. shall also auction/sell used lubricating oil only to registered recyclers;

(iii) The waste generators/auctioneers shall ensure that at the time of auction or sale, balance validity period of registration of waste purchasers unit should be sufficient to reprocess the quantity of wastes being sold/auctioned.

(iv) The waste generators/auctioneers shall maintain a record of such auctions/sale and make these records available to the State Pollution Control Board or committee for inspections.

(v) The waste generators/auctioneers shall file a half-yearly return of auction/sale in form latest by 30th June and 31st December of every year to the respective State Pollution Control Board/Pollution Control, Committee.

21. Techology and standards for recycling - (i) Recyclers shall use only environmentally sound technologies while recycling/reprocessing non-ferrous metal wastes or used lubricating oil. In case of used lubricating oil, reprocessors using acid clay process/modified acid clay process shall switch over within one year from the date of the notification to other environmentally sound technologies as under:

(a) Vacuum distillation with clay treatment

(b) Vacuum distillation with hydrotreating

(c) Thin film evaporation process

(d) Any other technology approved by the Ministry of Environment & Forests

(ii) The Recyclers registered with the Ministry of Environment & Forest in accordance with the procedure laid down under rule 19 of these rules, shall file a compliance report of having adopted one of the technologies mentioned in sub-rule (i) of rule 21 above by the due date. Units registered with the Ministry of Environment & Forests who fail to comply with the provisions mentioned in sub rule (i) of rule 21 above shall automatically cease to be registered with effect from the due date.

(iii) The SPCB/PCC shall inspect the units with upgraded technology within three months of the expiry of the one year period and submit a compliance report to MoEF.

(iv) The Ministry of Environment & Forests shall notify from time to time product specifications and standards to be followed by recyclers and reprocessors.

11. Schedules 1,2,3 and 4 appended to the said rules shall be substituted respectively by Schedules 1,2,3 and 7.

12. For Form 1 appended to the said rules, the revised Form 1 shall be substituted.

Hazardous Wastes (Management and Handling) Amendment Rules, 2002

SCHEDULE-1

[See rule 3 (i) (a)]

LIST OF PROCESSES GENERATING HAZARDOUS WASTES

1. Petrochemical processes and pyrolytic operations	1.1 Oven debris
	1.2 Oil-containing bleaching earth
	1.3 Acid tar
	1.4 Sulphur-containing residue from sulphur removal
	1.5 Oil-containing sludge
	1.6 Oil emulsion
	1.7 Oil-containing acid
	1.8 Tar residue made with coal tar
	1.9 Sludge from waste water purification
	1.10 Residual liquid and paste-like organic substances made with aromatic, aliphatic and naphenic hydro-carbons
	1.11 Residue from alkali wash of fuels
2. Natural gas production	2.1 Mercury-containing sludge
	2.2 Mercury-containing filter material
	2.3 Sulphur-containing residues
3. Production or use of zinc, zinc oxide	3.1 Zinc ashes/skimmings/fines
	3.2 Residue from processing of zinc ash
4. Production and use of copper oxide, copper including Electro-refining and Electro-winning operations	4.1 Dust and residues from gas cleaning system of copper smelters
	4.2 Spent electrolytic solutions from copper, electro-refining and electro winning operations
	4.3 Wastes sludges, excluding anode slimes from electrolyte purification systems
	4.4 Other exhaust dust
5. Production or use of lead	5.1 Lead ashes
	5.2 Lead slags
	5.3 Lead-containing filter material
6. Production or use of cadmium	6.1 Cadmium-containing filter material
7. Production or use of arsenic	7.1 Arsenic-containing filter material
8. Production of cast iron	8.1 Cupola oven dust

9. Production of crude iron and steel with oxy-steel converters or electro-ovens	9.1 Process dust
	9.2 Benzol acid sludge
10. Production of aluminium (primary or secondary production)	10.1 Filtered material
	10.2 Cathode residues
	10.3 Oven debris
11. Non-ferro matallurgical process	11.1 Heavy metal-containing oven debris arsenic chalk
12. Hardening of steel	12.1 Cynide-, nitrate-, or nitrite-containing stludge
	12.2 Hardening salt
13. Production of asbestos or asbestos-containing materials and/or products	13.1 Asbestos-containing residue
	13.2 Discarded asbestos
14. Production of chlorine by means of mercury/diaphragm-electrolysis process	14.1 Asbestos-containing discards
	14.2 Mercury bearing sludge
15. Phenol production	15.1 Phenol mixture
16. Metalworking	16.1 Selenium-containing metal waste
	16.2 Beryllium-containing metal waste
	16.3 Mercury-containing metal waste
17. Metal surface treatment, such as etching, staining, polishing, galvanising, cleaning, degreasing and hot dip galvanising	17.1 Acid, acid residue or acid mixture
	17.2 Alkali, alkali residue or alkali mixture
	17.3 Galvanic bath and (half-) concentrate made with sulphide, chromium (VI), cyanide, copper, zinc, cadmium, nickel or tin
	17.4 Halogen-free sludge from a bath which used organic solvents
	17.5 Halogen-containing sludge from a bath with organic solvents
	17.6 Phosphating sludge
	17.7 Halogen-containing organic degreasing bath
	17.8 Sludge from staining bath
	17.9 Copper etching fluid
18. Treatment of galvanising and similar with baths and water purification in metal surface treatment	18.1 Metal hydroxide sludge, chromium, cadmium copper, zinc, nickel or silver
	18.2 Heavy metal-containing eluate from ion ex changers
	18.3 Heavy metal-containing half-concentrates from membrane systems
19. Production of acids and fertilizer	19.1 Acid-containing residues
	19.2 Spent catalyst

	19.3 Sulphur containing residue
20. Production or use of solvents	20.1 Contaminated solvents not fit for originally intended use halogen-free aromatic, aliphatic or napthenic solvents
	20.2 Spent solvents
	20.3 Contaminated halogen-containing solvents made with phenols
	20.4 Contaminated halogen-containing solvents made with phenols
	20.5 contaminated solvents or mixtures of solvents made with organic nitrogen-containing aromatics napthenes of aliphatics
	20.6 Contaminated solvents or mixtures of solvents made with organic sulphur compounds
	20.7 Distillation or bottom residue
21. Removal of coatings from ships, bridges and locks, electricity pylons and road markings by blasting	21.1 Blasting material contaminated with coating residues
22. Industrial production or use of coatings paints, lacquers, varnishes and plastics, and of links	22.1 Residues of coating or such as inks if not completely hardened
	22.2 Sludge from waste water purification in productio processes
23. Production or use of glues, cements, adhesive and resins	23.1 Glue, cement of adhesive residue (not made with vegetable or animal materials) if not completely dried out
	23.2 Resin oil residue
24. Production or use of dyes, dye-intermediates and pigments	24.1 Process sludge
	24.2 Sludge from waste water treatment
25. Production or use of latex	25.1 Latex or latex emulsion residue if not completely polymerised or coagulated
26. Industrial production or use of paint removers	26.1 Paint remover residue
27. Industrial printing and copying with liquid toner	27.1 Printing ink residue
	27.2 Silkscreen printing ink residue
	27.3 Lacquer residue
	27.4 Liquid toner residue
	27.5 Residue of cleaning agents made with organic sovents
	27.6 etching fluind residue
	27.7 Dispersive oil residue
	27.8 Oxidising agent residue
28. Industrial production and /or use of photo-	28.1 Developer residue

chemicals	28.2 Fixer residue
	28.3 Bleaching fixer residue
29. Production or use of organic compounds	29.1 Organic residue
30. Production or use of halogen-containing hydrocarbons or of aromatic, aliphatic or napthenic hydrocarbons	30.1 Residue of fluid or pasty organic materials made with halogen-containing hydrocarbons
	30.2 Residue of fluid or pasty organic materials made with aromatic, aliphatic or napthenic hydrocarbons
31. Production or use or organic, nitrogen compounds or oxygen compounds including peroxide	31.1 Residue of fluid or pasty organic materials made with oxygen compounds organic nitrogen or oxygen compounds (other than vegetable or animal carbohydrates, proteins, fats and fatty acids)
	31.2 Organic peroxide residue
32. Production or use of materials made with silicones excluding cements	32.1 Silicons oil residue
	32.2 Silicone-containing residues
33. Production of canvas and textiles	33.1 Textile chemical residue
34. Production or sue of plastics or raw materials for them	34.1 Halogen-free residue of additives for plastics (e.g. Dyestuffs, stabilisers, or flame retardants)
	34.2 Halogen-containing residue or additives for plastics
	34.3 Halogen-free residue of plasticisers for plastics
	34.4 halogen-containing residue of plasticisers for plastics
	34.5 Residue from the preparation of vinylchloride monomer
	34.6 Residue from the preparation of acrylonitrile monomer
	34.7 Residue of liquid or pasty rubber emulsion or rubber solution if not polymerised
	34.8 Sludge from waste water purification from rubber production if not polymerised
	34.9 PVC-containing residue if not polymerised
35. Production of cosmetics	35.1 Residue of chemical raw materials and additives (other than vegetable and animal carbohydrates, proteins, fats and fatty acids)
36. Production of pharmaceuticals	36.1 Residues from the production of medicines (other than vegetable and animal carbohydrates, proteins, fats and fatty acids)
	36.2 Spent catalyst/spent carbon
	36.3 Off specification products
	36.4 Expired/discarded drugs/medicines
37. Industrial use, production and formulation of pesticides	37.1 Pesticides residues

	37.2 Sludge from waste water treatment
	37.3 Hex a or hexacontaining residue made with hexachlorocyclohexane or hexachlorobenzene
	37.4 Residues from the use of pesticides
	37.5 Date expired pesticides
38. Industrial production, formulation or use of wood preservatives	38.1 Production and formulation residue
	38.2 Sludge from the waste water purification
	38.3 Residue from the use of wood preservatives
	38.4 Wood alkali bath
39. Cleaning, emptying and maintenance of tanks and separators of vessels vehicles and of mobile and stationery storage tanks, washing water	39.1 Oil-containing cargo residue, washing water and sludge
	39.2 Chemical-containing cargo residue and sludge
	39.3 Oil-water sludge mixture and oil-containing air filters from oil, fat, sludge or petrol separation
40. Disposal of barrels/containers used for handling or hazardous wastes/chemicals	40.1 Chemical-containing residue from decontamination and disposal
	40.2 Sludge from treatment of waste water arising out of cleaning/disposal of barrels/containers
	40.3 Discarded containers/barrels/liners used for hazardous wastes chemicals
41. Purification processes for air and water	41.1 Sludge from waste water treatment from artificial fertilizer production
	41.2 Sludge from the treatment of waste water containing hydrofluoric acid
	41.3 Heavy metal-containing residue from used-ion exchange material in the water purification
	41.4 Flue gas cleaning residue
	41.5 Sludge from combined effluent treatment plants for cluster of industry
	41.6 Sludge from waste water treatment plant possessing hazard characteristics given in schedule - 3 (Part -B)
	41.7 Sludge, oil and grease skimmings from common industrial effluent treatment plants (CETPs) and unit specific effluent treatment plant (ETPs) containing hazardous components
42. Purification processesion for organic water	42.1 Filters and filter material which have organic liquids in them, e.g. Mineral oil, synthetic oil and organic chlorine compounds

	42.2 Spent catalyst
	42.3 Spent carbon
43. Waste treatment processes, e.g. incineration, distillation and separation and concentration techniques	43.1 Sludge from the incineration of exclusively chemical waste
	43.2 Fly ash from incineration of hazardous waste, except exclusively communal sewage sludge, flue gas cleaning residue
	43.3 Battery acid
	43.4 Distillation residue from the work-up of contaminated halogen-free organic solvents
	43.5 Distillation residue from the work-up of contaminated halogen-containing organic solvents
44. Tanning of leather	44.1 chromium (vi) bearing residue
	44.2 Chromium bearing sludge
45. Performance of maintenance and repair work on vehicles and	45.1 Oil-water mixtures, oil-containing sludge and oil emulsion
	45.2 Filters and filter material which have organic liquids on them, e.g. mineral oil, synthetic oil and oganic chlorine compounds
46. Every action relating to and every use of lubricating system oil	46.1 Spent oil
	46.2 Other spent lubricating and system oil
	46.3 Cotton waste used for handling lubricating oil

47. Off specification or discarded products	47.1 Off specification or discarded products from any of the 44 processes listed in column 2 of this Schedule.

SCHEDULE -2

[See rule 3(i) (b)]

LIST OF WASTE SUBSTANCES WITH CONCENTRATION LIMITS

Class A

Concentration limit ³ 50 mg/kg

A1 Antimony and antimony compounds

A2 Arsenic and arsenic compounds

A3 Beryllium and cadmium compounds

A4 Cadmium and beryllium compoinds

A5 Chromium (VI) compounds

A6 Mercury and mercury compounds

A7 Selenium and selenium compounds

A8 Tellurium and tellurium compounds

A9 Thallium and thallium compounds

A10 Inorganic cyanide compounds (cyanides)

A11 Metal carbonyls

A12 Napthalene

A13 Anthracene

A14 Penanthrene

A15 Chrysene, benzo (a) anthracene, fluoranthene, benzo (a) pyrene, benzo(K) fluoranthene, indeno (1,2,3-ed) pyrene and benzo (ghi) perylene

A16 halogenated fused aromatic rings, e.g. polychlorobiphenyls plus derivatives

A17 Halogenated aromatic compounds

A18 Benzene

A19 Dieldrin, aldrin, and andrin

A20 Organotin Compounds

Class B

Concentration limit: ³ 5,000 mg/kg

B1 Chromium (III) compounds

B2 Cobalt compounds

B3 Copper compounds

B4 Lead and lead compounds

B5 Molybdenum compounds

B6 Nickel compounds

B7 Tin compounds

B8 Vanadium compounds

B9 Tungsten compounds

B10 Silver compounds

B11 Organic halogen compounds

B12 Organic Phosphorus compounds

B13 Organic peroxides

B14 Organic nitro-and nitroso-compounds

B15 organic azo-and azo-oxy compounds

B16 Nitriles

B17 Amines

B18 (Iso-and thio-) cyanates

B19 Phenol and phenolic compounds

B20 Merceptans

B21 Asbestos

B22 Drilling, cutting, grinding and rolling oil or emulsions thereof

B23 Halogen-silanes

B24 Hydrazine (s)

B25 Fluorine

B26 Chlorine

B27 Bromine

B28 White phosphorus

B29 Ferro-silicon and alloys

B30 Manganese-silicon

B31 halogen-containing substances which produce acidic vapours on contact with damp air or water, e.g. silicon tetrachloride, alumunium chloride. Titanium tetrachloride

Class C

Concentration limit; ³ 20,000 mg/kg

C1 Ammonia and ammonium compounds

C2 Inorganic peroxides

C3 Barium compounds, except barium sulphate

C4 Fluorine compounds

C5 Phosphorus compounds, except the phosphate of aluminum, calcium and iron

C6 Bromates, (hypo) bromites

C7 Chlorates, (hypo) chlorites

C8 Aromatic compounds

C9 Organic silicon compounds

C10 Organic sulphur compounds

C11 Iodates

C12 Nitrates, nitrites

C13 Sulphides

C14 Zinc compounds

C15 Salts of per-acids

C16 Acid halides, acid amides

C17 Acid anhydrides

Class D

Concentration limit: ³ 50,000 mg/kg

D1 sulphur

D2 Inorganic acids

D3 Metal bisulphates

D4 Oxides and hydroxides except those of hydrogen, carbon, silicon, iron, aluminum, titanium, manganese, magnesium, calcium

D5 Aliphatic and napthenic hydrocarbons

D6 Organic oxygen compounds

D7 Organic nitrogen compounds

D8 Nitrides

D9 Hydrides

Class E

Regardless of concentration limit

E.1 Highly flammable substances

E.2. Substances which generate dangerous quantities of highly flammable gases on contact with water or damp air

SCHEDULE -3

[See rule 3 (i) (c)]

(Part -A)

LISTS OF WASTE APPLICABLE ONLY FOR IMPORTS AND EXPORTS

List - A *

Basel No.	OECD No.	Description of Material	Annex 1	Annex III	Custom Code
AI		**Metal and Metal bearing wastes**			
A1010		**Metal waste and waste consisting of alloys of the following metals, but excluding such wastes specified on list B**			
A1010	AA070	Cadmium (see B1020)	Y26	6.1,11,12	ex 2620.90
A1010	AA070	Antimony (see B1020)	Y27	6.1,11,12	ex 2620.90
A1010	AA070	Tellurium (see B1020)	Y28	6.1,11,12	ex 2620.90
A1020		**Waste having as constituent or contaminants excluding metal wastes in massive form.**			
A1020	AA070	Cadmium, cadmium compounds. (see B1020)	Y27	6.1,11,12	ex 2620.90
A1020	AA070	Tellurium, tellurium compounds. (see B1020)	Y28	6.1,11,12	ex 2620.90
A1020	AA030	Lead, lead compounds. (see B1020)	Y31	6.1,11,12	ex 2620.90
A1030		**Waste having as constituents or contaminants**			
A1040		**Wastes having as constituents any of the following**			
A1040		Metal carbonyls	Y19	6.1,11,12	
A1050	AA120	Galvanic sludges	Y17	6.1, 12	
A1070	AA140	Leaching residues from zinc processing, dusts and sludges such as jarosite, hematite, geoethite, etc.	Y23	12	
A1080	AA20	Waste Zinc residues not included on list B containing lead and cadmium in concentrations sufficient to exhibit hazard characteristics indicated in part B of this schedule. (see B 1080 and B1100)	Y23	4.3, 12	Ex 262019 Ex 2620.1 Ex 2817
A1090		Ashes from the incineration of insulated copper wire	Y 22	12	
A1100		**Dust and residues from gas cleaning systems of coer smelters**	**Y18, Y22**	**12**	**Ex 2620.30**
A1110		Spent electrolytic solutions from copper electrorefining and electrowinning operations	Y22	12	Ex 2620.30
A1120		Wastes sludges, excluding anode slimes, from electolytic purification systems in copper electrorefining and electrowinning operations	Y18, Y22	12	Ex 2620.30
A1130		Spent etching solutions containing dissolved copper	Y22	12	Ex 3284.90
A1150	AA161	Precious metal ash from incineration of printed circuit boards not included on list 'B'			Ex 7112.10
A1160	AA170	Lead acid batteries whole or crushed	Y 31	6.1,11,12	

A1170		Unsorted wastes batteries excluding mixtures of only List B batteries. Waste batteries not specified on List B containing schedule 2 constituents to an extent to exhibit hazard characteristics indicated in part B of this Schedule (see B 1090)	Y 26 Y 29 Y 31	6.1,11,12	Ex 8548.10 Ex 8548.90
A1180		Electrical and electronic assembles or scrap containing, compunds such as accumulators and other batteries included on list B, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or ocntaminated with schedule 2 constituents (e.e. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part B of this schedule (see B1110)			
A2		**Wastes containing principally inorganic constituents, which may contain metals and organic materials**			
A2010	AB040	Glass waste from cathode ray tubes and other activated glass	Y 31	6.1,11.12	Ex7001.00
A2030		Wastes catalysts but excluding such wastes specified on List B	Y 31		
A3		**Wastes containing principally organic constituents which may contain metals and inorganic materials**			
A3010	AC010	Waste from the production or processing of petroleum coke and bitumen	Y11		Ex2713.90
A3020	AC030	Waste mineral oils unfit for their originally intended use	Y 8		2710.00 3823.90
A3050	AC090	Wastes from production, formulation and use of resins, latex, plasticisers, glues / adhesives.			
A3070	AC110	[Waste] Phenol, phenol compounds including chlorophenol in the for of liquids or sludges	Y 39		
A3080	AC130	Ethers not including those specified on List B			
A3120	**AC190**	**Fluff : light fraction from shredding (automobile)**			
A3130	AC200	Waste organic phosphorus compounds	Y37		
A3140	AC210	(Waste) non-halogenated (organic) solvents (but excluding such wastes specified on List B)	Y 42		
A3160	AC230	Waste halogenated or unhalogenated non-aqueous distillation residues arising from organic solvent recovery operations	Y 18		
A 3170	AC240	Waste arising from the production of aliphatic halogenated hydrocarbons (such as chloromethanes, dichloroethane vinylchloride, allylchloride and epichorhydrin)			
A 3180	AC 120	Wastes, substances and articles containing, consisting of or contaminated with polychlorinated biphenyls (PCB) and/orpolychlorinated napthalenes (PCN) and / or polybrominated biphenyles (PBB) including any other polybrominated analogues of these compunds, at a concentration level of 50 mg.kg or more			
A 3190	RA020	Waste tarry residues (excluding asphalt cements) arising from refining, distillation and any pyrolitic treatment of organic materials.	Y11		
	AC250	Surface active agents (surfactants)			2620.90
	AC260	Liquid pig manure, faeces			2903.69
	AC270	Sewage sludge			3823.90

A4	**AD**	**Wastes which may contain either inorganic or organic constituents**	
A4010	AD010	Wastes from the production and preparation and use of pharmaceutical products	Y2
A4020		Clinical and related wastes: that is wastes arising from medical, nursing, dental, veterinary or similar practices, and wastes generated in hospitals or other facilities during the investigation or treatment of patients, or research projects.	
A4030	AD020	**Wastes from the production, formulation and use of biocides and phyto-pharmaceuticalsm ubckydubg waste pesticides and herbicides which are off-specification outdated and/or unfit for their originally intended use	Y4
A4040	AD030	Wastes from the manufacture formulation and use of wood preserving chemicals	Y5, Y22, Y24
A4050	AD040	Waste that contain, consist of, or are contaminated with any of the following) □□Inorganic cyanides, excepting precious metalbearing residues in solid form containing traces of inorganic cyanides □□Organic cyanides	Y33, Y38 Y7 Y38
A4060	AD060	Waste, oils, water, hydrocarbons/water mixtures, emulsions	Y9
A4070	AD070	Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish	Y12
A4080		Wastes of an explosive nature	Y15
A4090	AB110, AD110	Waste acidic or basic solutions.	Y34Y35
A4100		**Wastes from industrial pollution control devices for cleaning of industrial off-gases**	**Y18**
A4110	RC010	Wastes that contain, consist of or the contaminated with any of the following:1) □□Any congenor or polychlorinated dibenzofuran2) □□Any congenor or polychlorinated dibenzodioxin	Y43
A4120		Waste that contain, consist of or are contaminated with peroxides	
A4130		Waste packages and containers containing schedule 2 substances in concentrations sufficient to exhibit hazard characteristics indicated in part B of this schedule.	
A4140		Waste consisting of or containing off specification or out-dated chemicals listed in schedule 2 in concentration sufficient to exhibit hazard characteristics indicated in part B of this schedule.	
A4150		Waste chemical substances arising from research and	

	development of teaching activities which are not identified and/or are new and whose effects on human health and/or the environment are not known	
A4160	Spent activated carbon not resulting from the treatment or portable water and processes of the food industry and vitamin production	ex 2803

***** List A given as Annex. VIII of the Basel Convention of Transboundary Movement of Hazardous Wastes and their Disposal comprise of wastes characterised as hazardous under Article 1, paragraph 1 (a) of the Convention. Inclusion of wastes on this list dows not preclude the use of Annex. III of Basel Convention of hazard characteristics to demonstrate that the waste is not hazardous. The list is modified to the extent that certain waste categories given in original List 'A' of Basel Convention have been prohibited for import and export under Environment (Protection) Act, 1986 and are listed separately under Schedule 6 of these Rules.

LIST B*

Basel No.	OECD No.	Description Of Material	Annex I	Annex II	Customs Code
B1		**Metal and metal bearing wastes**			
B1010	GA120	Copper scrap			750400
	GA130	Nickel scrap			750300
	GA190	Molybdenum scrap			ex 810291
	GA200	Tantalum scrap			ex 810310
	GA210	Magnesium scrap excluding wastes in AA190			810420
	GA220	Cobalt scrap			ex 810510
	GA230	Bismuth scrap			ex 810600
	GA250	Titanium scrap			ex 810810
	GA260	Zirconium scrap			ex 810910
	GA280	Manganese scrap			ex 811100
	GA300	Chromium waste and scrap			ex 811220
	GA310	Germanium scrap			ex 811230
	GA320	Vanadium scrap (see AA060)			ex 811240
	GA330	Scrap of Hafnium			ex 8112.91
	GA340	Scrap of Indium			ex 8112.91
	GA350	Scrap of Niobium			ex 8112.91

	GA360	Scrap of Rhenium	ex 8112.91
	GA370	Scrap of Gallium	ex 8112.91
B1020		**Clean, uncontaminated metal scrap, including alloys, in bulk finished form (sheet, plate, beams, rods, etc.), of:**	
	GA270	Antimony scrap	ex 8110.00
	GA290	Beryllium scrap	ex 811211
	GA240	Cadmium scrap	ex 8107.10
B1040		Scrap assemblies from electrical power generation contaminated with lubricating oil, PCB or PCT to an extent indicated in schedule 2	
B1050		Mixed non-ferrous metal, heavy fraction scrap, containing schedule 2 materials in concentrations sufficient to exhibit hazard characteristics indicated in part B of this schedule.	
B1070		Waste of copper and copper alloys (excluding copper cake and copper residues containing less than 1.25% lead and 0.1% cadmium respectively) in dispersible form, containing schedule 2 constituents to an extent that they exhibit hazard characteristics indicated in part B of this schedule (see A1020, etc and AA040)	ex 2620.30
B1080		Zinc ash (containing less than 65% zinc and lead and cadmium more than 1.25% and .1% respectively) residues including zinc alloys residues in dispersible form unless containing schedule 2 constituents to an extent that they exhibit hazard characteristics indicated in part B of this schedule H4.3 (see A1080 and AA020)	ex 2620.10 ex 2620.19 ex 2817.00
B1090		Waste batteries made of lead, cadmium or mercury (see A1170 and AA180)	ex 8548.10 ex 8548.90
B1100	**GB**	**Metal bearing wastes arising from melting, smelting and refining of metals:**	
	GB025	Zinc skimmings containing less than 65% zinc and lead and cadmium more than 1.25% and .1% respectively.	
		Slags from copper processing for further processing or refining containing arsenic, lead or cadmium to an extent that they exhibit hazard characteristics indicated in part B of this scheduled.	ex 262030
	GB40	Slags from precious metals processing for further refining	ex 2620.90
	AA50	Aluminium skimmings (or skims) excluding salt slag	
	GB050	Tantalum-bearing tin slags with greater than 0.5% tin	ex 2620.90
B110	**GC**	**Electrical and electronic assemblies**	
	GC010	Electronic assemblies consisting only of metals or alloys	

	GC020	Electrical and electronic assemblies (including printed circuit board, electronic components and wires) not valid for direct re-use, but for recycling.	
B1120		**Spent catalysts excluding liquids used as catalysts, containing any of :**	
B1130		Uncleaned spent precious metal bearing catalysts	ex 381510 ex 711510
B1140		Precious metal bearing residues in solid form which contain traces inorganic cyanides	ex 381510 ex 711510
B1150		Precious metals and alloy wastes (gold, silver, the platinum group, and mercury) in a dispersible form Lithium-Tantalum and Lithium-Niobium containing glass scraps	ex 381510 ex 711510
B1170		Precious metal ash from the incineration of photograph film	ex 284310
B1200	GC080	Granulated slag arising from the manufacture of iron and steel	ex 261900
B1210		Slag arising from the manufacture of iron and steel including slag as a source of Titanium-dioxide and Vanadium	ex 261900
B1220		Slag from zinc production	ex 262030
B1230		Mill scaling arising from manufacture of iron and steel	ex 261900
	B2	Wastes containing principally inorganic constituents, which may contain metals and organic materials	
B2010		Wastes from mining operations in non-dispersible form	
	GD010	Natural graphite waste	250400
	GD040	Leucite, nepheline and nepheline syenite waste	252930
	GD050	Feldspar waste	252910
	GD060	Fluospar waste	252921 252922
	GD070	Silica waste in solid form excluding those used in foundry operations	281122
B2030	**GF**	**Ceramic wastes in non-dispersible wastes**	
	GF020	Cermet wastes and scrap (metal ceramic composites)	ex 8113.00
B2040	**GG**	**Other wastes containing principally inorganic constituents**	
	GG010	Partially refined calcium sulphate produced from flue gas desulphurisatin (FGD)	ex 262100
	GG030	Bottom ash and slag tap from coal fired power plants	ex 262600

B2070	AB050	Calcium fluoride sludge	ex 281800
B2100		Waste hydrates of aluminium and waste alumina and residues from alumina production, arising from gas cleaning, flocculation or filtration process	ex 281800
B2110		Bauxite residue ("red mud")	ex 260600
	B3	Wastes containing principally organic constituents, which may contain metals and inorganic materials	
B3010	GH	Solid plastic waste	
		The following plastic or mixed plastic materials, provided they are not mixed with other wastes and are prepared to a specification:	
		Scrap plastic of non-halogenated polymers and copolymers, including but not limited to the following:	
	GH011	ethlene	391590
	GH012	styrene	391520
	GH014	polypropylene	391590
	GH014	polyethylene teraphthalate	391590
	GH014	acrylonitrile	ex 391590
	GH014	butadienepolyacetals	ex 391590
	GH014	polyamides	ex 391590
	GH014	polybutylene teraphthalate	ex 391590
	GH014	polycarbonatespolyethers	ex 391590
	GH014	polythenlylene sulphides	ex 391590
	GH014	acrylic polymersalkanes C10-C13 (plasticiser)	ex 391590
	GH014	polyurethane (not containing CFC's	ex 391590
	GH014	polysiloxanes	ex 391590
	GH014	polymethyl methacrylate	ex 391590
	GH014	polyvinyl alcohol	ex 391590
	GH014	polyvinyl butyral	ex 391590
	GH014	polyvinyl acetate	ex 391590
		(Crude waste) resins or condensation products (including the following) (e.g.)	

	GH015	urea formaldehyde resins	ex 391590
	GH015	phenol formaldehyde resins	ex 391590
	GH015	melamine formal dehyde resins	ex 391590
	GH015	epoxy resins	ex 391590
	GH015	alkyd resins	ex 391590
	GH015	polyamides	ex 391590
		The following fluorinated polymer wastes Perfluoroethylene/propylene (FEP) Perfluoroalkoxy alkane (PFA) Perfluofoalkoxy alkane (MFA) polyvinylfluoride (PVF) polyvinylidenefluoride (PVDF)	
B3060	GM	Waste arising from agro-food industries provided it is not infectious	
B3060	GM090	Degras; residues resulting from the treatment of fatty substances or animal or vegetable waxes	ex 152200
B3060	GM100	Waste of bones or horn cores unworked, defatted, simply prepared (but not cut to shape), treated with acid or degelatinised	050690
B3060	GM110	Fish waste	ex 051191

* List B given as Annex IX of the Basel Convention of Transboundary Movement of Hazardous Wastes and their Disposal comprises of wastes not covered by Article 1, paragraph 1 (a) of the convention, unless they contain material listed under Annex I of the Convention to an extent causing them to exhibit Annex. III characteristics. The list is modified to the extent that concentration limits of wastes most involved in imports are specified.

SCHEDULE -3 (continued)

(PART - B)

List of Hazardous Characteristics

H1 Explosive

An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such speed as the cause damage to the surroundings. (UN Class 1; H1)

H3 Flammable liquids

The work "flammable" has the same meaning as "inflammable." Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5□ C, closed-cup test, or not more than 65.6□ C centigrade, open-cup test. (Since the results of open-cup tests and of closed-cup tests are not strictly comparable

and even individual results by the same test are often variable, regulations varying from the above figures to make allowance for such differences would be within the spirit of this definition).

H4.1 Flammable Solids

Solids, or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.

H4.2 Substances or wastes liable to spontaneous combustion

Substances or wastes liable to spontaneous heating under normal conditions encountered in transport, or to heating up on contact with air, and being then liable to catch fire.

H4.3 Substances or wastes which, in contact with water exit flammable gases

Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

H5.1 Oxidizing

Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen cause, or contribute to, the combustion of other materials.

H5.2 Organic Peroxides

Organic substances or wastes which contain the bivalent-O-O structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.

H6.1 Poisonous (Acute)

Substances or wastes liable either to cause death or serious injury or to harm health if swallowed or inhaled or by skin contact.

H6.2 Infectious substances

Substances or wastes containing viable micro organisms or their toxins which are known or suspected to cause disease in animals or humans.

H8 Corrosives

Substances or wastes which, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport, they may also cause other hazards.

H10 Liberation of toxic gases in contact with air or water

Substances or wastes, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.

H11 Toxic (Delayed or chronic)

Substances or wastes, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity).

H12 Ecotoxic

Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation and/or toxic effects upon biotic systems.

H13 Capable by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above.

SCHEDULE - 4

[See rule 3 z (iii) & 19 (i)]

LIST OF NON-FERROUS METAL WASTES FOR RECYCLING & REPROCESSING

Waste Category	Waste Type	Basel No.	OECD NO	Cus. Code	ISRI Code
NFMWI	Brass Scrap				Honey
NFMW2	Brass Dross				
NFMW3	Copper Scrap	B 1010	GA 120	740400	
NFMW4	Copper dross containing copper more than 65% and lead and cadmium equal to or less than 1.25% and 0. 1% respectively cadmium equal to or less than 1.25% and 0. 1% respectively				
NFMW5	Copper oxide mill scale				
NFMW6	Copper reverts, cake and residue				
NFMW7	Waste Copper and Copper Alloys (excluding copper cake and copper residues containing less than 1.25% lead and 0. 1% cadmium respectively)	B 1070		262110	
NFMW8	Metal Bearing Wastes arising from melting, smelting and refining of metals containing Slags from copper processing for further processing or refining	B 1100		2622030	
NFMW9	Insulated Copper Wire Scrap/copper with PVC sheathing				DRUID
NFMW10	Spent cleared metal catalyst containing copper				
NFMW 11	Nickel scrap	B 1010	GA 130	750300	
NFMW12	Spent Nickel catalyst				
NFMW13	Zinc Scrap				SAVES SCABS
NFMW14	Zinc Dross-Hot dip Galvanizers SLAB				SCRUB
NFMW15	Zinc Dross-Bottom Dross				SEAL
NFMW 16	Zinc Dross-Bottom Dross				SEAM
NFMW17	Zinc Skimming Metal bearing wastes arising from smelting and refining of metals.	B 1100	GB 025		
NFMW18	Zinc ash and residues including zinc alloys residues in dispersible form.	B 1080		262010 262019 281700	
NFMW19	Spent cleared metal catalyst containing zinc				
NFMW20	Mixed non-ferrous metal scrap	B 1050		-	

SCHEDULE - 5

[See rule 3 (z vi)]

Used oil Specification for Re-refining

Constituents/Property	**Acceptable Limits (Max.)**
Colour	8
Water	15%
Density	0.85 to 0.95
Kinetic Viscosity cSt at 100 degree C	1.0 to 32
Dilutents	15% Vol.
Neutralisation No.	3.5 mg KOH/g
Saponification value	18 mg KOH/g
Total halogens	4000 ppm
PCBs	Absent
Lead	100 ppm
Arsenic	5 ppm
Cd+Cr+Ni	500ppm
PAH	6%

*Notification G.S.R. 620(E) dated 06.09.1995 is hereby rescinded

SCHEDULE - 6

[See rule 12 (7)]

HAZARDOUS WASTES PROHIBITED FOR IMPORT TO AND EXPORT FROM INDIA

S. No.	Basel* No.	OECD No.	Description of material
1.	A 1010	AA 100	Mercury
2.	A 1030	AA 100	Waste having Mercury: Mercury Compounds as constituents or contaminants
3.	A 1010	AA 070	Beryllium
4.	A 1020	AA 070	Waste having Beryllium: Beyllium. Compounds as constituents or contaminants
5.	A 1010	AA 090	Arsenic
6.	A 1030	AA 090	Waste having Arsenic: Arsenic compounds as contituents or contaminants
7.	A 1010	AA 070	Selenium
8.	A 1020	AA 070	Waste having Selenium; Selenium Compounds as constituents or contaminants
9.	A 1010	AA 080	Thallium.
10.	A 1030	AA 080	Waste having Thallium; Thallium Compounds as constituents or contaminants
11.	A 1040	AA 070	Hexavalent Chromium Compounds
12.	A 1140		Wastes Curpic Chloride and Copper Cyanide Catalysts
13.	A 2050	RB 010	Waste Asbestos (Dust and Fibers)
14.	A 3180	AC 120	Waste, Substances and articles containing. Consisting of or contaminated with polychlorinated biphenyles (PCB and/or Polychlorinated Terphynyls. (PCT) And/or Polychlorinated Naphthalenes (PCN) and/or Polybrominated Biphyenyles (PBB) including and other Polybrominated analogues of these of more compounds at a concentration level of 50 mg/kg and more.
15.	A 4030	AD 020	Waste from the production, formulation use of biocides and phytopharmaceuticals, including waste pesticides and hebicides which are off- Specification out-dated, and/or unfit for their originally intended use.
16.	A 4050	AD 040	Waste that contain, consist of, or are contaminated with any of the following; · Inorganic cyanides, excepting precious metal hearing residues in solid form containing traces of inorganic cyanides. · Organic cyanides.
17.	A 2020		Waste inorganic fluorine compounds in the form of liquids or sludge but excluding Calcium fluoride sludge.

18.	A 2040	Waste gypsum arising from chemical industry processes.
19.	A 2060	Coal fired power plant fly ash.
20	A 3530	Wastes that-consist of or are contaminated with leaded anti-knock compound sludge or leaded petrol (gasoline) sludges.
21.	A 3040	Waste thermal (heat transfer) fluids.
22.	A 3060	Waste Nitrocellulose.
23.	A 3090	Waste leather dust, ash. Sludges and flours when containing hexavalent chromium compounds or biocides.
24.	A 3100	Waste paring and other waste of leather or of composition leather not suitable for the manufacture of leather articles containing hexavalent chromium compounds or biocides.
25.	A 3110	Fellmongery wastes containing hexavalent chromium compounds or biocides or infectious substances.
26.	A 3150	Waste halogenated organic solvents.
27.	A 3190	Waste tarry residues (excluding asphalt cements) arising from refining, distillation and pyrolitic treatment of organic materials)
28.	A 4020	Clinical and related wastes; that is wastes arrives from medical, nursing, dental, veterinary, or similar practices and wastes generated in hospital or other facilities during the investigation or treatment of patients, or research projects.

* Basel Convention on / Control of Transboundary Movement of Hazardous Waste and their Disposal

** Organisation for Economic Cooperation & Development

The following notifications are hereby rescinded:

(a) S.O. No. 897(E) dated December 26,1996

(b) S.O. No. 330(E) dated April 15,1997

(c) S.O. No. 899(E) dated October 13,1998

SCHEDULE -7

[See rule 12 (3)]

S. No. (1)	Authority (ies) (2)	Duties and corresponding Rule (3)
1.	Ministry of Environment and Forests under the Environment (Protection) Act., 1986	i) Identification of hazardous wastes as per rule-3. ii) Permission to exporters as per rule 14 (3) iii) Permission to importers as per rule 13 (3)
2.	Central Pollution Control Board constituted under the Water Act (Prevention & Control of Pollution), 1974	i) Co-ordinate activities of State Pollution Control Boards and ensure implementations of the conditions of imports ii) Monitor the compliance of the conditons of authorization, import and export. iii) Conduct training courses for authorities dealing with management of hazardous wastes. iv) Recommend standards for treatment disposal of waste, leachate and specifications of materials. v) Recommend procedures for characterization of hazardous waste. vi) Sector specific documentation to prevent/reduce/minimise the generation of wastes of wastes in Schedule 1.
3.	State Pollution Control Boards or Pollution Control Committees constituted under the Water Act (Prevention & Control of Pollution), 1974	i) Grant and renew authorisation under rule 5 (4) and rule 8. ii) Monitor the compliance of the various provision and conditions of authorisation. iii) Forward the application for imports submitted by the importers as per rule 13 (1) iv) To review matters pertaining to identification and notification of disposal sites. v) Implementation of programmes to prevent/reduce/minimise the generation of wates in Schedule 1 in a systematic manner. vi) Action against violations of HW rules
4.	Directorate General of Foreign Trade constituted under the Foreign Trade (Development & Regulation) 1992.	i) Grant licence as per rule 13 (5) ii) Refuse licence for hazardous wastes prohibited for imports under the Environment (Protection) Act. 1986.
5.	Port Authorities and Customs Authorities under the Customs Act. 1995	i) Verify the documents as per rule 13 (6) ii) Inform the Ministry of Environment & Forests,

Govt. of India of any illegal traffic as per rule 15.

iii) Analyse wastes permitted for imports and exports

iv) Train officials on the provisions of the Hazardous Wastes Rules and in analysis of hazardous wastes.

FORM - I

[See rules 3(b), 5(2) (3) and (6) (ii)]

Application for Obtaining Authorisation for Collection/ Reception/ Treatment/ Transports/ Storage/ Disposal of Hazardous Waste

[Substituted by G.S.R. 380 (E) dated 31-3-92]

From: ……

…….

…….

To

The Member Secretary,

.....…. Pollution Control Board,

……

……

……

Sir,

I / We hereby apply for authorisaiton./ renewal of authorisaiton under sub-rule (2) and (3) and clause (ii) of subrule (b) of Rule 6 of the Hazardous Wastes (Management and Handling) Rules, 1989 for collection/ reception/ treatment/ transport/ storage/ disposal of hazardous wastes.

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1. Code No.

2. Whether the unit is situated in a critically polluted area as identified by Ministry of Environment and Forests;

To be filled in by Applicant

PART - A

General

3.(a)Name and address of the unit and location of activity

(b)Name and address of the unit and location of activity

(c)Authorisation required for (Please tick mark appropriate activity /activities:

(i) collection.

(ii) reception.

(iii) treatment.

(iv) transport.

(v) storage.

(vi) disposal.

(d) In case of renewal of authorisation previous authorisation number and date.

4.(a) Whether the unit is generating hazardous waste as defined in the Hazardous wastes (Management Rules, 1989;

(b) If so the category No.

5.(a) Total capital invested on the project:

(b) Year of commencement of production:

(c) Whether the industry works general/ 2 shifts/ round the clock

6. (a) List and quantum of products and by-products:

(b) List and quantum of raw material used:

7. Furnish a flow diagram of manufacturing process showing input and output in terms of products and waste generated including for captive power generation and demineralised water.

PART - B

Pertaining to Sewage and Trade Effluent

8.Quantity and source of water for:

(a) Cooling m3/d

(b) Process m3/d

(c) Domestic use m3/d

(d) Others m3/d

9.Sewage and trade effluent discharge

(a) Quantum of discharge m3/d :

(b) Is there any effluent treatment plant:

(c) If yes, a brief description. of unit operations with capacity

(d) Characteristics of final effluent pH:

Suspended solids

Dissolved solids

Chemical Oxygen Demand (COD)

Biochemical Oxygen Demand BOD5/ 200C

Oil and grease

(additional parameters as specified by the concerned Pollution Control Board)

(e) Mode of disposal and final discharge point:

(enclose map showing discharge point):

(f) Parameters and Frequency of self monitoring:

[*] Read BOD (3 days at 27C) vide G.S.R. 176(E) dated 2.4.96.

PART - C

Pertaining to Stack (Chimney) and Vent Emissions

10.(a) Number of stacks and vents with height and dia (m):

(b) Quality and quantity of stack emission from each of the above stacks-particulate matter and Sulphar dioxide (SO_2) (Additional parameters as specified by the concerned Pollution Control Board):

(c) A brief account of the air pollution control unit to deal with the emission:

(d) Parameters and Frequency of self monitoring:

PART - D

Pertaining to Hazardous Waste and Hazardous Chemical

11.Solid Wastes:
(a) Total Quantum of generation
(b) Quantum of hazardous waste generated and its nature, as defined under Environment (Protection) Act, 1986, (see the Hazardous Wastes Management and Handling Rules, 1989):
(c) Mode of storage within the plant, method- of disposal and any other information sought by the concerned Pollution Control Board:

12.(a) Hazardous Chemicals as defined under Environment (Protection Act. 1986 (see the Manufacture, Storage and import of Hazardous Chemicals Rules, 1989):

(b) Whether any isolated storage is involved if yes, attach details Yes/NO

PART - E

Pertaining to Treatment, Storage & Disposal Facility

13.Detailed proposal of the facility (to be attached) to include:

(a)Processing of Waste

(i) Location of site

(ii) Name of waste processing technology

(iii) Details of processing technology

(iv) Quantity of waste to be processed per day

(v) Site clearance (from local authority, if any)

(vi) Utilization programme for waste processed (Product Utilization)

(vii) Measures to be taken for prevention and control of environmental pollution including treatment of leachates

(viii) Investment on Project and expected returns

(ix) Measures to be taken for safety of workers working in the plant

(b)Disposal of Waste

(i) Method of disposal (details in brief be given)

(ii) Quantity of waste to be disposed per day

(iii) Nature and composition of waste

(iv) Methodology and operational details of landfilling/ incineration

(v) Measures taken to check environmental pollution.

Place: Signature:

Date:Designation:

FORM - 11

[See Rules 19 (ii) & (vi)]

APPLICATION FOR REGISTRATION OF FACILITIES POSSESSING ENVIRONMENTALLY SECOND

MANAGEMENT PRACTICE FOR RECYCLING NON-FERROUS METAL WASTES/ USED LUBRICATING

OIL

[To be submitted in triplicate]

Name & Address of the unit	
2. Contact person with designation, Tel/ Fax	
3. Date of commissioning	
4. No. of Workers (including contract labourers)	
5. Consent Validity	a) Under Air Act., 1981 Valid up to_____ b) Under Water Act., 1974 Valid up to_____
6. Validity of Authorisation under Rule 5 of the Hazardous Wastes (M & H) Rules, 1989	Valid up to_____
7. Installed capacity of production (MTA)	

8. Product Manufactured (Tonnes/ Year)	YEAR I	YEAR II	YEARIII
Name			
a)			
b)			
c)			

9. Raw material consumption (Tonnes/ Year)	YEAR I	YEAR II	YEAR III
Name			
a)			
b)			
c)			

10. Manufacturing Process	Please attach manufacturing process flow diagram for Each product (s)
11. Water Consumption	Industrial_____m^3/day Domestic_____ m^3 /day
12. Water Cess Paid up	
13. Waste waster generation	Industrial
a. As per, consent m^3 /day	Domestic

b. Actual m^3/day (average of last three months)

14. Waste water treatment (please provide flow diagram of the treatment scheme)	Industrial Domestic
15. Waste waster discharge	Quantity m'/day Location Analysis of treated waste water PH, BOD, COD, SS, O&G Any other

FORM - 12

[See rule 19 (xiii)]

Form for Filling Recyclers Non-Ferrous Metal Wastes/ Used Oil

[To be submitted by recyclers to State Pollution Control/ Committee by 30th June and 31st December of every year]

1. Name and address of the recycler	
2. Name of the authorised person and fall address with telephone and fax number	
3. Installed annual capacity to recycle non-ferrous metal wastes/ used oil (in MTA)	
4. (in MTA) purchased/ processed/ sold during the period from October - March / April -September	(i) Quantity of wastes purchased from the manufactures- (ii) Quantity of wastes purchased from auctioneers- (iii)Quantity of wastes obtained form any other source- (iv)Quantity of wastes processed- (v) Quantity of wastes sold
5. Quantity and type material recovered from nonferrous metal wastes/ used oil (in MTA)	
6. Quantity of recycles materials sent back	(i) the manufacturers (ii) other agencies #

*delete whichever is not applicable

#enclose list of other agencies

Signature of the authorised person

Place:……..

Date:…….

FORM - 13

[See rule 20 (v)]

FORM FOR FILLING RETURNS OF AUCTION/ SALE OF NON-FERROUS METAL WASTES/ USED OIL *

[To be submitted by waste generators / auctioneers to State Pollution Control Board / Committee by 30th June and 31st December of every year]

Name and address of the generator/auctioneer	
2. Name of the authorised person and full address wit telephone and fax number	
4. Total quantity of wastes auctioned / sold during the Period from October - March / April -September	(i) Non-ferrous Metal Wastes (indicate type and quantity (in metric tons) : (ii) Used oil (indicate type and quantity (in metric tons

* delete whichever is not applicable

Signature of the authorised person
[F.No.23(16)/2001-HSMD]
DR.V.RAJAGOPALAN.Jt.Secy.

Place .....

Date:.....