

MINISTRY OF ENVIRONMENT & FORESTS

(Department of Environment, Forests and Wildlife)

NOTIFICATION

New Delhi, the 28th July, 1989

S.O. 594(E). 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 :

1. Short title and commencement.

- (1) These rules may be called the Hazardous Wastes (Management and Handling) Rules, 1989.
- (2) They shall come into force on the date of their publication in the official Gazette.

2. Application.

These rules shall apply to hazardous wastes as specified in Schedule and shall not apply to-

- (a) waste water and exhaust gases as covered under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and rules made thereunder;
- (b) wastes arising out of the operation from ships beyond five kilometres as covered under the provisions of the Merchant Shipping Act, 1958 (44 of 1958) and the rules made thereunder,
- (c) radio-active wastes as covered under the provisions of the Atomic Energy Act, 1962 (33 of 1962) and rules made thereunder,

3. Definitions.

In these rules, unless the context otherwise requires,-

- (a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
- (b) "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;
- (c) "authorisation" means permission for collection, reception, treatment, transport, storage and disposal of hazardous wastes granted by the competent authority in Form 2;
- (d) "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;
- (e) "export" with its grammatical variation and cognate expression means taking out of India to a place outside India;
- (f) "exporter" means any person under the jurisdiction of the exporting country who exports hazardous wastes and the exporting country itself, who exports hazardous wastes;
- (g) "facility" means any location wherein the processes, incidental to the waste generation collection, reception, treatment, storage and disposal are carried out;

- (h) "Form" means Form appended to these rules;
- (i) "hazardous wastes" means categories of wastes specified in the Schedule;
- (j) "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;
- (k) "import" with its grammatical variations and cognate expressions, means bringing into India from a place outside India;
- (l) "importer" means an occupier or any person who imports hazardous wastes;
- (m) "operator of a facility" means a person who owns or operates a facility for collection, reception, treatment, storage and disposal of hazardous wastes;
- (n) "Schedule" means Schedule appended to these rules;
- (o) "State Pollution Control Board" means the Board appointed under sub-section of the 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);
- (p) "transboundary movement" means any movement of hazardous wastes 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;
- (q) the words and expressions used in these rules and not defined but defined in the Act, shall have the meanings respectively assigned to them in the Act.

4. Responsibility of the occupier for handling of wastes.

- (1) The occupier generating hazardous wastes listed in column (2) of the Schedule in quantities equal to or exceeding the limits given in column (3) of the said Schedule, shall take all practical steps to ensure that such wastes are properly handled and disposed of without any adverse effects which may result from such wastes and the occupier shall also be responsible for proper collection, reception, treatment, storage and disposal of these wastes either himself or through the operator of a facility.
- (2) The occupier or any other person acting on his behalf who intends to get his hazardous waste treated by the operator of a facility under sub-rule (1), shall give to the operator of a facility, such information as may be specified by the State Pollution Control Board.

5. Grant of authorisation for handling hazardous wastes.

- (1) Hazardous wastes shall be collected, treated, stored and disposed of only in such facilities as may be authorised for this purpose.
- (2) Every occupier generating hazardous wastes and having a facility for collection, reception, treatment, transport storage and disposal of such wastes shall make an application in Form 1 to the State Pollution Control Board for the grant of authorisation for any of the above activities:

Provided that the occupier not having a facility for the collection, reception, treatment, transport, storage and disposal of hazardous wastes shall make an application to the State Pollution Control Board in Form 1 for the grant of authorisation within a period of six months from the date of commencement of these rules.

- (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 to the State Pollution Control Board for the grant of authorisation for any of the above activities:

Provided that the operator engaged in the business of the collection, reception, treatment, transport, storage and disposal of hazardous wastes shall make an application to the State Pollution control Board in Form 1 for the grant of authorisation within a period of six months from the date of commencement of these rules.

(4) The State Pollution Control Board shall not issue an authorisation unless it is satisfied that the operator of a facility or an occupier, as the case may be, possesses appropriate facilities, technical capabilities and equipment to handle hazardous wastes safely.

(5) The authorisation to operate a facility shall be issued in Form 2 and shall be subject to conditions laid down therein.

(6)(i) An authorisation granted under this rule shall unless sooner suspended or cancelled, be in force for a period of two years from the date of issue or from the date of renewal.

(ii) An application for the renewal of an authorisation shall be made in Form 1r before its expiry.

(iii) The authorisation shall continue to be in force until it is renewed or revoked.

(7) The State Pollution Control Board, may, after giving reasonable opportunity of being heard to the applicant refuse to grant any authorisation.

6. Power to suspend or cancel an authorisation.

(1) The State Pollution Control Board may cancel an authorisation issued under these rules or suspend it for such period as it thinks fit, if in its opinion, the authorised person has failed to comply with any of the conditions of the authorisation or with any provisions of the Act or these rules, after giving the authorised person an opportunity to show cause and after recording reasons therefor.

(2) Upon suspension or cancellation of the authorisation and during the pendency of an appeal under rule 12, the State Pollution Control Board may give directions to the persons whose authorisation has been suspended or cancelled for the safe storage of the hazardous wastes, and such person shall comply with such directions.

7. Packaging, labelling and transport of hazardous wastes.

(1) Before hazardous wastes is delivered at the hazardous waste site, the occupier or operator of a facility shall ensure that the hazardous wastes is packaged in a manner suitable for storage and transport and the labelling and packaging shall be easily visible and be able to withstand physical conditions and climate factors.

(2) Packaging, labelling and transport of hazardous wastes shall be in accordance with the provisions of the rules issued by the Central Government under the Motor Vehicles Act, 1988 and other guidelines issued from time to time.

8. Inventory of disposal sites.

(1) The State Government or a person authorised by it shall undertake a continuing programme to identify the sites and compile and publish periodically an inventory of disposal sites within the State for the disposal of hazardous wastes.

(2) The State Government or a person authorised by it shall undertake an environmental impact study before identifying a site as waste disposal site in the State.

(3) The State Government or a person authorised by it shall undertake a continuing programme to compile and publish an inventory of sites within the State at which hazardous wastes have at any time been stored or disposed of and such inventory shall contain, besides the location and description, information relating to the amount, nature and toxicity of hazardous wastes at each such site as may be associated with such site.

9. Records and returns.

(1) The occupier generating hazardous waste and operator of a facility for collection, reception, treatment, transport, storage and disposal of hazardous waste shall maintain records of such operations in Form 3.

(2) The occupier and operator of a facility shall send annual returns to the State Pollution Control Board in Form 4.

10. Accident reporting and follow-up.

Where an accident occurs at the facility or on a hazardous waste site or during transportation of hazardous wastes, the occupier or operator of a facility shall report immediately to the State Pollution Control Board about the accident in Form 5.

11. Import of hazardous wastes.

(1) Import of hazardous wastes from any country to India shall not be permitted for dumping and disposal of such wastes. However, import of such wastes may be allowed for processing or re-use as raw material, after examining each case on merit by the State Pollution Control Board or by an officer authorised in this behalf.

(2) The exporting country or the exporter as the case may be, of hazardous wastes shall communicate in Form 6 to the Central Government (the Ministry of Environment and Forests) of the proposed trans-boundary movement of hazardous wastes.

(3) The Central Government shall, after examining the communication received under sub-rule (2) and on being satisfied that the import of such hazardous wastes is to be used for processing or reuse as raw material grant permission for the import of such wastes subject to such conditions as the Central Government may specify in this behalf and if, however, the Central Government is not satisfied with the communication received under sub-rule (2), may refuse permission to import such hazardous wastes.

(4) Any importer importing hazardous wastes shall provide necessary information as to the type of hazardous wastes he is to import, in Form 6, to the concerned State Pollution Control Board/the Central Pollution Control Board in the case of Union Territories.

(5) The State-Pollution Control Board shall examine the information received under the sub-rule (4) and issue such instructions to the importers as it considers necessary.

(6) The Central Government or the State Pollution Control Board, as the case may be, shall inform the concerned Port Authority to take appropriate steps regarding the safe handling of the hazardous wastes at the time of off-loading the same.

(7) Any person importing hazardous wastes shall maintain the records of the hazardous wastes imported as specified in Form 7 and the records so maintained shall be open for inspection by the State Pollution Control Board/the Ministry of Environment and Forests/the Central Pollution Control Board in the case of Union Territories or an officer appointed by them in this behalf.

12. Appeal.

(1) An appeal shall lie, against any order of suspension or cancellation or refusal of an authorisation by the State Pollution Control Board to the State Government and to the Ministry of Environment and Forests in the case of the Central Pollution Control Board.

(2) Every appeal shall be in writing and shall be accompanied by a copy of the order appealed against and shall be presented within thirty days of the order passed.

SCHEDULE
[See rules 3 (i), 3(n) and 4]
CATEGORIES OF HAZARDOUS WASTES

Waste Categories	Type of wastes	Regulatory Quantities
1	2	3
Waste Category No. 4	Mercury, Arsenic, Thallium and Cadmium bearing wastes.	5 kilogrammes per year the sum of the specified substance calculated as pure metal.
Waste Category No. 5	Non-halogenated hydrocarbons including solvent.	200 kilogrammes per year calculated as non-halogenated hydrocarbons.
Waste Category No. 6	Halogenated hydro-carbon including solvents	50 kilograms per year calculated as helogenated hydrocarbons.
Waste Category No. 7	Wastes from paints, pigments, glue, varnish and printing ink.	250 kilogrammes per year calculated as oil or oil emulsions.
Waste Category No.8	Wastes from Dyes and Dye intermediate containing inorganic chemical compounds.	200 kilogrammes per year calculated as inorganic chemicals.
Waste Category No. 9	Wastes from Dyes and Dye intermediate containing organic chemical compounds.	50 kilogrammes per year calculated as organic chemicals.
Waste Category No. 10	Waste oil and oil emulsions.	1000 kilogrammes per year calculated as oil and oil emulsions.
Waste Category No. 11	Tarry wastes from refining and tar residues from distillation or prolytic treatment.	200 kilogrammes per year calculated as tar
Waste Category No. 12	Sludges arising from treatment of waste waters containing heavy metals, toxic organics, oils emulsions and spend chemical and inceneration ash.	irrespective of any quantity.
Waste Category No. 13	Phenols.	5 kilogrammes per year calculated as phenols.
Waste Category No. 14	Asbestos.	200 kilogrammes per year calculated asbestos.
Waste Category No. 15	Wastes from manufacturing of pesticides and herbicides and residues from pesticides and, herbicides formulation units.	5 kilogrammes per year calculated as pesticides and their intermediate products.
Waste Category No. 16	Acid/Alkaline/Slurry	200 kilogrammes per year calculated as Acids/Alkalies.
Wastes Category No.17	Off-specification and discarded products.	Irrespective of any quantity.
Wastes Category No.18	Discarded containers and Containers	Irrespective of any quantity.

	linears of hazardous and toxic wastes.	
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1[FORM I]

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

Application for authorisation/renewal of authorisation for collection/reception/treatment/ transport/storage/ disposal of hazardous wastes. From :

.....

To
 The Member Secretary,
Pollution Control Board,

.....

Sir,

I/We hereby apply for authorisation renewal of authorisation under sub-rule (3) of rule 5 of the Hazardous Wastes (Management and Handling) Rules, 1989 for collection/reception/ treatment/transport/storage/disposal of hazardous wastes.

FOR OFFICE USE ONLY

(1) Code No. :

(2) Whether the unit is situated in a critically polluted area as identified by Ministry of Environment & Forests

TO BE FILLED IN BY APPLICANT

PART A - GENERAL

3. (a) Name of Owner/Occupier

(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 and Handling) 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 bye-products

(b) List and quantum of raw materials 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 (BODs)

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

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 Sulphur Dioxide (SO₂)
(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 chemicals.

11. Solid wastes:

(a) Total quantum of generation

(b) Quantum of hazardous waste generated and its nature, as defined under the 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

(c) Whether emergency plans are prepared for taking Yes/No

-on-site measures Yes/No

-off-site measures Yes/No

Yours faithfully,

Name and Signature of applicant

F.No. Q.-14011/1/91-CPW]
T. GEORGE JOSEPH, Jr. Secy.

FOOTNOTE: The principal rules were published in the Gazette of India vide Notification No. S.O. 594(E) dated the 28th July, 1989 and subsequently amended vide Notification No.S.O. 116(E) dated the 15th March 1990.

1 Substituted by Rule 2 of the Hazardous Wastes (Management and Handling) Rules, 1989, published vide G.S.R. 380(E) dated 31.03.1992.

FORM 2

(See rule 3(c) and 5(5)]

Authorisation for operating a facility for collection, reception, treatment, storage, transport, and disposal of hazardous wastes).

1. Number of authorisation and date of issue
2. ... of is hereby granted an authorisation to operate a facility for collection, reception, treatment, storage, transport and disposal of hazardous waste on the premises situated at
3. The authorisation granted to operate a facility for collection, reception, treatment, storage, transport and disposal of hazardous wastes.
4. The authorisation shall be in force for a period of years from the date of issue.
- 5 The authorisation is subject to the conditions stated below and the such conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986.

Signature
Date
Designation ..

Terms and conditions of authorisation

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

FORM 3

[See rule 9(1)]

Format for maintaining records of hazardous wastes at the facility

1. Name and address of the occupier or operator of a facility:
2. Date of issuance of authorisation and its reference number:
- 3 Description of hazardous waste:

Physical form with description	Chemical form	Total volume and weight (in kg.)
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4. Description of storage and treatment of hazardous waste:

Date	Method of storage of hazardous wastes	Date	Method of treatment of hazardous wastes
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5. Details of transportation of hazardous waste:

Name and address of the consignee of package Mode Of packing/ of the waste for transportation Mode of transportation to site Of disposal Date of transportation

6. Details of disposal of hazardous waste:

Date of disposal Concentration of hazardous material in the final waste form Site Of disposal (identify the location on the relevant layout drawing for reference) Method of disposal Persons involved in disposal

7. Data on environmental surveillance:

Date of measurement	Analysis of ground water			Analysis of soil samples			Analysis of air sampling		Analysis of any other samples(give details)
	Location of sampling	Depth of sampling	Data	Location of sampling	Depth of sampling	Data	Location of sampling	Data	

Name and signature of the Head of facility

FORM-4

(See Rule 9(2))

Format for the submission of returns, regarding disposal of hazardous Waste

(To be submitted to the State Pollution Control Board)

1. Name and address of the Institution:

2. Details of waste disposal operations:

S.No.	Date of issuance of authorisation for the disposal of hazardous waste and its references number	Description of Hazardous Waste	Mode of Transportation to the site of disposal	Site of disposal (attach a sketch showing the location(s) of disposal)	Brief description of the method of disposal	Date of disposal	Remarks(if any)
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Physical form and contents Chemical form and contents Total Volume of the hazardous waste disposed with contents No. of packages

Name and signature of the Head of the Facility

FORM-5

(See rule 10)

1. The date and time of the accident:
 2. Sequence of events leading to accident:
 3. The hazardous waste involvement in accident:
 4. The date for assessing the effects of the accident on health or the environment:
 5. The emergency measures taken:
 6. The steps taken to alleviate the effects of accidents:
 7. The steps taken to prevent the recurrence of such an accident:
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FORM-6

[See rule 11(23 and (4))]

(Format for notification and movement document)

A. INFORMATION TO BE PROVIDED ON NOTIFICATION

1. Reasons for waste export
2. Exporter of the Waste
3. Generator(s) of the waste and site of generations¹
4. Importer of wastes
5. Intended carrier(s) of the waste or their agents if known
6. Exporting Country ♦s Competent authority²
7. Expected countries of transit Competent authority²
8. Importing country ♦s Competent authority²
9. General or single notification.
10. Projected date(s) of shipment(s) and period of time over which waste is to be exported and proposed itinerary (including point of entry and exit)⁴
11. Means of transport envisaged (road, rail, sea, air, inland waters).
12. Information relating to insurance⁴
13. Designation and physical description of the waste and its composition⁵ and information on any special handling requirements including emergency provisions in case of accidents. 14. Type of packaging envisaged (e.g. bulk, drummed, tanker).
15. Estimated quantity in weight/volume⁶
16. Process by which the waste is generated⁷
17. Method of disposal
18. Declaration by generator and exporter that the information is correct.
19. Information transmitted (include in technical description of the plant) to the exporter or generator from the importer of the waste upon which the latter has based his assessment that there was no reason to believe that the wastes will not be managed in an environmentally sound manner in accordance with the laws and regulations of the importing country.

B. INFORMATION TO BE PROVIDED ON THE MOVEMENT DOCUMENT:

1. Exporter of the wastes⁸
2. Generator(s) of the waste and site of generation⁸
3. Importer of the waste and actual site of disposal⁸
4. Carrier(s) of the waste or his agent(s).
5. Subject of general or single notification.

6. The date the trans-boundary movement started and date(s) and signature on receipt by each person who takes charge of the waste.
7. Means Of transport (road, rails, inland, waterway, sea, air) including countries of export transit and import, also point of entry and exit where these have been designated.
8. General description of the waste
9. Information on special handling requirements including emergency provision in case of accidents.
10. Type and number of packages.
11. Quantity in weight/volume.
12. Declaration by the exporter that the information is correct.
13. Declaration by the exporter indicating no objection from the competent authorities of all States concerned which are Parties.
14. Certificate by importer of receipt at designated disposal facility and indication of method of disposal and of the approximate date of disposal.

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1. Full name and address, telephone, telex or telefax numbers and the name, address, telephone, telex or telefax number of the person to be contacted.
 2. Full name and address, telephone, telex and telefax number.
 3. In the case of general notification covering several shipments, either the expected dates of each shipment or, if this is not known the expected frequency of the shipments will be required.
 4. Information to be provided on relevant insurance requirements and how they are met by exporter carrier and importer.
 5. The nature and concentration of the most hazardous components, in terms of toxicity and other dangers presented by the waste both in handling and in relation to the proposed disposal method.
 6. In the case of a general notification covering several shipments, both the estimated total quantity and estimated quantities for each individual dual shipment will be required.
 7. In so far as this is necessary to assess the hazard and determine the appropriateness of the proposed disposal operation.
 8. Full name and address, telephones telex or telefax number and the name, address, telephone telex or telefax number of the person to be contacted in case or emergency.

FORM-7

(Format for maintaining records of hazardous wastes imported)

1. Name and address of the importer
2. Date reference number of issuance of permission to import hazardous wastes:
3. Description of hazardous waste
 - (a) Physical form
 - (b) Chemical form:
 - (c) Total volume and weight (in kilogrammes):
4. Description of storage, treatment and reuse of hazardous waste
 - (a) Date
 - (b) Method of storage:
 - (c) Method of treatment and reuse (give details):

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