



STANDARD OPERATING PROCEDURE

Title: Hazardous Waste Management and Handling

SOP No.:		Department:	EHS	
		Effective Date:		
Revision No.:		Revision Date:		
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1.0 OBJECTIVE:

To lay down a procedure for handling, identification, collection, short term storage and disposal of hazardous waste.

2.0 SCOPE:

This procedure is applicable to all those source locations where “Hazardous Waste” generated.

3.0 RESPONSIBILITY:

Officer / Executive – EHS

4.0 ACCOUNTABILITY:

Head – EHS

5.0 ABBREVIATIONS:

EMS	Environmental Management System
HR	Human Resources
Ltd.	Limited
MR	Management representative
No.	Number
TSDF	Treatment Storage and Disposal Facility

6.0 PROCEDURE:

6.1 WASTES AND SOURCE OF GENERATION

S.No.	TYPE OF HAZARDOUS WASTE	CATEGORY No.
1.	Sludge & Filter contaminated with oil	3.3
2.	Used or Spent Oil	5.1
3.	Wastes or Residues containing oil	5.2
4.	Process Residue & Waste	28.1
5.	Off specification Products	28.4
6.	Date-expired products	28.5
7.	Spent solvent	28.5
8.	Empty barrels/containers/liners contaminated with hazardous Chemicals /wastes	33.1
9.	Exhaust Air or Gas cleaning residue	35.1
10.	Spent ion exchange resin containing toxic metals	35.2
11.	Chemical Sludge from waste water treatment	35.3
12.	Waste Media	NA
13.	Blood soaked cotton	NA



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6.2 Hazardous waste container Management and Chemical Segregation - All generators of hazardous waste shall properly manage containers and segregate waste based on chemical compatibility. The following practices shall be used at all times:

- 6.2.1** All containers shall be compatible with the waste stored in them. The container shall be in good condition. There shall be no leakage in the container selected. If the container is leaking or damaged, transfer the waste to a compatible container in good condition.
- 6.2.2** All containers shall be kept closed at all times except when adding waste to the container.
- 6.2.3** Containers having hazardous waste will be labeled with its contents prior to sending to the Stores (Scrap) department. The label will include waste identification, weight, plant, Date and signature of concerned officer.
- 6.2.4** If a manufacturer's container is used to accumulate hazardous waste, deface the original label and attach new hazardous waste label. (Waste will not be removed from the source or workspace unless it has the specified hazardous waste label.)
- 6.2.5** Do not mix solid and liquid waste.
- 6.2.6** Do not fill liquid containers to the top. Leave space in the container to allow for the expansion of the liquid.

6.3 MATERIALS WITH SPECIAL REQUIREMENTS:

The following categories of wastes require special containment or handling by the generator.

- 6.3.1** Batteries - Spent batteries may be considered a hazardous material. Lead acid batteries should be kept indoors or in a container. Departments shall make arrangements with qualified vendors for recycling batteries.
 - 6.3.2** Empty Containers/Glassware - After removing or defacing labels, Empty containers and glassware shall be placed in the silos at Scrap Yard and will be handled as a hazardous waste.
 - 6.3.3** Fluorescent Light Tubes - Place the used fluorescent light tube in its original box for proper disposal. The boxes shall be sealed, marked with the words "Used Lamps" and the number of tubes marked on the top of the box. It shall be disposed to recycler.
- 6.4** Disposal route: Disposal of hazardous waste from its source will be as per following.
- 6.5** Generating department shall transfer hazardous waste to in-house leachate proof hazardous waste storage facility in G shift from 8:00 to 18:00 daily and hand it over to Stores (scrap) department.



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- 6.6 After receiving hazardous waste from generator Stores (scrap) department will enter the data in hazardous waste register and shall arrange for further disposal in coordination with EHS department.
- 6.7 All Hazardous wastes shall be stored in Leachate proof Hazardous Waste storage facility till its disposal.
- 6.8 No Hazardous waste shall be stored for more the 90 days.
- 6.9 The disposal of hazardous waste shall be through Form – 10 (Hazardous Waste Manifest).
- 6.10 No hazardous waste should be stored beyond 90 days in premises and No Biomedical waste should be stored more than 48 hours.
- 6.11 The generator department should pack the hazardous waste in Container / Poly bags as per above.
- 6.12 The container should be labelled as per the form 08 of Hazardous & Other Waste Management, Handling & Transboundry Movement Rules 2016.
- 6.13 The container then should be transferred to Hazardous waste storage room.
- 6.14 A record of the receipt of hazardous waste should be taken from HR Department as per annexure I.
- 6.15 HR department shall make a record of daily hazardous waste generated as per Annexure II and quarterly as per Form III of Hazardous & Other Waste Management, Handling and Transboundry movement rules 2016.
- 6.16 HR/concerned department should dispose the hazardous waste within 90 days of generation to vendor authorised.
- 6.17 The route of disposal shall be as per the **Annexure – III**.
- 6.18 Transportation and Disposal: Hazardous waste may be transported only by a licensed hazardous waste transporter and will be sent to approved site. And shall be disposed along with six copies of Form 13 “Hazardous waste Manifest” to a vendor authorized.
- 6.19 Waste Minimization: Generators of hazardous waste are required to minimize the volume and toxicity of the hazardous waste they generate by adopting cGMP etc.
- 6.20 Training: Persons involved in the management and handling of hazardous waste must be equipped with information, training and equipment necessary to ensure their safety.
- 6.21 Record: Scrap department will maintain a register of hazardous wastes which includes the hazardous waste quantity and source point for monitoring purpose.



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6.22 An annual return should be submitted in Form - IV of Hazardous & Other Waste Management, Handling and Transboundary Movement Rules 2016.

7.0 ANNEXURES:

ANNEXURE No.	TITLE OF ANNEXURE	FORMAT No.
Annexure-I	Record of hazardous waste disposal from departments	
Annexure-II	Record of hazardous waste disposal from industry	
Annexure-III	Route of hazardous waste disposal	
Annexure – IV	Label of hazardous waste	

ENCLOSURE: SOP Training Record

8.0 DISTRIBUTION:

- Controlled Copy No. 01 Quality Assurance
- Controlled Copy No. 02 Environment, Health & Safety
- Master Copy Quality Assurance

9.0 REFERENCES:

ISO 14001:2004 Environmental Management Systems (EMS) – Requirements with guidance for use.

10.0 REVISION HISTORY:

CHANGE HISTORY LOG

Revision No.	Change Control No.	Details of Changes	Reason for Change	Effective Date	Updated By



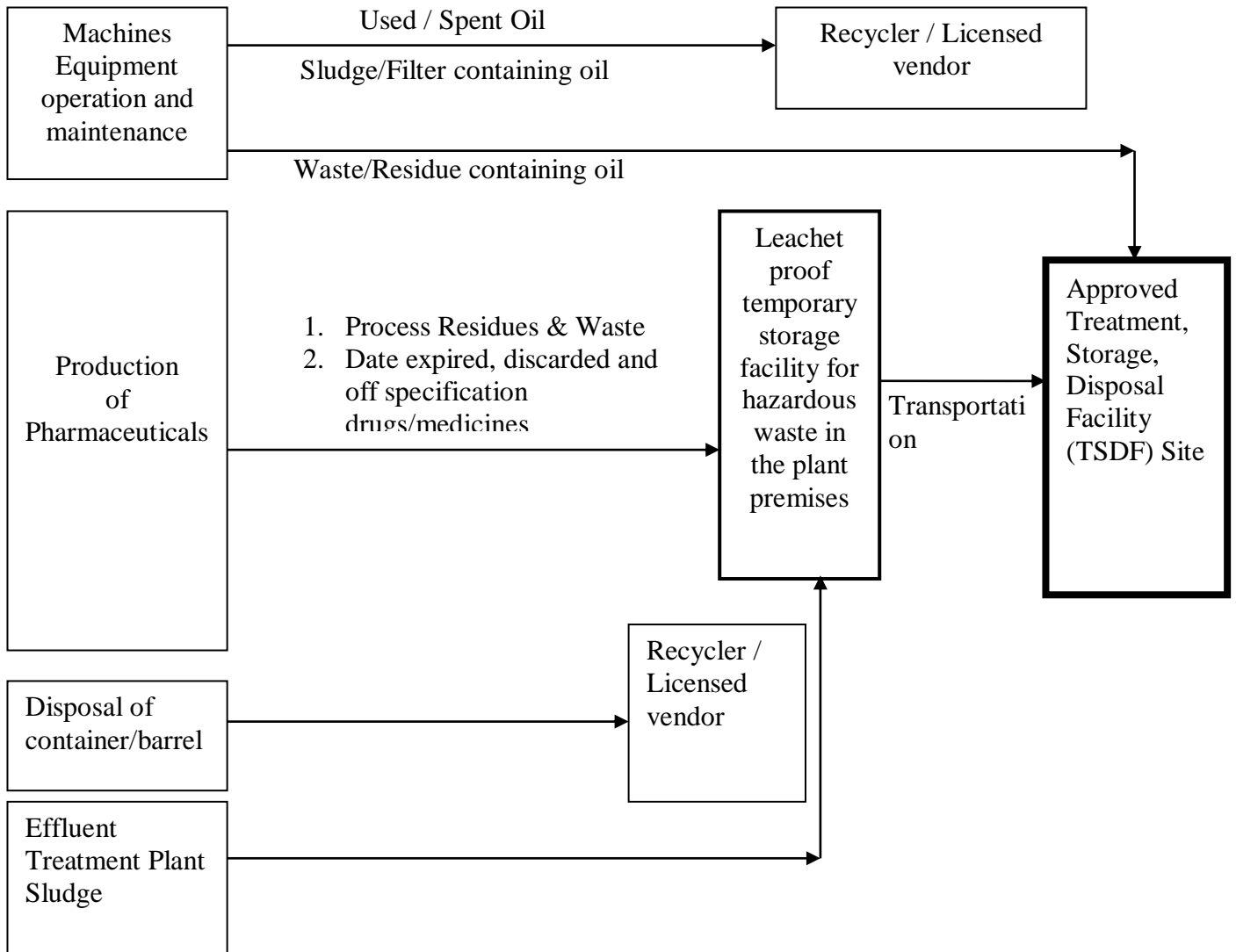
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ANNEXURE – III

ROUTE OF HAZARDOUS WASTE DISPOSAL





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ANNEXURE – IV

LABEL OF HAZARDOUS WASTE

FORM 8

[See rules 17 (1) and 18 (2)]

LABELLING OF CONTAINERS OF HAZARDOUS AND OTHER WASTE

Handle with care

Waste category and characteristics as per Part C of Schedules II and III of these rules	Incompatible wastes and substances
Total quantity	Date of storage
Physical State of the waste (Solid/Semi-solid/liquid):	
Sender's name and address	Receiver's name and address
Phone.....	Phone.....
E-mail.....	E-mail.....
Tel. and Fax No.....	Tel. and Fax No.....
Contact person.....	Contact person.....
In case of emergency please Contact	

Note:

1. Background colour of label - fluorescent yellow.
2. The word, 'HAZARDOUS WASTES' and 'HANDLE WITH CARE' to be prominent and written in red, in Hindi, English and in vernacular language.
3. The word 'OTHER WASTES' to be written prominently in orange, in Hindi, English and in vernacular language.
4. Label should be of non-washable material and weather proof