Form 2 -[Rule 6(2)] Authorization under Hazardous & Other Wastes [Management & Transboundary Movement]Rules,2016

Authorization No: 321549

Valid upto: 30/06/2026

(This document contains 8 pages excluding annexure)

Karnataka State Pollution Control Board
Parisara Bhavana,No.49, Church Street,Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

Authorization No: 321549 **PCB ID:** 10269 **Date:** 11/11/2020

FORM FOR GRANT OR RENEWAL OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

Ref: 1. Authorization application submitted by the industry/organization on 16/10/2020 at Regional Office.

2. Inspection of the project site/organization by Regional Officer , Nelamangala on 16/10/2020
3. Proceedings of CCM dated: 27/10/2020 , held on: 20/10/2020

1. Number of authorization 321549 and date of issue 11/11/2020

2. Reference of application No. 20784 Inward Date 16/10/2020

3. Senior General Manager of Ramky Enviro Engineers Ltd., (Tsdf) is hereby granted an authorization based on the enclosed signed inspection report for or any other use of hazardous or other wastes or both on the premises situated at the location **Address**: 75 to 85 of Pemmenahalli & 7 & 9 of Thimmanayakanahalli , Towards Doddaballapur Road, NH-207, KIADB Industrial Area, **Industrial Area** : Nelamangala Taluk , **Taluk** : Nelmangala , **District** : Bangalore Rural

Details of Authorization:

Category of Hazardous waste as per the Schedule I,II & IV of these rules	Description of Hazardous Waste	Quantity/Annum	Unit	Authorized Mode of Disposal or recycling or utilization or co-processing, etc.,
I	9.1~Lead bearing residues	10000.000	M.T	As Per Annexure
I	8.3~Flue Gas Dust And Other Particulates	10.000	M.T	As Per Annexure
I	37.1~Sludge from wet scrubbers.	5.000	M.T	As Per Annexure
	17.1~Residues Dusts Or Filter Cakes	10.000	M.T	As Per Annexure
	17.2~Spent Catelyst	10.000	M.T	As Per Annexure

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	2.2~Sludge Containing Oil	100.000	M.T	As Per Annexure
I	8.2~Sludges And Filter Cakes	10.000	M.T	As Per Annexure
I	6.2~Zinc fines or dust or ash or skimmings in dispersible form	10.000	M.T	As Per Annexure
	20.3~Distillation Residues	500.000	M.T	As Per Annexure
I	5.2~Wastes Residues Containing Oil	500.000	M.T	As Per Annexure
	20.4~Process Sludge	800.000	M.T	As Per Annexure
I	5.1~Used Spent Oil	1.500	M.T	As Per Annexure
	3.1~cargo residue, washing water and sludge containing oil	200.000	M.T	As Per Annexure
I	4.5~Spent Clay Containing Oil	100.000	M.T	As Per Annexure
	3.2~cargo residue and sludge containing chemicals	200.000	M.T	As Per Annexure
I	4.4~Organic Residues From Process	100.000	M.T	As Per Annexure
	3.3~Sludge And Filters Contaminated With Oil	200.000	M.T	As Per Annexure
I	4.2~Spent Catalyst	100.000	M.T	As Per Annexure

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I	4.1~Oily Sludge Emulsion	300.000	M.T	As Per Annexure
I	9.2~Lead ash or particulate from flue gas	20.000	M.T	As Per Annexure
	19.1~Residue or sludge containing phenol	100.000	M.T	As Per Annexure
I	11.5~Drosses and waste from treatment of salt sludge	10.000	M.T	As Per Annexure
I	35.5~Chromium sludge from cooling water	1.000	M.T	As Per Annexure
I	12.1~Acidic and alkaline residues	30.000	M.T	As Per Annexure
I	35.3~Chemical Sludge From Waste Water Treatment	20000.000	M.T	As Per Annexure
I	33.2~Contaminated cotton rags or other cleaning materials	500.000	M.T	As Per Annexure
I	12.6~Sludge From Staining Bath	30.000	M.T	As Per Annexure
I	33.1~Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	0.000	M.T	As Per Annexure
I	13.6~Residuces from coke oven by product plant	20.000	M.T	As Per Annexure
I	31.1~Process residue and wastes	20.000	M.T	As Per Annexure

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I	29.2~Sludge containing residual pesticides	100.000	M.T	As Per Annexure
I	15.2~Discarded Asbestos	100.000	M.T	As Per Annexure
I	29.1~Process wastes or residues	100.000	M.T	As Per Annexure
I	18.1~Spent Catalyst	10.000	M.T	As Per Annexure
I	28.5~Date-expired products	1000.000	M.T	As Per Annexure
I	18.2~Carbon residue	100.000	M.T	As Per Annexure
I	28.4~Off specification products	500.000	M.T	As Per Annexure
I	18.4~Chromium Sludge From Water Cooling Tower	20.000	M.T	As Per Annexure
I	12.8~Plating Metal Sludge	20.000	M.T	As Per Annexure
I	32.2~Corrosive Wastes Arising From Use Of Strong Acid And Bases	1.000	M.T	As Per Annexure
I	28.3~Spent carbon	400.000	M.T	As Per Annexure
I	21.1~process Wastes,Residues and sludges	5.000	M.T	As Per Annexure
I	22.2~Process residues	500.000	M.T	As Per Annexure

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I	28.1~Process Residue and wastes	1500.000	M.T	As Per Annexure
I	23.1~Wastes or residues(not made with vegetable or animal materials	500.000	M.T	As Per Annexure
I	1.1~Furnace/Reactor Residue And Debris	100.000	M.T	As Per Annexure
I	37.3~Concentration or evaporation residues	3000.000	M.T	As Per Annexure
I	10.1~Residues Containing Cadmium And Arsenic	10.000	M.T	As Per Annexure
I	37.2~Ash from incinerator and flue gas cleaning residue	6000.000	M.T	As Per Annexure
I	11.4~Flue Gas Dust And Other Particulates	10.000	M.T	As Per Annexure
I	35.1~Exhaust Air or Gas cleaning residue	50.000	M.T	As Per Annexure
I	34.2~Sludge from treatment of waste water arising out of cleaning / disposal of barrels/containers	5.000	M.T	As Per Annexure
I	12.3~Spent bath and sludge containing sulphide, cyanide and toxic metals	10.000	M.T	As Per Annexure
I	34.1~Chemical-containing residue arising from decontamination.	5.000	M.T	As Per Annexure
I	12.5~Phosphate Sludge	50.000	M.T	As Per Annexure

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I	24.1~ Chemical Residues	1000.000	M.T	As Per Annexure
I	25.1~Chemical Residues	200.000	M.T	As Per Annexure
I	26.1~Process waste sludge/residues containing acid, toxic metals, organic compounds	1300.000	M.T	As Per Annexure
I	27.1~process Residues	400.000	M.T	As Per Annexure

1. The authorization shall be valid for a period upto 30/06/2026

A. General Conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986 and the Rules made there under.

2. The authorization or its renewal shall be produced for inspection at the request of an Officer authorized by the Karnataka State Pollution Control Board.

3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes and other wastes except what is permitted through this authorization and without obtaining prior permission of the KSPCB.

4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of this authorization.

5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.

6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on “Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty”.

7. It is the duty of the authorized person to take prior permission of the Karnataka State Pollution Control Board to close down the facility.

8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

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9. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

10. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

11. An application for the renewal of an authorization shall be made **'3' months** before the date of expiry.

12. The Person authorized shall bring to the notice of the Board, if any increase in quantity, change in category and handling operation. In such cases, the authorized Person has to obtain fresh authorization.

13. Karnataka State Pollution Control Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions of this authorization or to suspend or cancel this authorization.

14. The Person authorized shall take steps for reduction and prevention of the waste generated or for recycling or reuse.

15. The authorized person shall maintain the records at site in Form-3 and shall submit the annual returns in Form-4 within 30th June every year for the Period April to March and manifest in Form-10.

16. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

17. The hazardous and other waste which gets generated during recycling or reuse or recovery or per-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

18. The transportation of hazardous waste shall have to be carried out only through registered/authorized vehicles meant for transportation of hazardous waste.

19. The Person Authorized shall not store the Hazardous Waste more than ninety days as per Rule 8 (1).

20. The Person Authorized shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.

21. Display Boards: The person authorized shall display sign boards at the storage site as "Hazardous Waste Storage Site" and "Danger" and the site shall be provided with accident preventive measures.

Additional Conditions:

The applicant shall follow the uploaded additional conditions stipulated along with Annexure-A, B, C D

For and on behalf of the
Karnataka State Pollution Control Board

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CHIEF/ SENIOR ENVIRONMENTAL OFFICER

COPY TO:

1. The Environmental Officer, KSPCB, Regional Office,for information and to inspect the industry during your next visit to the area.
2. Master copy (Dispatch).
3. Office copy.

Signature Not Verified
Digitally signed by
Date: 2020.11.11 16:49:52 +05:30

ADDITIONAL CONDITIONS TO ACCOMPANY AUTHORISATION ISSUED UNDER THE PROVISIONS OF THE HAZARDOUS AND OTHER WASTE (MANAGMENT AND TRANSBOUNDARY MOVEMENT) RULES, 2016 TO M/S.KARNATAKA WASTE MANAGEMENT PROJECT (A DIVISION OF M/S RAMKY ENVIRO ENGINEERS LTD., SY. NO. 75-85 OF PEMMANAHALLI VILLAGE AND SY. NO. 7, 8 & 9 OF THIMMANAYAKANAHALLI VILLAGE, KIADB INDUSTRIAL AREA, DABASPET, NELAMANGALA TALUK, BANGALORE RURAL DISTRICT- 562 111

1. M/S Karnataka Waste Management Project (A Division Of M/S Ramky Enviro Engineers Ltd.. is hereby authorised under Rule 6 of the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 to Operate Common Hazardous Waste Treatment and Disposal Facility at Sy. No. 75-85 Of Pemmanahalli Village And Sy. No. 7, 8 & 9 of Thimmanayakanahalli Village, KIADB Industrial area, Dabaspet, Nelamangala Taluk, Bangalore Rural District- 562 111. The facility is authorised to collect the hazardous waste, transport , storage, treatment and dispose the hazardous waste generated from other industries authorised by the Board with capacities as under

   i) To Dispose of Hazardous waste in Secured landfill of capacity not exceeding 40,000 T/Annum
   ii) Incineration of Hazardous Waste - using Incinerator of capacity 12,528 TPA and shall confirm to following ;

   Bio-degradable organics <5%, Non Biodegradable Organics >20% with Calorific value of >2500 Kcal/Kg.

2. The Categories of waste authorised for disposal through Secured land fill and incineration is given in Annexure- A & B respectively.

3. The Operator of the facility is also authorised to generate, treat and dispose hazardous waste generated during process of operation of Incinerator of Hazardous waste received from outside / DG sets etc., within the CHWTSDF .

4. In view of COVID -19 Pandemic, applicant shall be ready to incinerate the excess incinerable Biomedical waste if need arises, with prior intimation to the Board.

5. The Operator of the CHWTSDF shall only accept the wastes covered under the HW Rules, 2016 and during emergency situation the bio-medical waste shall be accepted for incineration with prior intimation to the Board.

6. Transportation of hazardous wastes shall be done in compliance with the H & OW Rules respectively and the guidelines issued by CPCB/MoEF & CC, Govt of India in this respect from time to time. Suitable transport vehicle, closed containers etc. shall

be provided appropriate with the nature. Characteristics of wastes. The guidelines for transportation given in **Annexure- D** shall be followed.

7. Dedicated vehicles either owned by the facility or leased out by the facility shall be used for transportation of the hazardous waste. However individual authorisation under the Rule. 6(1) of HOW Rules, 2016 shall be obtained for transportation for each of the vehicles.

8. The Occupier of the facility shall provide washing bay for all the vehicles involved in transportation and shall ensure that, vehicles used for transportation shall only be washed in the Washing bay within CHWTSDF .

9. Operator of the facility shall set up the laboratory for analysis of hazardous wastes in accordance with the provisions as recommended in the Memorandum of Understanding. The laboratory shall have the capability to carry out the comprehensive and finger print parameters analysis as may be necessary for treatment and disposal of the hazardous waste

10. The laboratory shall be adequately staffed and equipped to carry out the above work. The laboratory shall be responsible to maintain the analytical records.

11. Operator shall ensure all the installed analytical equipments are in good working condition so as to provide support for required scientific operation of the facility and also to ensure proper stabilization of hazardous waste before disposing the same in land fill.

12. Safety, security, contingency plans, risk management and emergency procedures shall be put in place all the times.

13. The Operator of the facility shall obtain Public Liability Insurance and Shall remit Environment Relief Fund . The same shall always be in force.

OPERATING REQUIRMENTS OF THE CHWTSDF:

All operations involving collection, transport, storage and disposal shall comply with the guidelines / regulations Issued by CPCB / MoEF & CC, Government of India from time to and stipulated in the authorization under Rule 5 of the HW Rules. The Operator should ensure the hazardous wastes from the generators are accepted at the facility in compliance of the manifest notified under the said rules through Hazardous Waste Transporter authorized by KSPCB.

1. **Overall responsibility of the Operator:**

   a) Accepting hazardous wastes at CHWTSDF from the generators authorized by KSPCB

b) Establishing a system for optimal movement of hazardous wastes transportation and treatment and disposal operations

c) Operating the CHWTSDF as per conditions stipulated in the authorization as well as guidelines issued by CPCB/MoEF & CC from time to time..

d) Undertaking cleanup operation and remediation in case of contamination resulting from CHWTSDF or during transportation of hazardous waste by Operator of the facility. .

e) Compliance of regulations concerning occupational safety and health of CHWTSDF employees.

2. Sequence of Operations at the CHWTSDF :

a) Hazardous wastes and its Comprehensive Analysis (CA) done at time of entering MOU shall be received by Operator from the generator

b) The operator shall examine the report and plan pathway for hazardous waste treatment and disposal.

c) Upon confirmation of the same by the operator to the generator(sender) the waste shall be dispatched to the CHWTSDF accompanied by transport manifest.

d) Upon receipt at the facility, the hazardous wastes shall be weighed and properly tagged.

e) Hazardous waste shall then undergo a visual inspection to confirm the physical appearance.

f) A representative sample of the hazardous waste shall be collected and sent to the on-site laboratory for Finger Print Analysis (FPA).

g) The result of the Finger Print Analysis (FPA) shall be compared with the results of Comprehensive Analysis (CA).

h) Upon confirmation, hazardous waste shall be sent for CHWTSDF operations accordingly through the identified pathway.

3. Storage at Generator's premises:-

It is the responsibility of the Operator to inform the Generator about non-compatible wastes so that the generator may take precautions against mixing or storing of such wastes. The Operator shall have to educate the Generator's staff to make on-site storage in colour coded containers that are supplied by the Operator. The sizes of the containers, drums, trolleys, etc. shall be governed by the volume of specific type of waste and carting cycle. While considering this, the Operator shall ensure that the problems like odour, surface water contaminations, ground water percolation etc. does not occur.

4. Pre treatment at Sender (Generator) place:

This aspect is basically for making the waste more amenable for transport and further treatment. This can be done by way of neutralization, oil & grease removal, change in form, dewatering etc, so as to render such waste less hazardous. This activity should be done in scientific manner and the pollution so generated would have to be treated so as to meet the standards as stipulated in the consent order. The Operator of the facility shall advise the generator to make the waste amenable for transport.

5. Pre- Transportation :

1.1 The Operator shall not accept hazardous wastes from a generator/Sender unless six-copy (with colour codes) manifest is generated and provided by the generator/sender himself.

1.2 The transporter shall give two copies of the manifest signed and dated to the generator and retain the remaining 4-copies to be used for further necessary action prescribed in the HW Rules.

1.3 This aspect shall include the envisaged strength of fleet of hazardous waste transportation vehicles that the Operator desires to place in service.

1.4 The transport vehicle shall be designed suitably to handle and transport the hazardous wastes of various characteristics. The transportation may include transferring of the containers or contents. In both the cases, However, care shall be taken that non-compatible wastes are not mixed. The wastes shall be transported in closed manner at all times.

1.5 Necessary precautions should be taken as envisaged under the guidelines issued by MoEF in 1991, CPCB in 1998 and Central Motor Vehicles Rules, 1989. There should be a garage / workshop to inspect cushioning springs, sparking from silencer, engine getting hot, staring trouble, washing of vehicles, closing arrangement etc.

1.6 Pre-transportation operations shall include pre-inspection of tankers/ containers before filing, to check for cleanliness / washing followed by packaging labelling and marking Drivers should be trained and knowledge should be provided regarding TREM (Transport Emergency) Cards and the manifest stations after unloading of wastes and not in the generator's premises before loading of fresh waste. Old label shall be removed to avoid misleading message. Proper documentation shall be done as per HW Rules.

6. Loading & Transportation

6.1 Since the transportation cargo is hazardous in nature, it is essential that mechanical loading of containers takes place with the help of mobile or in-built cranes / loading equipment in the transportation vehicles meant for transporting the hazardous wastes. Portable or inbuilt cranes should be engaged to lift the containers and place them on

the transporting vehicles. Spillages should be avoided through measures such as checking shock absorbing capacity of vehicles, road surfaces, free board in the containers, curvature of the roads, unsecured fastening of drums etc.

6.2 Manifest documents or a change of custody receipt books is essential. A location map may be prepared on a daily basis where every entry of hazardous waste load is shown.

7. Spillage Handling

Spillage during handling should be avoided by adopting good housekeeping practices and upkeep of storages/handling equipment Operator would have transporting staff and provide them with instructions to use the TREM Cards to deal with files and accidents and should equip with signs, placards, etc. This aspect should also be covered under the scheme.

The Operator shall immediately inform KSPCB and other regulatory authorities in case of spillage, leakage or other accidents during transportation.

8. Storage at CHWTSDF :

Separate area should be earmarked for storing the waste at CHWTSDF for storing incinerable waste and Landfillable which requires stabilization. The storage area may consist of different cells for storing different kinds of hazardous wastes. In designing these cells, the following points shall be taken into consideration.

i. That ignitable, reactive and non-compatible wastes should be stored separately.

ii. That wastes containing volatile solvents or other low vapour pressure chemicals should be adequately protected from direct exposure to sunlight.

iii. The storage area should have a proper containment system. The containment system should have a collection area to collect and remove any leak, spill or precipitation.

iv. It should be designed in such a way that the floor level of the storage area is least 150 mm above the maximum flood level.

v. The operator should put in place a system for inspection of the storage also to check the conditions of the containers, spillages, leakages etc proper records as may specified by KSPCB in the authorization.

vi. The hazardous wastes should not be stored for more than 90 days at this temporary storage area.

vii. In case the waste is not in accordance with the authorization issued by KSPCB to the generator, the operator shall reject the wastes. Intimation to this effect shall be immediately sent to KSPCB for further advice.

viii. Incinerable hazardous wastes shall be stored as per the guidelines issued by Central Pollution Control Board for storing of incinerable hazardous wastes.

9. Waste Treatment / Stabilization

Waste Treatment / Stabilization process shall be designed to convert hazardous wastes in the form of non-aqueous liquids, semi-solids or reactive solids in to less teachable solids that can be then deposited directly into the secured landfill. The treatment / stabilization operations shall be carried out for all wastes identified for the purpose so as to minimize their contaminant leaching potential so as to change the nature of such wastes to a less hazardous category. Treatment / stabilization shall involve immobilization of leachable materials by fixation of non-reactive solids, reduction of volume, reducing contaminant level of organic / inorganic components. Suitable Technology shall be selected depending on the nature of waste, physical properties, option for technology applications cost. etc. The treated wastes shall be assessed for compatibility with other wastes as with liner system used before being land filled.

10. Record keeping

A day to day record with (weekly, monthly, quarterly and annual) extracts shall be prepared separately for land fillable and incinerable waste.

Operator shall have to devise a separate format for daily record or logbook. This shall include:

a) Hazardous **waste** generation
Category number
Origin of manufacturing activity.

b) Description of hazardous waste.
Physical form & Chemical form
Quantity (volume & weight)

c) Details of
Daily method of storage of hazardous waste
Daily method of treatment of hazardous waste

d) **Details of transportation**
Name and address of consignee of package
Mode of packing
Mode of transportation
Date of transportation
Quantity transported

e) **Details of disposal of hazardous waste (date wise)**

Date of disposal

Concentration of hazardous material in the final waste form

Details of stabilization.

Site of disposal (identify the location on the relevant layout drawing for reference)

Method of disposal (incinerated/land filled.

f) **Data on environmental surveillance**

Date of measurement

Ground water (sampling location, depth of sampling, results)

Soil (sampling location, depth of sampling, results)

Air (sampling location, data)

Any other (keep record) and data base on the above aspect shall be developed within one month and the credentials (user ID & PW) shall be made available to the Board.

g) **Remark (like discrepancy in manifest etc) & Details of environmental surveillance**

- Date of measurement
- Ground water (sampling location, depth of sampling, results)
- Soil (sampling location, depth of sa mpli ng, res ults)
- Air (sampling location, data)

Any other **(keep** record)

Accident Reporting

- Date and time of accident
- Sequence of event leading to accident
- Name of hazardous waste involved in the accident
- Chemical data -sheet assessing effect of accident on health and environment
- Emergency measures taken
- Step to prevent recurrence of such wastes.

h) The Operator of the facility shall also maintain a record of inspections and visits of officials from KSPCB, CPCB, Directorate of factories, Department of Ecology an Environment, Government of Karnataka, MoEF & CC, South Zone, & Local authorities. This should be followed by compliance report.

SENIOR ENVIRONMENTAL OFFICER
WASTE MANAGEMENT CELL
KSPCB

ANNEXURE-A

a) Categories of Waste authorised for disposal in land fill.

Waste Stream No as per Schedule - I	Description of Hazardous Waste for land fill	Authorized quantity of hazardous waste	Treatment and disposal methods to be adopted
10.1	Residues Containing Cadmium And Arsenic	40,000 TPA	Shall be collected from the hazardous wastes generating industries from Karnataka State and transported through designated vehicles to the TSDF site and stabilized in stabilization pits provided within the industry and then land filled by scientific procedure.
11.4	Flue Gas Dust And Other Particulates		
11.5	Drosses and waste from treatment of salt sludge		
12.1	Acidic and alkaline residues		
12.3	Spent bath and sludge containing sulphide, cyanide and toxic metals		
12.5	Phosphate Sludge		
12.6	Sludge From Staining Bath		
12.8	Plating Metal Sludge		
13.6	Residuces from coke oven by product plant		
15.2	Discarded Asbestos		
17.1	Residues Dusts Or Filter Cakes		
17.2	Spent Catalyst		
18.1	Spent Catalyst		
18.4	Chromium Sludge From Water Cooling Tower		
21.1	process Wastes, Residues and sludge		
24.1	Chemical Residues		
26.1	Process waste sludge/residues containing acid, toxic metals, organic compounds		
28.1	Process Residue and wastes		
28.3	Spent carbon		
31.1	Process residue and wastes		
32.2	Corrosive Wastes Arising From Use Of Strong Acid And Bases		
34.1	Chemical-containing residue arising from decontamination.		

34.2	Sludge from treatment of waste water arising out of cleaning / disposal of barrels/containers	40,000 TPA	Shall be collected from the hazardous wastes generating industries from Karnataka State and transported through designated vehicles to the TSDF site and stabilized in stabilization pits provided within the industry and then land filled by scientific procedure.
35.1	Exhaust Air or Gas cleaning residue		
35.3	Chemical Sludge From Waste Water Treatment		
35.5	Chromium sludge from cooling water		
37.1	Sludge from wet scrubbers.		
37.2	Ash from incinerator and flue gas cleaning residue		
37.3	Concentration or evaporation residues		
6.2	Zinc fines or dust or ash or skimmings in dispersible form		
8.2	Sludges And Filter Cakes		
8.3	Flue Gas Dust And Other Particulates		
9.1	Lead bearing residues		
9.2	Lead ash or particulate from flue gas		

SENIOR ENVIRONMENTAL OFFICER
WASTE MANAGEMENT CELL
KSPCB

ANNEXURE -B

a) Categories of Waste authorised for Incineration

Waste Stream No as per Schedule -I	Description of Hazardous Waste for incineration	Authorized quantity of hazardous waste	Treatment and disposal methods to be adopted
1.1	Furnace/Reactor Residue And Debris	12,528 TPA	Shall be collected from hazardous waste generators and transported in approved vehicles without causing adverse effect on the environment, stored in the premises. Incinerate the same in an approved incinerator using environmentally sound technology with proper control equipments.
18.2	Carbon residue		
19.1	Residue or sludge containing phenol		
2.2	Sludge Containing Oil		
20.3	Distillation Residues		
20.4	Process Sludge		
21.1	process Wastes, Residues and sludge		
22.2	Process residues		
23.1	Wastes or residues(not made with vegetable or animal materials		
24.1	Chemical Residues		
25.1	Chemical Residues		
26.1	Process waste sludge/residues containing acid, toxic metals, organic compounds		
27.1	process Residues		
28.1	Process Residue and wastes		
28.3	Spent carbon		
28.4	Off specification products		
28.5	Date-expired products		
29.1	Process wastes or residues		
29.2	Sludge containing residual pesticides		
3.1	cargo residue, washing water and sludge containing oil		
3.2	cargo residue and sludge containing chemicals		
3.3	Sludge And Filters Contaminated With Oil		
33.2	Contaminated cotton rags or other cleaning materials		

4.1	Oily Sludge Emulsion	12,528 TPA	Shall be collected from hazardous waste generators and transported in approved vehicles without causing adverse effect on the environment, stored in the premises. Incinerate the same in an approved incinerator using environmentally sound technology with proper control equipments.
4.2	Spent Catalyst		
4.4	Organic Residues From Process		
4.5	Spent Clay Containing Oil		
5.2	Wastes Residues Containing Oil		

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ANNEXURE -C

a) Categories of Waste authorised to be generated , stored and disposed

Waste Stream No as per Schedule -I	Description of Hazardous Waste generated	Authorized quantity of hazardous waste	Treatment and disposal methods to be adopted
Incineration Plant			
37.2	Incineration ash and flue gas cleaning residue and Salts generated from Spray drier	1000 MT/A	Shall be stored in secured manner and disposed in land fill
Common TSDF Facility			
5.1	Used Oil	1.5 KL/A	Shall be stored in secured manner and hand over to authorized re-processors
5.2	Waste residue containing oil	0.5 MT/A	Shall be stored in secured manner and hand incinerated in house
5.2	Oil contaminated filters	10 No's/A	Shall be stored in secured manner, and incinerated in house
5.2	Used bags (Contaminated with chemicals and oil)	2.0 MT/A	Shall be stored in secured manner and incinerated in house
5.2	Contaminated hand gloves, gum boots etc.,	600 Pairs/A	Shall be stored in secured manner and incinerated in house
33.1	Discarded containers	200.0 MT/A	Shall be stored in secured manner and handed over to authorized recyclers.

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ANNEXURE -D

TRANSPORTATION:

1. The transporter shall comply with the following ;
   - i) Transporter should have valid "Pollution Under Control Certificate" for the vehicle and the same shall be valid all the times.
   - ii) Vehicles shall be painted preferably in blue colour with white strip of 15 to 30 cm width running centrally all over the body.
   - iii) Vehicle should be fitted with mechanical handling equipment as may be required for safe handling and transportation of the wastes.
   - iv) The words "HAZARDOUS WASTE" shall be displayed on all sides of the vehicle in Vernacular Language, Kannada & English.
   - v) Name of the transporter and the facility to which it has entered agreement for transport of Hazardous or, as the case may be shall be displayed.
   - vi) Vehicles shall be fitted with roll-on/roll-off covers if the individual containers do not possess the same.
   - vii) Carrying of passengers is strictly prohibited and those associated with the waste haulers, shall be permitted only in the cabin.
   - viii) Transporter shall carry documents of manifest for the wastes during transportation as required under Rule 20 of the Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
   - ix) The truck shall be dedicated for transportation of hazardous wastes and they shall not be used for any other purpose.
   - x) The vehicle shall carry first aid kit, spill control equipment and fire extinguisher;
   - xi) HW transport vehicle shall run only at a speed specified under Motor & Vehicle Act in order to avoid any eventuality during the transportation of Hazardous Waste.
   - xii) Educational qualification for the driver shall be minimum of 10^{th} pass (SSLC). The driver of the transport vehicle shall have valid driving license for heavy vehicles from the State Road Transport Authority and shall have experience in transporting the chemicals.
   - xiii) Driver shall be properly trained for handling the emergency situation and safety aspects involved in the transportation of hazardous wastes.
   - xiv) The design of the trucks shall be such that there is no spillage during transportation;

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