BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE

ORIGINAL APPLICATION NO. 14/2025 (WZ)

IN THE MATTER OF: -

KAILAS NARKE — **APPLICANT**

VERSUS

MAHARASHTRA ENVIRO POWER LTD. & 10 ORS. — **RESPONDENT(S)**

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(Pratik D. Bharne)
Scientist 'E' & Regional Director
Central Pollution Control Board
क्षेत्रीय निदेशक / Regional Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
क्षेत्रीय निदेशालय, पुणे / Regional Directorate, Pune
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Envt. Forest & Climate Change, Govt. of India
सर्वे नं. ११०, हीराबाई धनकुडे हॉल, बाणेर रोड, बाणेर, पुणे – 411045
Sr. No. 110, Hirabai Dhankude Hall, Baner Road, Baner, Pune-411045

Place: Pune
Date: 02/07/2025

NOTARY
MANISHA SAMEER CHITNIS
PUNE (MAHARASHTRA)
REGD. NO. 20258
EXP. DATE 07/03/2030
GOVERNMENT OF INDIA

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
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ORIGINAL APPLICATION NO. 14/2025 (WZ)

IN THE MATTER OF: -

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VERSUS

MAHARASHTRA ENVIRO POWER LTD. & 10 ORS. — **RESPONDENT(S)**

REPLY ON BEHALF OF RESPONDENT NO.11, CENTRAL POLLUTION CONTROL BOARD (CPCB)

1. That, the Hon'ble National Green Tribunal, Western Zone Bench (WZ), Pune (hereinafter referred to as "Hon'ble NGT") vide its order dated 04/04/2025 in Original Application (hereinafter referred to as "OA") No. 14/2025 (WZ) has sought the reply of Central Pollution Control Board (hereinafter referred to as "CPCB") in the instant matter. Thereby, the reply is made in succeeding paragraphs.

2. That, at the outset, the Answering Respondent deny all claims, contentions, allegations and averments against the Answering Respondent i.e. CPCB in the above OA contrary to anything stated or submitted in this reply. Nothing in the OA may be deemed to have been accepted or admitted by the Answering Respondent for want of a specific denial or on ground of non-traverse, save any averment which has been expressly admitted hereinafter.

3. That, CPCB is constituted under Section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (hereinafter referred to as "Water Act, 1974"). It performs the functions under the Water Act, 1974, The Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred to as "Air Act, 1981") and The Environment

(Protection) Act, 1986 (hereinafter referred to as "E(P) Act, 1986"). State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) in every State/Union Territory have been constituted under Section 4 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 5 of the Air (Prevention and Control of Pollution) Act, 1981 and are responsible for implementation of the provisions of both the Acts in their respective State/Union Territory.

4. That, the matter is related to air, water, soil pollution and damage to the environment, adverse impact on public health & livestock in the surrounding area of villages viz. Nimgaon Bhogi, Annapur and Dhok Sangvi etc. due to the activities of M/s Maharashtra Enviro Power Ltd., (MEPL) MIDC, Ranjangaon, Tal. Shirur, Dist. Pune, a Common Hazardous Waste Treatment Storage Disposal Facility (hereafter referred to as the "facility"). Further, allegations are about the non-compliances, violations of terms & conditions of environment clearance and Consent to Operate by the facility.

PRELIMINARY SUBMISSION:-

5. That, it is humbly submitted that CPCB carried-out inspection cum monitoring of the facility and surrounding area of villages viz. Nimgaon Bhogi, Annapur and Dhok Sangvi w.r.t the matter raised in Zero Hour in Lok Sabha on 29/07/2024 by Dr. Amol Ramsing Kolhe, Hon'ble Member of Parliament (Lok Sabha), which is regarding alleged water & land contamination in Shirur Parliamentary Constituency due to the operations of the facility. During the inspection cum monitoring, representative grab samples of water within the facility; effluent from inlet & outlet of effluent treatment plant (ETP) of the facility and surface water and ground water were collected from the alleged area(s), outside the facility.

6. That, it is humbly submitted that based on the monitoring results of the surface & ground water samples and observations & findings, CPCB vide letter no. CP-21/87/2024-WM-II-HO-CPCB-HO/5290, dated 12/09/2024, requested the Respondent no. 2 i.e. Maharashtra Pollution Control Board (MPCB) to take cognizance of the observations made in the CPCB report and ensure time bound compliance by the facility for containment of sources of contamination and remediation of contaminated surface and groundwater bodies. Further, MPCB was

also requested to provide the Action Taken Report in compliance to the CPCB letter, dated 12/09/2024. Copy of the CPCB letter, dated 12/09/2024 is annexed and marked as **Annexure-R11-I**. Relevant extract of the aforesaid CPCB letter, dated 12/09/2024 is reproduced as below:

i. The existing hydro-geological conditions at site indicate that subsurface water flow comes in contact with a portion of secured landfill below the ground level, thereby the risk of contamination from landfills exists.
ii. The facility has constructed unlined lagoon to receive surface run-off from the facility towards northern end of the facility, between closed cells 4 and 5.
iii. The facility has constructed a 700-meter trench to receive surface run-off and sub-surface seepage/flow from north-north-east side of the facility which discharges through cascade structure followed by a lined drain, which meets natural nala leading to Pazar Talav, Nimgaon Bhogi. A temporary arrangement was made to collect the water from cascade structure and pumping to unlined pond.
iv. Facility also constructed encasing trench of length 130 mtr towards north north-west boundary to received surface run-off and seepages, which discharges into a lined pond. The accumulated water from lined pond is pumped back to unlined lagoon.
v. There was active seepage from closed cell#2, which is being collected into encasing trench and ultimately pumped back to unlined lagoon.
vi. During inspection, there were visual evidences of breach of surface run-off from the outlet of lined drain beneath the compound wall and as well as near the North-West boundary of the facility. This lead to flow of contaminated water into Pazar Talav, Vill. Nimgaon Bhogi.
vii. The water sample collected from the encasing drain was found contaminated w.r.t. TDS: 29,544 mg/l; BOD: 521 mg/l; COD: 1,222 mg/l; Sulphide: 3.96; Boron: 9.15 mg/l and Manganese: 4.1 mg/l, including NH_3-N: 348 mg/l; TKN: 381 mg/l; respectively. Similar level of contamination was also found in accumulated water at unlined lagoon.
viii. The water sample collected from the trench was also contaminated w.r.t. TDS: 27,506 mg/l; BOD: 454 mg/l; COD: 1,318 mg/l; Sulphide: 4.11 mg/l; NH_3-N: 362

mg/l; TKN: 478 mg/l; Boron: 9.38 mg/l and Manganese: 3.71 mg/l respectively. Similar level of contamination was found at upstream of the trench.

ix. As per the interaction with few villagers/farmers of Nimgaon Bhogi Village, it is gathered that during monsoon season frequent overflow of surface run-off has been witnessed from the facility into the Pazar Talav through the natural drain and thereby making the surface water unsuitable for irrigation as well as for cattle consumption.

x. Water sample collected from a natural drain, downstream of the facility, is also contaminated in the similar range to that of trench. Water in Pazar Talav and at the out of Talav is also contaminated.

xi. Groundwater samples collected from the open dug well near Pazar Talav indicate high levels of contamination with BOD: 193 mg/l; COD: 560 mg/l; TDS: 12,944 mg/l; Sulphide: 0.35 mg/l; NH_3-N: 25 mg/l; TKN: 30 mg/l; Boron: 3.38 mg/l; Manganese: 4.89 mg/l; and Cyanide: 0.07 mg/l. The ground water is unsafe for human, agriculture or animal consumption.

xii. Surface and groundwater samples were collected from 8 locations of alleged impact areas outside the facility. Out of which, at 2 locations the water is being used for drinking purposes and for rest of 6 locations the water is being used only for agricultural activities.

xiii. The water quality analysis of Ground water collected from open dug well of Annapur Gram Panchayat, Near Ghahaninath Mandir, Annapur (2.95 km from the facility) reveals that it has elevated levels of TDS, total hardness, fluoride, and sulphide, likely due to its groundwater source and the underlying strata. For Surface water collected from Ghod River i.e. Jack well of Shirur Municipal Council, d/s of Gohd River, Shirur (situated 8.2 km away from the facility), higher concentrations of TDS, total hardness, fluoride, sulfate, and cyanide were noted. Both the locations are separated by hillocks, agricultural fields, and domestic settlements from the facility. However, the water is treated at a local Water Treatment Plant before use for drinking purpose. In both cases, other monitored parameters meet the Indian Standard Drinking Water Specification (IS 10500:2012) acceptable limits.

7. That, it is humbly submitted that this Answering Respondent pursued the matter with the Respondent no.2 i.e. MPCB vide email communication dated 11/10/2024

requesting for necessary action in compliance to the CPCB letter, dated 12/09/2024. Copy of the email communication addressed to MPCB is annexed and marked as **Annexure-R11-II**.

It is further humbly submitted that Respondent no. 2 i.e. MPCB vide its letter dated 06/06/2025 submitted the present status report of M/s Maharashtra Enviro Power Ltd., (MEPL) with compliance status of the "Interim Directions issued under section 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974, 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981 & Hazardous and Other Wastes (M & TM) Rules, 2016 and amendments thereafter" issued on 01/10/2024 by MPCB has also been provided. Copy of the status report submitted by MPCB is annexed and marked as **Annexure-R11-III.**

8. That, it is humbly submitted for effective management of Hazardous and Other Wastes, Ministry of Environment Forest and Climate Change (hereinafter referred as MoEF&CC) has notified Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (hereinafter called as HOWM Rules, 2016) vide G.S.R No. 395 (E) on 04/04/2016 in supersession of the earlier Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. The HOWM Rules, 2016 lay down provisions for storage, packaging, transportation, recycling, utilization, pre-processing, co-processing, treatment, import, export, offering for sale, transfer or disposal, etc. of the hazardous and other wastes. As per the prevailing HOWM Rules, 2016, CPCB has been entrusted with responsibility for preparation and updating of guidelines/SOPs for management of hazardous and other Waste.

9. That, as per Rule 21 of the HOWM Rules, 2016, the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) have been entrusted with duty to grant and renewal of Authorization; ensure compliance of the various provisions stipulated under the aforesaid Rules through monitoring and taking of actions against defaulters.

10. That, CPCB published guidelines titled "Guidelines for Pre-Processing and Co-Processing of Hazardous and Other Wastes in Cement Plant as per HOWM Rules,

2016", refers the provisions of HOWM Rules, 2016 on wastes management hierarchy, wherein, prevention, minimization, reuse, recycling, recovery, utilisation including pre-processing and co-processing are to be envisaged prior to considering the option of disposal through incineration or secured landfilling. The aforesaid guidelines highlights about benefits of co-processing of hazardous wastes & other wastes in cement kilns, pre-processing of hazardous wastes & other wastes for co-processing, standard operating procedures for environmentally sound handling, packaging, labelling, collection, transportation, storage waste reception & acceptance and responsibility of occupier of hazardous & other wastes and procedure for obtaining authorisation for co-processing of hazardous wastes & other wastes. Copy of the aforesaid guidelines is available on the following link of the CPCB website- https://cpcb.nic.in/uploads/hwmd/GUIDELINES-ON CO-ProcessinginCement.pdf and a copy of the same is also annexed and marked as **Annexure-R11-IV**.

PARA-WISE SUBMISSIONS:-

11. That, the averments made in Para nos. 1 to 11 are about the details of Applicants and Respondents. The same are matter of records and need no comments from this Answering Respondent.

12. That, the averments made in Para no. 12.1 (i to vii) under the heading "Facts and Circumstances of the present application" are about various permissions i.e. Consent to establish/Consent to operate under Water Act, 1974 and Air Act, 1981; Authorization under HOWM Rules, 2016 granted/renewed by MPCB to the facility from time to time and conditions stipulated therein and MPCB not furnishing copy of 1st Environmental Clearance to the Applicant by MPCB. It is humbly submitted that the said averments are related to MPCB and invites no comments from this answering respondent.

Further, with regard to submission of the Applicant vide Para no. 12.1 (iv) mentioning about CPCB's communication with the Respondent no. 3 i.e. MPCB w.r.t. granting pre-processing permissions in a decentralise manner without creating obstacle to co-processing, it is humbly submitted that CPCB vide its letter dated 02/05/2023 communicated the provisions of the HOWM Rules, 2016 regarding waste

management hierarchy wherein Co-processing has been specified as preferred option over disposal. Further, it was informed that MPCB may authorize the industries intending to send their hazardous waste for Co-processing in Cement plants with condition that the waste shall be pre-processed at any facility including Common TSDF having adequate infrastructure as outlined in the above guidelines after verification of the same. The Copy of the said letter is annexed and marked as **Annexure-R-11-V.**

13. That, the averments made in Para no. 12.2 (i to viii) and Para no. 12.3 under the heading "Facts and Circumstances of the present application" are about various non-compliances by the Respondent no. 1 i.e. M/s Maharashtra Enviro Power Ltd., as mentioned by the Applicant, which are based on the inspections carried-out by the Respondent no. 3 i.e. MPCB and various actions proposed by the Respondent no. 3 against the Respondent no. 1. It is humbly submitted that the said averments are related to MPCB and this Answering Respondent has no comments to offer on the same.

14. That, the averments made in Para no. 13 (13.1 to 13.18) are about various grievances and representations addressed by the Gram Panchayat, villagers of Nimgaon Bhogi, Annapur, Shirur, Kardelwadi, Tardobachi, Aamdabad, Saradwadi & Ors. to the MPCB, and the District Collector against the facility; various action taken by the MPCB against the Respondent no. 1. It is humbly submitted that the said averments are related to MPCB and this Answering Respondent has no comments to offer on the same.

15. That, the averments made in Para nos. 14 (14.1 to 14.7) and 15 are about various action taken by the Respondent no. 3 i.e. MPCB against the Respondent no. 1, and application addressed by the Applicant to the Respondent no. 3 i.e. MPCB for seeking information under Right to Information Act, 2005. It is humbly submitted that the said averments are related to MPCB and this Answering Respondent has no comments to offer on the same.

16. That, the averments made in Para no. 16 under the heading "Grounds for filing of Application" (16.1 and 16.3) wherein reference of the CPCB's guidelines titled

"Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" has been made and submission has been made that MPCB had not initiated any substantive action against the facility. In this regard, it is humbly submitted that CPCB has published guidelines "Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016". Copy of the aforesaid guidelines is available on the following link of the CPCB website – https://cpcb.nic.in/uploads/hwmd/Guidelines_HW_1.pdf and copy of the same is annexed and marked as **Annexure-R11-VI**.

Further, the averments related to non-initiation of substantive action relates to MPCB and this Answering Respondent has no comments to offer on the same.

17. That, the averments made in Para no. 16 under the heading "Grounds for filing of Application" (16.2, 16.6 and 16.8) are submissions made by the Applicant regarding non-development of monitoring mechanism by MPCB; exclusive permission issued by MPCB for pre-processing of hazardous waste and MPCB keeping the permissions to various industries pending. The said averments are related to MPCB and this Answering Respondent has no comments to offer on the same.

18. That, the averments made in Para no. 16 under the heading "Grounds for filing of Application" (16.4) are about 15-days' notice served by the Applicant to the various respondents; report of Ground Water Survey and Development Agency, Government of Maharashtra and submissions of the Applicant that MPCB is the implementing agency of various environmental legislations in the State of Maharashtra. In this regard, it is humbly submitted that the Applicant has not served copy of notice to this Answering Respondent and hence, this Answering Respondent has no comments to offer on the same.

19. That, the averments made in Para no. 16 under the heading "Grounds for filing of Application" (16.5) are about exclusive permission issued by MPCB to the facility for pre-processing hazardous waste in its jurisdiction; CPCB's communication with the Respondent no. 3 i.e. MPCB w.r.t. not to restrict the permission/s to be granted for Pre-Processing to any industry, operation or process, so as to ensure utilization of

hazardous and other wastes for the purposes of Co- Processing. In this regard, the submissions made by this answering respondent at para 12 above may kindly be referred, the same is not being reiterated for the sake of brevity. Further, averments related to exclusive permissions pertains to MPCB, hence, calls no comments from this answering respondent.

20. That, the averments made in Para no. 16 under the heading "Grounds for filing of Application" (16.7) are about allegation of the Applicant that operation of Pre-Processing facility by the Respondent no.1 has caused serious environmental damage in the surrounding areas and thereby exclusive permission for pre-processing shall not be granted to MEPL. In this regard, it is humbly submitted that as per the Section 25 of the Water Act, 1974 and section 21 of the Air Act, 1981, the concerned SPCB/PCC is the responsible agency for grant/refuse/revoke the consents. Further, as per the Rule 21 and Schedule VII of the HOWM Rules, 2016, the SPCBs/PCCs are entrusted with duties for Grant and renewal of authorization; Monitoring of compliance of various provisions of the said Rules and to take action against violations of these rules among the other duties.

21. That, the averments made in Para no. 17 under the heading "Limitation" and Para no. 18 under the heading "Prayers clauses" (Para nos. a to i) are regarding filing of application within limitations of 06 months and various prayers made before Hon'ble Tribunal. This answering respondent has no comments to offer in this regard.

22. That, in light of the above submissions, this Answering Respondent No. 11 i.e. CPCB shall abide by any order(s) or direction(s) passed by this Hon'ble Tribunal in the present OA.

Pratik D. Bharne
(Scientist 'E' & Regional Director)
Central Pollution Control Board

क्षेत्रीय निदेशक / Regional Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
क्षेत्रीय निदेशालय, पुणे/Regional Directorate, Pune
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Envt. Forest & Climate Change, Govt. of India
सर्वे नं. ११०, हीराबाई धनकुडे हॉल, बाणेर रोड, बाणेर, पुणे - 411045
Sr. No. 110, Hirabai Dhankude Hall, Baner Road, Baner, Pune-411045

NOTARY MANISHA SAMEER CHIT PUNE (MAHARA REGD. NO EXP. GOVERNM

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE

ORIGINAL APPLICATION NO. 14/2025 (WZ)

IN THE MATTER OF: -

KAILAS NARKE — APPLICANT

VERSUS

MAHARASHTRA ENVIRO POWER LTD. & 10 ORS. — RESPONDENT(S)

AFFIDAVIT

I, Pratik D. Bharne, working as Scientist 'E' & Regional Director in Central Pollution Control Board, Regional Directorate, Survey No. 110, Hirabai Dhankude Multipurpose Hall, Baner Road, Baner, Pune – 411045, do hereby solemnly affirm, declare on oath and state as under:

1. That the deponent is authorized representative to represent the Respondent CPCB in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent and authorized to verify, sign and swear this affidavit on behalf of the Respondent CPCB.

2. That the accompanying reply may be read part and parcel of the present affidavit as I am competent to swear this affidavit.

3. That the contents there of are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.

DEPONENT

क्षेत्रीय निदेशक / Regional Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
क्षेत्रीय निदेशालय, पुणे/Regional Directorate, Pune
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Envt. Forest & Climate Change, Govt. of India
सर्वे नं. ११०, हीराबाई धनकुडे हॉल, बाणेर रोड, बाणेर, पुणे - 411045
Sr. No. 110, Hirabai Dhankude Hall, Baner Road, Baner, Pune-411045

VERIFICATION

Verified at Pune on this day.... of July, 2025 that the contents of the above reply are correct and true on the basis of the record of the cases as mentioned in the day to day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

DEPONENT – Respondent No.11

क्षेत्रीय निदेशक / Regional Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
क्षेत्रीय निदेशालय, पुणे/Regional Directorate, Pune
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Envt. Forest & Climate Change, Govt. of India
सर्वे नं. ११०, हीराबाई धनकुडे हॉल, बाणेर रोड, बाणेर, पुणे - 411045
Sr. No. 110, Hirabai Dhankude Hall, Baner Road, Baner, Pune-411045

COUNSEL for Respondent No. 11

NOTARY MANISHA SAMEER CHITNIS PUNE (MAHARASHTRA) REGD. NO. 20258 EXP. DATE 07/03/2030 GOVERNMENT OF INDIA

Noted & Registered
At.Sr.No. 386/2025

BEFORE ME

MANISHA SAMEER CHITNIS
NOTARY
GOVERNMENT OF INDIA

02 JUL 2025

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Annexure-R11-I

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

SPEED POST

F. No. CP-21/87/2024-WM-II-HO-CPCB-HO 5290

12th September 2024

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
7 OCT 2024
पुणे/आवक संख्या 1457

To

The Member Secretary,
Maharashtra Pollution Control Board,
Kalptaru Point, 2nd - 4th Floor,
Opp. Cine Planet, Sion Circle, Sion (E),
Mumbai – 400 022, Maharashtra

Sub: Matter raised during zero hour on 29/07/2024, by Dr. Amol Ramsingh Kolhe, Hon'ble M.P., regarding water & land contamination in Shirur Parliamentary Constituency – reg.

Sir,

With reference to the Office Memorandum No. ZH/XVIII/II/2024/LSS/TO/934, dated 30/07/2024, from Lok Sabha Secretariat (copy enclosed), regarding matter raised in zero hour on 29/07/2024, by Dr. Amol Ramsing Kolhe, Hon'ble M.P., Lok Sabha, for alleged water & land contamination in Shirur Parliamentary Constituency due to the operations of the M/s Maharashtra Enviro Power Ltd., (MEPL) MIDC, Ranjangaon, a Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF).

In this regard, Central Pollution Control Board (CPCB), Regional Directorate-Pune (RD-Pune) carried out inspection of the facility during 13/08/2024 to 14/08/2024 wherein various issues related to water pollution were observed. The observations made during the said visit is enclosed herewith for ready reference. It was reported that MPCB has also received several complaints about groundwater contamination resulting from the facility's operations and discharges into nearby villages and MPCB has taken action from time to time by issuing directions to the facility.

In view of the above, it is requested to take cognizance of the observations made in the CPCB report and ensure time bound compliance by the facility for containment of sources of contamination and remediation of contaminated surface and groundwater bodies. The Action Taken Report may please be provided to this office at the earliest.

Yours faithfully,

Encl: As Above

(B. Vinod Babu)
Scientist 'F' & Head
Waste Management-II Division

Copy to:
The Regional Directorate : For follow-up, please.
Central Pollution Control Board
Survey No. 110, Dhankude, Multi-Purpose Hall,
Baner Road, Baner, Pune

For N/A please.

(B. Vinod Babu)

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032
दूरभाष/Tel: 43102030, 22305792, वेबसाईट/Website : www.cpbc.nic.in

OBSERVATIONS MADE BY CPCB DURING INSPECTION OF M/S MAHARASHTRA ENVIRO POWER LTD., (CHWTSDF) MIDC RANJANGAON W.R.T. MATTER RAISED DURING ZERO HOUR BY DR. AMOL RAMSINGH KOLHE, HON'BLE MEMBER OF PARLIAMENT REGARDING WATER AND LAND CONTAMINATION

Background:

Hon'ble MP Dr. Amol Ramsingh Kolhe has raised the issue of Water and Soil Pollution by M/s Maharashtra Enviro Power Ltd., (MEPL), Ranjangaon, Maharashtra (a Common Hazardous Waste Treatment Storage and Disposal facility). To verify the ground status, a team from CPCB, RD-Pune, conducted an inspection and monitoring of M/S Maharashtra Enviro Power Ltd., (MEPL) and the surrounding areas from 13/08/2024 to 14/08/2024. Water and effluent samples were collected both within the facility and from nearby areas for analysis.

Observations and Findings of CPCB Team:

- The existing hydro-geological conditions at site indicate that subsurface water flow comes in contact with a portion of secured landfill below the ground level, thereby the risk of contamination from landfills exists.
- The facility has constructed unlined lagoon to receive surface run-off from the facility towards northern end of the facility, between closed cells #4 and #5.
- The facility has constructed a 700-meter trench to receive surface run-off and sub-surface seepage/flow from north-north-east side of the facility which discharges through cascade structure followed by a lined drain, which meets natural nala leading to Pazar Talav, Nimgaon Bhogi. A temporary arrangement was made to collect the water from cascade structure and pumping to unlined pond.
- Facility also constructed encasing trench of length 130mtr towards north-north-west boundary to received surface run-off and seepages, which discharges into a lined pond. The accumulated water from lined pond is pumped back to unlined lagoon.
- There was active seepage from lined lagoon, which is being collected into encasing trench and ultimately pumped back to unlined lagoon.
- During inspection, there was visual evidences of breach of surface run-off from the outlet of lined drain beneath the compound wall and as well as near the North-West boundary of the facility. This lead to flow of contaminated waste into Pazar Talav, Vill. Nimgaon Bhogi.
- The water from unlined lagoon was found contaminated with respect to TDS: 29,544 mg/l; BOD: 521 mg/l; COD: 1,222 mg/l; Sulphide: 3.96; Boron: 9.15 mg/l and Manganese: 4.1mg/l, including ammonical parameter NH3-N: 348 mg/l; TKN: 381 mg/l; respectively. Similar level of contamination was also found in accumulated water at unlined lagoon.
- Water collected in trench was also contaminated with respect to TDS: 27,506 mg/l; BOD: 454 mg/l; COD: 1,318 mg/l; Sulphide: 4.11 mg/l; NH3-N: 362 mg/l; TKN: 478 mg/l; Boron: 9.38 mg/l and Manganese: 3.71 mg/l respectively. Similar level of contamination was found at upstream of the trench.
- As per the interaction with few villagers/farmers of Nimgaon Bhogi Village, it is gathered that during monsoon season frequent overflow of surface run-off has been witnessed from the facility into the Pazar Talav through the natural drain and thereby making the surface water unsuitable for irrigation as well as for cattle consumption.
- Water sample collected from a natural drain, downstream of the facility, is also contaminated in the similar range to that of trench. Water in Pazar Talav and at the out of Talav is also contaminated.
- Groundwater samples collected from the open dug well near Pazar Talav indicate high levels of contamination with BOD: 193 mg/l; COD: 560 mg/l; TDS: 12,944 mg/l; Sulphide: 0.35 mg/l; NH3-N: 25 mg/l; TKN: 30 mg/l; Boron: 3.38 mg/l; Manganese: 4.89 mg/l; and Cyanide: 0.07 mg/l. The ground water is unsafe for human, agriculture or animal consumption.

- Surface and groundwater samples were collected from 8 locations of alleged impact areas outside the facility. Out of which, at 2 locations the water is being used for drinking purposes and for rest of 6 locations the water is being used only for agricultural activities.
- The water quality analysis of Ground water collected from open dug well of Annapur Gram Panchayat, Near Ghahaninath Mandir, Annapur (2.95 km from the facility) reveals that it has elevated levels of TDS, total hardness, fluoride, and sulfide, likely due to its groundwater source and the underlying strata. For Surface water collected from Ghod River i.e. Jack well of Shirur Municipal Council, d/s of Gohd River, Shirur (situated 8.2 km away from the facility), higher concentrations of TDS, total hardness, fluoride, sulfate, and cyanide were noted. Both the locations are separated by hillocks, agricultural fields, and domestic settlements from the facility. However, the water is treated at a local Water Treatment Plant before use for drinking purpose. In both cases, other monitored parameters meet the Indian Standard Drinking Water Specification (IS 10500:2012) acceptable limits.

Annexure

Action taken by MPCB from 2019

S. no.	Type of directions	Nature of non-compliances and action proposed
1.	SCN under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 19/12/2019	• Not provided adequate ETP. • Not provided adequate vehicle washing effluent collection tank & its overflow. • Percolation of effluent outside the facility
2.	Proposed Directions u/s 33A of the Water (P & CP) Act, 1974; u/s 31A of the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 07/07/2021	• Discharge of effluent outside the premises through a storm water drain at Northern direction, which is meeting to a natural drain and Pazar Talav at d/s of the facility. • Seepage of coloured effluent from the existing unlined lagoon within the facility, which is going outside the facility at Northern direction. • Failure to arrest the surface run-off from the facility. • Proposal to terminate the services of handling & management of hazardous waste. • Proposal to forfeit the bank guarantee.
3.	SCN under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 22/12/2021	• Accumulation of coloured effluent at pond at North-West boundary of the facility. • Unlined lagoon was found completely filled with coloured effluent, thereby chances of seepage, outside the facility. • Directed to submit the corrective action plan towards the observed non-compliances.
4.	SCN under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 24/01/2022	• Accumulation of coloured effluent at pond at North-West boundary of the facility. • Unlined lagoon was found completely filled with coloured effluent, thereby chances of seepage, outside the facility. • Not completing the construction of cut of trench, to stop seepage. • Directed to submit the corrective action plan towards the observed non-compliances.
5.	Directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 18/02/2022	• To treat the accumulated water in ETP prior sending to CETP. • To provide 2-way pumping & piping arrangement with flow meter to lift the accumulated water from the facility to CETP and to monitor its quality. • To lift & treat the water accumulated outside the facility near compound wall. • To submit bank guarantee of Rs. 10 lakhs.
6.	Interim directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and	• Not to store effluent in unlined lagoon. • Not to discharge effluent treated/untreated outside the facility.

	HOWMR, 2016, dated 08/08/2022	• To submit data on environmental monitoring & peizometric wells, action plan for disposal of accumulated water, to submit compliance of recommendations of NEERI report and bank guarantee of Rs. 10 lakhs and forfeit of earlier bank guarantee of Rs. 5 lakhs.
7.	Directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 13/12/2023	• To construct trenches of approx. 2 mtr. width to collect water ingress from all the nallah streams across the plant within the premises within 03 months. • To submit time bound action plan within 15 days for control of seepages and disposal of 12,000 m^3 surface runoff water which is stored in kaccha pit. • To treat and dispose the accumulated surface runoff which is stored in the kaccha pit within the premises, before ensuing monsoon season. • To submit geological and geohydrological report for the proposed landfill site at Plot No. H-4 & H-4/1 within a period of 02 months. • To submit the fresh bank guarantee of Rs. 10 lakhs towards compliance of directions and forfeit of existing bank guarantee of Rs. 5 lakhs.
8.	Directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 26/08/2024	• Violation of earlier directions dated 13/12/2023 for not disposing the accumulated water stored in unlined lagoon; not submitting the geological and geohydrological report for the proposed landfill site at Plot No. H-4 & H-4/1. • Not taking effective steps to prevent the overflow of surface run-off outside the facility, which meets Pazar Talav.

Annexure-R11-II

Matter raised during zero hour on 29.07.2024, by Dr. Amol Ramsingh Kolhe, Hon'ble,M.P., regarding water & land contamination in Shirur Parliamentary Constituency — reg.

CPCB, Pune < rdpune.cpcb@gov.in >

Fri, 11 Oct 2024 5:53:24 PM +0530

To "ms"<ms@mpcb.gov.in>

Cc "ast"<ast@mpcb.gov.in>,"Pratik Bharne"<pratik.cpcb@gov.in>,"NISHCHAL C" <nischal.cpcb@nic.in>,"Nikhilesh Sanjay Gandhre" <nikhileshsg.cpcb@supportgov.in>

Ref: CPCB Letter No. CP-21/87/2024-WM-II-HO-CPCB-HO/5290 dated 12.09.2024 (Copy Attached)

Sir,

Please find attached herewith letter issued by CPCB w.r.t inspection carried by CPCB in the matter raised in zero hour on 29.07.2024, by Dr. Amol Ramsing Kolhe, Hon'ble M.P., Lok Sabha, for alleged water & land contamination in Shirur Parliamentary Constituency due to the operations of the M/s Maharashtra Enviro Power Ltd., (MEPL) MIDC, Ranjangaon, a Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF) for necessary action.

धन्यवाद,
केंद्रीय प्रदूषण नियंत्रण बोर्ड
क्षेत्रीय निदेशालय, पुणे
020-29912773

LiFE Lifestyle for Environment

G20 भारत 2023 INDIA

वसुधैव कुटुम्बकम्
ONE EARTH • ONE FAMILY • ONE FUTURE

1 Attachment(s)

CPCB Letter dated 12.09.2024…
3.3 MB

MAHARASHTRA POLLUTION CONTROL BOARD
SUB-REGIONAL OFFICE, PUNE-II

Annexure-R11-III

Ph. 9422742901
E-mail: Sropune2@mpcb.gov.in

Jog Center Bldg.
2nd floor, Wakdewadi,
Mumbai – Pune Highway
Pune 411003

"Your service is our duty"

MPCB/ SRO P- II/ 250606-FTS-0206 Date: 06/06/2025

To,

Scientist 'F* & Head,

Waste Management-1I Division,

Central Pollution Control Board,

Parivesh Bhawan, East Arjun Nagar, New Delhi – 110032

Sub: Present Status Report of M/s Maharashtra Fnviro Power Limited Ranjangaon, Tal:- Shirur, Dist:- Pune.

Ref: 1. Your letter dtd. 12/09/2024 in the matter raised during zero hour on 29/07/2024, by Dr. Amol Ramsingh Kolhe, Hon'ble M.P., regarding water & land contamination in Shirur Parliamentary Constituency — reg.

2. Letter send to Dr. Amol Ramsingh Kolhe, Hon'ble M.P. of MEPL present status.

Sir,

With respect to your letter dtd. 12/09/2024 submitting herewith Present Status Report of M/s. Maharashtra Enviro Power Ltd.,(MEPL) are as follow:-

Sr.	Description	Details
1	Name	M/s. Maharashtra Enviro Power Ltd.,
2	Address	Plot No.P-56,MIDC Ranjangaon, Tal- Shirur, Dist- Pune.
3	Category & Type	Red/LSI, CHWTSDF
4	Operational Since	2007
5	Total Area	About 75 Acre
6	Area Covered	Regional Office - Pune, Nashik, Aurangabad & Kolhapur
7	Total Member Industries	@ 4500
8	HW Received	1) About 120-150 MT/Day Solid HW received for Secure Landfill

		2) About 40-45 Ton/Day Solid HW received for Incineration. 3) About 80-85 Ton/Day Liquid HW received for Incineration
9	Consented Product	1) Secured Landfill- 60,000 MT/A 2) Hazardous Waste Incineration-25000 MT/A 3) New Rotary Incineration of capacity- 2 TPH. 4) Liquid HW Incineration- 1 Ton/Hr 5) Pre Processing of Alternate Fuel from Organic Incinerable HW-15000 MT/A 6) Pre Processing of Alternate Fuel from Inorganic Incinerable HW-5000 MT/A 7) Pre Processing of Alternate Fuel from Non Hazardous Waste- 5000 MT/A
10	Environment Clearance	Environemnt Clearance obtained on 02.09.2019 for Plot No. P-56, MIDC Ranjangaon **(EC copy - Annex. I)** Environemnt Clearance obtained on 09.01.2023 for Plot No. H-4, H-4/1, MIDC Ranjangaon, Unit-II **(EC copy - Annex. II)**
11	Consent Status	Consent to operate obtained on 09.01.2025, Plot No. P-56, MIDC Ranjangaon valid upto- 31.10.2026 **(Annex. III)** Obained Consent to Establish for (Expansion) HW Secure landfill at Plot-H-4 & H-4/1, MIDC Ranjangaon, on 07.05.2024 for Secure Landfill- 4 Nos **(Annex. IV)**
12	Effluent Generation	Industrial Effluent : 35 CMD Domestic Effluent : 20 CMD
13	Water Pollution Control details	Industrial effluent @ 35 CMD generated from Landfill leachate, vehical washing, APC cleaning water for which they have provided ETP of capacity 100 CMD followed by MEE of capacity 50 CMD, Treated effluent reused in cooling of molten slag at PGVR. (Since 2023 CETP has stopped collection of ETP treated effluent)
14	Air Pollution Control Details	1) Industry has provided Ventury Scrubber, Direct contact scrubber, Wet ESP & Polising scrubber with stack of height 45 mtr to Plasma Gasification Vitrification Reactor (PGVR)

		2) Provided Multi Cyclone Dust Collector with stack of height 45 mtr to MEE Boiler
15	Present Status	1) During the visit Plasma Gasification, Liquid Incinerator, Rotary Incineration & Secure Landfill no. 8 are in operation. 2) Industry Informed that presently Avg. HW received at site is 180-190 MT/Day, out of which Secure Landfill is @ 150-155 MT/Day and Incinerable is @ 30-35 MT/Day. 3) During the visit, the capping work for SLF No. 7 is in progress. SLF No. 8 is in operational. 4) The actual industrial effluent generation of leachate, vehicle washing activity are @ 20 to 25 CMD. 5) Industry has provided Effluent Treatment Plant (ETP) of Capacity - 100 CMD and it is in Operational. Industrial effluent after primary treatment is being taken into Multiple Effect Evaporator (MEE) plant for further treatment having capacity 50 CMD. After that MEE condensate further taken into secondary & tertiary treatment facility of ETP. Treated effluent is being used for cooling of molten slag generated from Plasma Gasification system. During visit treated water sample collected from ETP. 6) PP informed that @5000 m3 water stored in katccha pond, industry is treating katccha pond water in existing ETP and MEE plant. Sample collected from katccha pond. Laying of HDPE lining at one side of katccha pond provided. 7) PP has started construction work of retaining wall @ 45 % work has been completed and remining work is in progress. Due to construction work of retaining wall percolation from compound wall is arrested at downstream, however due to incomplete work still percolation was observed from upper side of compound wall.

		8) JVS Results of Kattcha Pond Inside Premises, Pazar Talav & Well water (03) are exceeding. **(All results Annex. V)**

	Board Interim Direction Dtd- 01.10.2024	
Sr. No.	**Points**	**Compliances**
1	PP should immediately stop all seepages / percolation from the facility area by providing retaining wall and submit the compliance report immediately to the Board.	• PP has started construction work of retaining wall and try to control seepages / percolation. • During visit minor seepages observed near compound wall.
2	PP shall lift the entire contaminated water accumulated in the katccha pond and treat the same into their existing ETP and MEE within period of 02 months. PP should submit daily report of treatment of contaminated water to the Board office through e-mail. For the compliance of the same, facility should submit the Bank Guarantee of Rs. 10.0 Lakhs.	• Work of lifting of contaminated water accumulated in the katchha pond for further treatment is in progress. • Industry is submitting regularly report of treatment of contaminated water to the Board office through e-mail. • Industry has submitted reply of Interim Direction and mentioned that **upto May-2025** they will reclaim the existing water storage area. • Submitted Bank Guarantee as per Interim Directions
3	PP shall provide impervious lining to the Katchha pond and ensure that, there should not be any contamination of ground water/soil/well/water bodies around the facility area. PP shall provide piezometric well at the downstream of the Katchha quality and submit the report regularly to the Board. For compliance of the same, Bank Guarantee of Rs. 5.0 Lakhs shall be submitted.	• PP has not provided HDPE lining to entire Katchha pond. However PP has Laying of HDPE lining at one side of Katchha pond. • PP has provided piezometric well at upstream and downstream of facility. • Submitted Bank Guarantee of Rs. 5.0 Lakhs as per Interim Directions.

4	PP shall provide storm water drainage to avoid the mixing of rainwater surface runoff into the Katchha pond.	• Partly area covered by storm water drainage and reaming work is in progress.
5	PP shall take all necessary measures to reduce smell in the area by providing fume extraction system and scrubbers of adequate capacity for all point source of VOC emissions in the facility during handling of waste.	• Industry has provided fume extraction system with scrubber to the stabilization/ preprocessing plant. • Industry has provided Continuous Ambient Air Quality monitoring station at Upstream and downstream of industry, which is connected to MPCB & CPCB website.
6	PP shall plant aromatic trees in the massive quantity inside the facility premises and all along the boundary wall and compliance report along with photographs of tree plantation shall be submitted to the Board office.	• Industry has submitted proposed plan of Green belt development along with Interim Directions reply.
7	PP shall not take any effective steps for development of additional land acquired for expansion of the facility until obtaining all necessary permission from the competent authority.	• PP has not yet started development of additional land for expansion of the facility

Latest Directions issued by M.P.C. Board

a) MPC Board has filed Criminal Case in the CJM Court vide no. 4179/2015.

b) Direction issued to the M/s Maharashtra Enviro Power Ltd. on 26.08.2024 **(Annex. VI)**

c) Forfeited Bank Guarantee of Rs. 5.0 lacs as per Direction dtd. 26.08.2024 **(Annex. VII)**

d) Personal Hearing extended at HQ on 24.09.2024 and accordingly Interim Direction issued on 01.10.2024 & reply dtd. 14.10.2024 **(Annex. VIII & Annex. IX)**

e) Conditional Directions issued dated 24.04.2025 as per directions BG of Rs. 5.0 lacs Forfeited. **(Annex. X)**

f) Cases filed on Kailash Narke V/s Maharashtra Enviro Power Ltd., & Others in the NGT vide O.A. No. 14/2025(WZ) **(Last NGT Order Annex. XI)**

This is submitted for information & further needful please.

(Babasaheb Kukade)
Sub-Regional Officer,
M. P. C. Board, Pune-II

D.A. as above

F.No. 10-16/2017-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 2nd September, 2019

To,

The Director
M/s Maharashtra Enviro Power Limited
20, IT Park, Parsodi, Nagpur- 411028, Maharashtra
E Mail- pareshmevawala@gmail.com

Subject: Enhancement of Incineration Capacity and Installation of Common MEE and Spray Dryer Units at MIDC, Ranjangaon, Pune, Maharashtra by M/s Maharashtra Enviro Power Limited - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No. IA/MH/MIS/62901/2017 dated 8th May, 2019, submitted to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of environmental clearance to the project 'Enhancement of Incineration Capacity and Installation of Common Multiple Effect Evaporator (MEE) and Spray Dryer Units' at MIDC, Ranjangaon, Pune, Maharashtra by M/s Maharashtra Enviro Power Limited, was considered by the Expert Appraisal Committee (Infra-2) in its 42nd meeting held during 10 -12 July, 2019. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above meeting are as under:-

(i) Maharashtra Enviro Power Ltd (MEPL) has operational Common Hazardous Waste Treatment, Storage & Disposal Facility (CHWTSDF) at P-56, MIDC Ranjangaon Village Ranjangaon, Taluka Shirur, Pune, Maharashtra. The present facility has permission for secured land filling with capacity of 60000 TPA and hazardous waste incineration facility with capacity of 25000 TPA. Proposed project will have following major components added to existing CHWTSDF site:

Sr. No.	Component	Existing Capacity	Expansion Capacity	Total Capacity After Expansion
1	Secured Land Fill	60000 MT/Year	0	60000 MT/Year
2	Hazardous Waste Incineration	72 TPD	80 TPD	152 TPD
3	Common Multiple Effect Evaporator	0	200 KLD	200 KLD
4	Common Spray Dryer	0	200 KLD	200 KLD
5	Power Plant	6 MW	0	6 MW
6	Liquid Incinerator*	-	24 TPD	-
7	Cement pre-processing facility for cement co-processing**	-	80 TPD	-

(ii) Geographical location of project site is at Latitude: 18°48'8.10" N and Longitude: 74°17'11.95" E. Total Land area is 3,00,000 sqm, out of which proposed incineration facility (80 TPD) will be located in area of 12,250 sqm, Proposed MEE facility will be located in 300 sqm, proposed spray dryer will be located in 500 sqm, proposed liquid incinerator will be located in 5,250 sqm, proposed cement processing area will be located in 3,800 sqm. Expansion is proposed in the existing premises without acquiring any additional land.

J. Bose

(x) Employment generation: Project during operation phase will need total 60 (skilled, semi-skilled and unskilled) on contractual and permanent basis workers which will be sourced from the local area.

(xi) Benefit of the project: Direct and indirect employment generation due to proposed expansion project. Social development activities in the surrounding villages by proposed enterprise social responsibility. Better management of the incinerable hazardous waste in MIDC, Ranjangaon area which will encourage development of new industries in this region.

3. The project/activity is covered under category A of item 7(d) 'Common hazardous waste treatment, storage and disposal facilities (TSDFs)' of the Schedule to the EIA Notification, 2006 and its amendments, and requires appraisal at Central level by sectoral EAC.

4. The EAC in its 42nd meeting held during 10-12 July, 2019, based on the information submitted and clarifications provided by the Project Proponent and detailed discussions held on all the issues, recommended the project for grant of environmental clearance with stipulated specific conditions along with other Standard EC Conditions as specified by the Ministry vide OM dated 4th January, 2019 for the said project/activity, while considering for accord of environmental clearance. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project 'Enhancement of Incineration Capacity and Installation of Common MEE and Spray Dryer Units' at MIDC, Ranjangaon, Pune, Maharashtra by M/s Maharashtra Enviro Power Limited, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

A. Specific Conditions:

(i) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

(ii) The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.

(iii) Ground water abstraction shall be as prescribed by the CGWA. A clearance/permission of the CGWA shall be obtained in this regards.

(iv) It shall be ensured that all the trees and other plantation are of the non edible varieties and do not in any way encourage the incorporation of toxic materials in the food chain.

(v) The TSDF should only handle the waste generated from the member units.

(vi) Analysis of Dioxins and Furans shall be done through CSIR - National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.

(vii) The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous Waste Treatment, Storage and Disposal Facilities' published by the CPCB in May, 2010.

(viii) Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.

(ix) Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.

J. Rose

Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (incase of the presence of schedule-I species in the study area)

iii. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.

iv. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.

v. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.

vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities

I. Air quality monitoring and preservation:

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.

iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

S. Bose

xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

III. Noise monitoring and prevention:

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

IV. Energy Conservation measures:

i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

V. Waste management:

i. The TSDF should only handle the waste generated from the member units.

ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.

iii. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.

iv. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

v. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

vi. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VI. Green Belt:

i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.

ii. Top soil shall be separately stored and used in the development of green belt.

VII. Public hearing and Human health issues:

i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.

ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.

xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

5. This issues with the approval of the Competent Authority.

S. Bose.

(Dr. Subrata Bose)
Scientist F

Copy to:

1) The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032, Maharashtra.

2) The APCCF (C), MoEF&CC, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur – 440001, Maharashtra.

3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.

4) The Member Secretary, Maharashtra State Pollution Control Board Kalptaru Point, 3rd & 4th Floor, Sion Matunga Scheme, Road No 6, Opposite Cine, Sion Circle, Sion (E), Mumbai - 400 022, Maharashtra.

5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.

6) Guard File/ Record File/ Notice Board.

7) MoEF&CC Website.

S. Bose.

(Dr. Subrata Bose)
Scientist F

ENVIRONMENTAL CLEARANCE

PARIVESH (Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environmental Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), Maharashtra)

To,

The Director

MAHARASHTRA ENVIRO POWER LIMITED (UNIT - 2)

Plot No. H-4 and Plot No. H-4/1, MIDC Ranjangaon, Village - Ranjangaon, Taluka - Shirur, Pune, Maharashtra, India -412220

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/MH/MIS/76141/2021 dated 21 May 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC23B032MH188629**
2.	**File No.**	SIA/MH/MIS/76141/2021
3.	**Project Type**	New
4.	**Category**	B1
5.	**Project/Activity including Schedule No.**	7(d) Common hazardous waste treatment, storage and disposal facilities (TSDFs)
6.	**Name of Project**	Proposed New Project of Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDFs) (Landfill Sites Only) by Ms. Maharashtra Enviro Power Limited Unit 2
7.	**Name of Company/Organization**	MAHARASHTRA ENVIRO POWER LIMITED (UNIT - 2)
8.	**Location of Project**	Maharashtra
9.	**TOR Date**	30 Nov 2021

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 09/01/2023

(e-signed)
Pravin C. Darade , I.A.S.
Member Secretary
SEIAA - (Maharashtra)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No. SIA/MH/MIS/76141/2021
Environment & Climate Change Department
Room No. 217, 2nd Floor,
Mantralaya, Mumbai- 400032.

To
M/s. Maharashtra Enviro Power Limited (Unit–2),
Plot H-4 & Plot H-4/1, MIDC Ranjangaon,
Village – Ranjangaon, Taluka-Shirur, Pune.

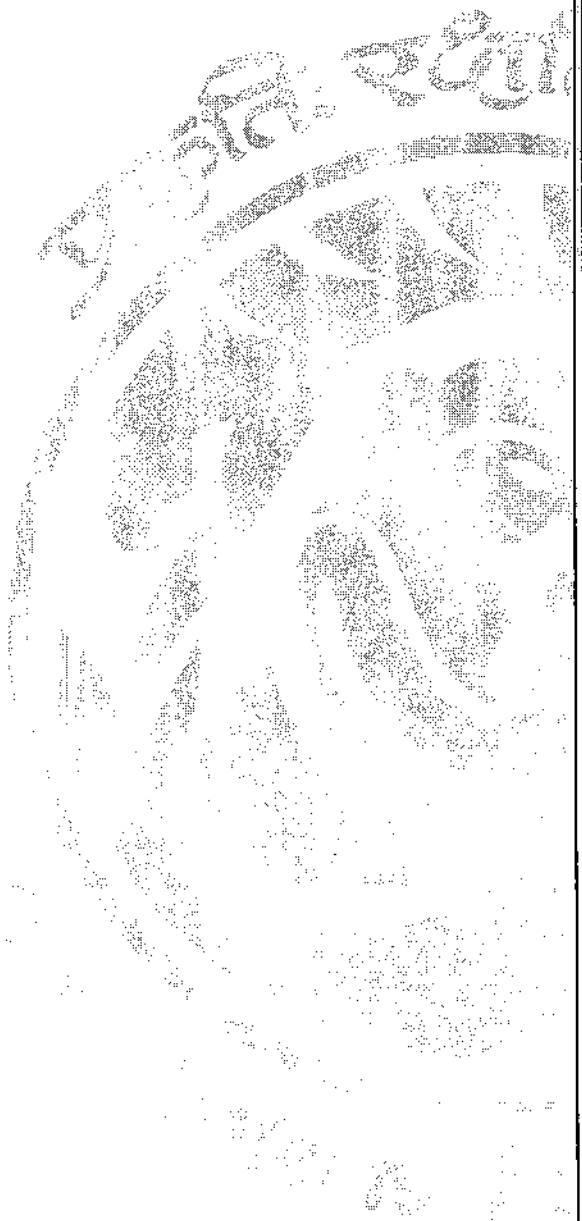
Subject : Environment Clearance for Proposed New Project of Common Hazardous Waste Treatment, Storage and Disposal Facility (Landfill Sites Only) at Plot H-4 & Plot H-4/1, MIDC Ranjangaon, Village – Ranjangaon, Taluka-Shirur, Pune, Maharashtra by M/s. Maharashtra Enviro Power Limited (Unit – 2)

Reference : Application no. SIA/MH/MIS/76141/2021

This has reference to your communication on the above mentioned subject. The proposal was considered by the SEAC-1 in its 229th meeting under screening category 7 (d) as per EIA Notification, 2006 and recommend to SEIAA. Proposal then considered in 253rd (Day-4) meeting of State Level Environment Impact Assessment Authority (SEIAA) held on 21st November, 2022.

2. Brief Information of the project submitted by you is as below:-

Sr. No.	Particulars Required	Details
1	Name of the project & Address along with all corner latitude and longitude	**Name of Project:** Proposed New Project of Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDFs) (Landfill Sites Only) by **M/s. Maharashtra Enviro Power Limited (Unit 2)** **Address:** Plot No. H – 4 & Plot H – 4/1, MIDC Ranjangaon, Village – Ranjangaon, Taluka – Shirur, Pune, Maharashtra, India. **Boundary Coordinates:**



Sr No	Latitude	Longitude
A	18°48'43.62" N	74°17'14.68" E
B	18°48'44.02" N	74°17'20.92" E
C	18°48'45.42" N	74°17'22.31" E
D	18°48'44.21" N	74°17'23.62" E
E	18°48'46.29" N	74°17'26.70" E
F	18°48'44.67" N	74°17'35.88" E
G	18°48'43.71" N	74°17'36.50" E
H	18°48'31.77" N	74°17'25.60" E
I	18°48'28.30" N	74°17'26.45" E
J	18°48'27.67" N	74°17'22.92" E
K	18°48'24.82" N	74°17'23.62" E
L	18°48'24.50" N	74°17'22.53" E
M	18°48'23.20" N	74°17'23.01" E
N	18°48'24.25" N	74°17'27.28" E
O	18°48'21.08" N	74°17'28.44" E
P	18°48'21.18" N	74°17'33.13" E
Q	18°48'19.87" N	74°17'34.35" E
R	18°48'15.44" N	74°17'30.70" E
S	18°48'11.09" N	74°17'32.12" E
T	18°48'10.37" N	74°17'31.19" E
U	18°48'20.38" N	74°17'27.70" E
V	18°48'22.55" N	74°17'26.75" E
W	18°48'22.28" N	74°17'22.52" E
X	18°48'22.43" N	74°17'22.13" E

		-
2	Type of Organization (Private /Government/Semi Government etc.)	Private Limited
3	Correspondence Address and contact details of Project Proponent	**M/s. Maharashtra Enviro Power Limited (Unit 1)** Plot P – 56, MIDC Ranjangaon Village – Ranjangaon, Taluka – Shirur, Pune, Maharashtra, India
4	Type of project (ToR / EC / Amendment in ToR / Amendment in EC / Revalidation / Expansion / Process change etc.)	EC – New Project
5	Category of project as per EIA Notification 2006 amended from time to time (Pl. mention category A, B, B1, B2 etc. whichever is applicable)	7 (d) – Common Hazardous Waste Treatment, Storage and Disposal Facility (TSDF Sites Only) Category – B1
6	If earlier ToR is obtained pl. mention details (ToR letter No. & Date, SEAC/EAC Meeting No.)	Standard ToR Letter No: SIA/MH/MIS/69461/2021 issued on dated 30/11/2021
7	If earlier EC is obtained pl. mention EC Number & Date	Not Applicable as proposed project is new.
8	Whether the proposal is a violation case (yes/no)	No
9	Applicability of CRZ clearance (yes /no)	No
10	Whether General /Specific Conditions are applicable to the project (Yes/No) If yes pl. give details	No
11	Whether Scrutiny fees paid as per SEIAA guidelines (Yes/No); If yes pl give payment details	Yes. Rs. 7,00,000/- Through NEFT Reference Number: 689629971 Payment on dated 13/09/2022
12	Name of accredited Environmental Consultant & address along with Accreditation No. & Validity	**Consultant Name:** ENPRO Enviro Tech and Engineers Pvt. Ltd. **Address:** Plot No. D/29/16, Hojiwala Industrial Estate, Gate No. 3, Sachin Palsana Road, Sachin, Surat - 394230. **Accreditation No. & Validity:** NABET/EIA/2225/RA 0236 Rev 01 valid till 12th January 2025
13	Name of layout plan approving Authority	MIDC (Maharashtra Industrial Development Corporation)
14	Estimated cost of Project (in Rs. Lakhs)	Rs. 13,000 Lakhs (i.e., Rs. 130 Crores)
15	Area of project (in Sq.m.)	2,47,836 Sq. m.
16	Whether 33% green belt is provided (Yes/No)	Yes. Unit has proposed to provide 98,842 Sq. m area for green belt development which is 39.8 % of the total plot area.

17	Area of Green Belt & No. of trees in the proposed project in Sq. m. (Pl. provide 2000 trees per hectare of green belt area)	Unit has proposed to provide 98,842 Sq. m area for green belt development which is 39.8 % of the total plot area. Unit will plant total 15600 numbers of trees.	
18	Width of internal roads and turning radius	6 – 9 m wide road on periphery with 9 m turning radius	
19	Details of proposed construction	Total Built-up Area (in Sq.m)	2071.5 Sq. m.
		No. of Buildings & its height in mtrs.	Total 1 building (Admin) with maximum height up to 10 - 12 meters. Others will be LAT shed, boiler room, colling tower room etc.)
20	List of Raw materials & Storage Details (Pl. add on in the list if necessary)	Not applicable as proposed project is for Common Hazardous Waste Treatment, Storage and Disposal Facility (CHWTSDF) (Landfill Sites Only)	

-

Sr. No.	Name of Raw Material	Consumption MT/Month	Maximum Storage Details	Hazardous Category	Proposed Precautions to Prevent Accidents	Remarks
1	Hazardous Waste	--	--	--	Unit will provide PPEs to workers; on site / off site emergency management plan will be prepared	--

						and plant will be operated based on CPCB guidelines.	

-

21	Production Details	As provided below:

-

Sr. No.	Name of Products	Existing Capacity MT/Month	Proposed Capacity MT/Month	Total Capacity MT/Month	Name of Product approving authority (like FDA of pharmaceuticals etc.)
1	Secured Landfill No. 1	NA	2,00,000 MT	2,00,000 MT	NA
2	Secured Landfill No. 2	NA	2,00,000 MT	2,00,000 MT	NA
3	Secured Landfill No. 3	NA	2,00,000 MT	2,00,000 MT	NA
4	Secured Landfill No. 4	NA	2,00,000 MT	2,00,000 MT	NA
5	Effluent Treatment Plant (1 no.)	NA	35 KLD	35 KLD	NA
6	Multiple Effect Evaporator (1 no.)	NA	35 KLD	35 KLD	NA

-

22	Water Consumption & Effluent generation (All units in CMD)	**Total water consumption: 60** (35 for industrial activities + 10 for domestic activities + 15 for gardening activities) **Total wastewater generation: 39** (30 from industrial activities + 9 from domestic activities)
i	Source & Qty of water requirement (in CMD):	Source: Maharashtra Industrial Development Corporation (MIDC) Qty of water requirement: 24 CMD (after recycling 36 CMD water from RO plant and STP)
ii	Water supply permission obtained (Yes/No) & approving Authority:	No. Unit shall take permission after getting EC receipt.

-

Particulars	Consumption (CMD)			Loss (CMD)			Effluent Generation (CMD)		
	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	NA	10	10	NA	1		NA	9	9

Gardening	NA	**15**	**15**	NA	**15**		NA	**0**	**0**
Industrial	NA	**35**	**35**	NA	--		NA	**30**	**30**
Boiler	NA	13	13	NA	10		NA	3	3
Colling Tower	NA	12	12	NA	9		NA	3	3
Vehicle Washing	NA	5	5	NA	1		NA	4	4
Misc. Plant activities such as road de-dusting, land fill application, fire water make up, scrubber etc.	NA	5	5	NA	5		NA	--	--
Leachate from SLF and scrubber	NA	--	--	NA	--	--	NA	20	20
Total	**NA**	**60**	**60**	**NA**	**21**	**21**	**NA**	**39**	**39**

-

23	Quantity of Sewage Generation (in CMD)	9
24	Details of Sewage Treatment and Disposal of treated sewage:	Domestic sewage will be sent to packaged STP for treatment and treated sewage will be reused for gardening purpose.
25	Details of Effluent Generation (unit in CMD)	As under:

-

Particulars	Existing	Proposed	Total
a) Qty. of Effluent generation: (CMD)	NA	30 Industrial 9 Domestic	30 Industrial 9 Domestic
b) Qty. of high TDS/COD effluent: (CMD)	NA	NA	NA
c) Qty. of low TDS/COD effluent: (CMD)	NA	30 Industrial 9 Domestic	30 Industrial 9 Domestic

-

26	Whether Zero liquid Discharge Effluent Treatment is proposed (Yes/No)	Yes
27	Brief Description of Effluent Treatment scheme	Industrial effluent will be treated in inhouse ETP plant consisting of primary treatment (Physico-

		Chemical Treatment) followed by MEE plant, biological treatment and RO plant. Here, RO permeate water will be reused within plant premises and RO reject water will be sent back to MEE plant. Sludge generated from primary and secondary treatment will be sent to TSDF site. Domestic sewage will be sent to packaged STP. Treated sewage will be recycled and reused for gardening purpose. This way, no effluent will be discharged outside the plant premises as unit has proposed ZLD for the proposed project.
28	Qty of treated effluent proposed to be sent to CETP (pl. mention Name of CETP and its membership Details)	None
29	Please mention parameters of treated effluent to be achieved as per EP Rule,1986 and or stipulated by the SPCB	As under:

-

Parameters	Inlet Concentration (mg/l)	Outlet Concentration (mg/l)
pH	6.5 – 8	7 - 8
TSS	400 - 500	< 100
TDS	7500 - 15000	< 500
COD	7000 - 10000	< 500
BOD	3000 - 4000	< 250
Heavy Metals	-	-
Benzene	-	-
Other if any	-	-

-

30	Brief Note on proposed Rainwater harvesting scheme along with budget allocation:	Unit has proposed to provide rain water collection system within premises itself and also allotted 36 m^2 area for the storage of rain water. Approx. 10 Lakhs budget will be provided for the same.
31	Solid Waste Management	As provided under:

-

Sr. No.	Type of Waste	Quantity (MT/Month)	Source of Generation	Disposal Methods	Pl. mention plan to reduce solid waste generation if any
1	STP Sludge	0.234	Sewage Treatment Plant	Used as a manure in garden	Unit will not send it to TSDF site for landfilling. Instead, unit will use it as a manure in garden.

-

32	Hazardous Waste Generation & Disposal (As per	As provided under:

HW Rule 2016)

-

Sr. No.	Category	Particulars	Source of Generation (please include name of product)	Existing Qty of Generation MT/Month	Proposed Qty of Generation MT/Month	Total Qty of Generation MT/Month	Method & Disposal as per HW Rules, 2016
1	34.3	ETP Sludge	From Effluent Treatment Plant	NA	1.8	1.8	Send to TSDF Site
2	34.3	MEE Salt	From MEE plant	NA	30	30	Send to TSDF Site

-

33 Fuel Consumption — As under:

-

Sr. No.	Type of Fuel	Consumption Qty (TPD)			Used for (Boiler / DG Set)	Ash %			SO2 %			Air Pollution Control Equipment provided (yes / No)
		Existing	Proposed	Total		Existing	Proposed	Total	Existing	Proposed	Total	
1	Coal	NA	4 MT/ Day	4 MT /Day	Boiler (1 MT /Hr)	NA	0.1	0.1	NA	0.5	0.5	Yes. Multicyclone separator and Alkali Scrubber with 30 m stack height
2	LDO	NA	30 Lit./ Hr	30 Lit./ Hr	DG Set (150 KV	NA	0.01	0.01	NA	0.05	0.05	Yes. 20 m stack height will

					A)							be provided.
3	Stabilizer	NA	--	--	--	--	--	--	--	--	--	Yes. Scrubber + Activated Carbon Bed

-

34	Brief Note on Air Pollution Control equipment's	**For Boiler:** Unit has proposed to use coal as fuel in boiler having capacity of 1 MT/Hr. Multicyclone Separator and Alkali Scrubber along with 30 m stack height will be provided as an APCM for boiler. **For DG Set:** Unit has proposed to use LDO as a fuel for DG set. Unit will provide 20 m stack height to each DG set **For Stabilizer:** Unit has proposed to provide Scrubber + Activated Carbon Bed for Fumes generated from stabilizer.
35	Stack Details (Also include process vent details)	As provided under:

-

Sr. No.	Section / Unit	Source Pollution	Stack No.	Stack Height	Height from Ground	Internal Diameter (inch)	Temperature of exhaust gas
1	Utility	Boiler (1 MT/Hr)	1	30 m	30 m	4	120 deg C
2	Utility	DG Set (125 KVA)	2	20 m	20 m	4	120 deg C
3	Utility	Stabilizer	3	Vent	Vent	--	NA

-

36	Energy	
a	Source of Supply:	Maharashtra Electricity Board
b	Maximum Demand (KVA):	250 KVA
c	Whether DG Set will be provided (Yes / No): If yes,	Yes

-

Sr. No.	No. of DG Sets		Capacity
	Existing	Proposed	
1	NA	DG Set	150 KVA

-

d	Please Mention if high tension line is passing through the plot: Yes / No	No

	If yes, pl. give details:	--
37	Details of use of renewable energy with budget allocation	As under:
i	Total Energy Demand ---------- KVA	250 KVA
ii	Proposed renewable energy source capacity ---------- KVA	50 KW
iii	Proposed Budget (in Rs. Lakhs):	Rs. 25 – 30 Lakhs
iv	Timeline for implementation:	Unit will install solar panels within the year of completion of construction activities.
38	Details of public hearing (if applicable)	Not Applicable as the unit is located in Notified Industrial Estate (MIDC, Ranjangaon)
i	Place of Public Hearing	NA
ii	Date of Public Hearing	NA
	Pls fill following details	

-

Sr. No.	Issue Raised during Public Hearing	Applicant Plan for compliance / implementation	Budget allocation for implementation	Specific time line of compliance
1	NA	NA	NA	NA

-

39	EMP (Please mention specific items proposed in EMP along with specific timeline for its implementation)	As provided under:

Construction Phase

Sr. No.	Attribute	Specific Measures	Budget in (Rs in Lakhs)	Remarks
1	Air	Monthly Ambient Air Monitoring at Construction Site (3 Locations within Premises)	0.6	Through NABL/MoEF Approved Laboratory
2	Water	Ground Water Monitoring Once in a Year at Project Site (3 Location one up side and two down side)	0.375	
3	Noise	Noise Level Monitoring at Project Site (At 5 Locations within Premises)	0.2	
4	Soil	Soil Testing at Project Site (Once in a Year at two places)	0.1	
5	Solid Waste	C&D Waste Management	0.5	--
6	Hazardous Waste	None	--	--
7	Fuel & Energy	As per Requirement	--	--

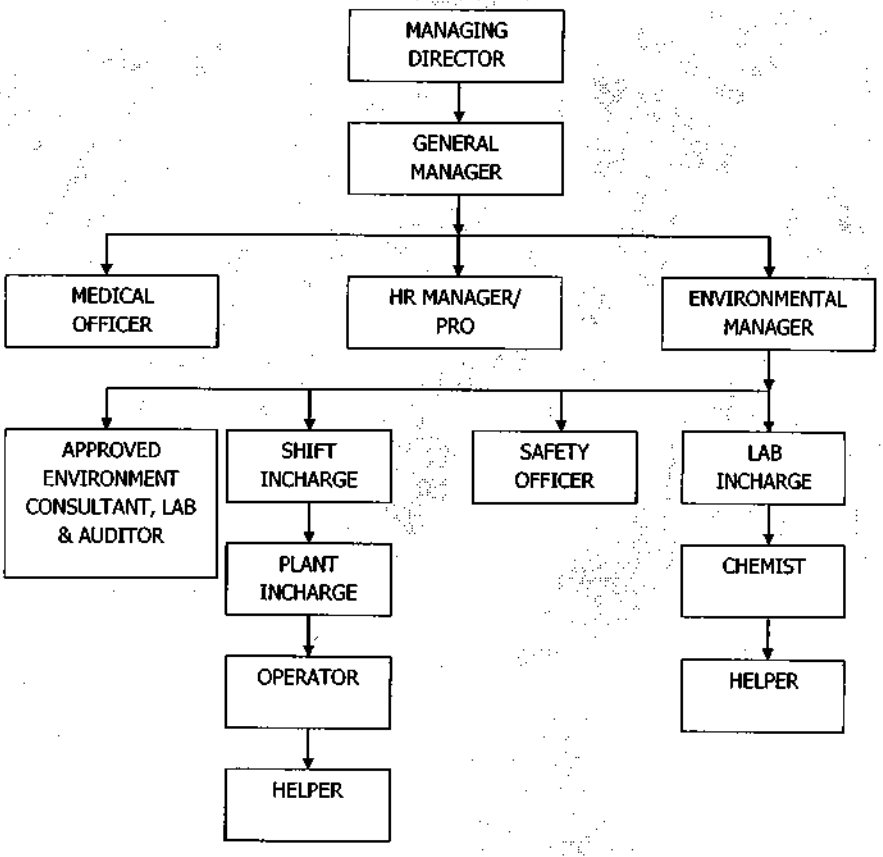
8	Safety & Health	PPEs to Workers	0.75	Helmets, Gloves, Safety Shoes etc.

-

Operation Phase

Sr. No.	Attributes	Specific Measures	Budget in Rs. Lakhs	Timeline for 1/5 implement	Responsibility	Remarks
1	Air	Installation of APCM for Boiler (Multicyclone Separator and Alkali Scrubber) along with Stack and DG set stack	35	Within the one year after getting EC receipt	Unit Head / General Manager	--
2	Water	Construction / Installation of ETP, MEE Plant, RO plant, STP plant	95	Within the one year after getting EC receipt	Unit Head / General Manager	--
3	Noise	Acoustic enclosure for D.G. Sets and other Noise Generating Equipment	1	Within the one year after getting EC receipt	Unit Head / General Manager	--
4	Soil (Environmental Monitoring)	Development of Environmental Monitoring Laboratory and laboratory equipment	15	Once the operation phase started	Environmental Manager	Through NABL/MoEF Approved Laboratory
5	Solid Waste	None	--	--	--	STP Sludge will be used as a manure in garden
6	Hazardous Waste	Storage Shed for Haz. Waste	50	Within the one year after getting EC	Environmental Manager	--

					receipt		
	7	Fuel & Energy	Coal Consumption and Electricity	70	Once the operation phase started	General Manager / Unit Head	Recurring cost per annum
	8	Safety & Health	Development of Occupational Health Centre / First Aid Centre. & Installation of Fire Hydrant Pipelines and installation of pumps, Automatic alarm system, tripping system, Fire extinguisher, Fixed & Portable Fire Fighting system, PPEs etc.	80	Within the one year after getting EC receipt	Safety Officer	--
	9	Rain water harvesting	Rain water collection system	10	Once the construction works completes	Unit Head	--
	10	implementation of recommendation of LCA	--	--	--	--	--
	11	Implementation recommendation HAZOP/Risk Assessment	HAZOP assessment report	1	After getting EC receipt and detailed engineering	General Manager / Safety Officer	--
	12	Any other please specify	--	--	--	--	--
40	Other Relevant Information: (Pl. provide brief note on proposed project)				--		

41	Details of skill development program within Organization	Unit will organize skill development program for the employees/workers on regular time during operation phase.
42	Details of environmental Monitoring Cell (Pl. provide organogram with educated Qualification and experience)	Since, our project is yet to commence, it does not have any Environment Policy. Technically qualified and experienced staff will be in-charge of this activity. Organogram for proposed project is provided as under:
		
43	Details of court cases if pending in any Hon'ble court	None

3. The proposal has been considered by SEIAA in its 253rd (Day-4) meeting held on 21st November, 2022 and decided to accord Environment Clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implantation of following terms and conditions-

Specific Conditions:

SEAC Conditions-

1. PP to submit amalgamation order of plot Nos. H-4 and H-4/1 obtained from the MIDC.
2. The total plot area is 2,47,336 Sq.mtrs. PP proposes green belt development on 98842 Sq.mtrs. along the periphery of the plot.

3. PP to complete green belt development before commissioning of the plant by planting 5-6 feet tall indigenous saplings/plants with provision of drip irrigation.
4. PP to provide necessary parking areas for the vehicles carrying hazardous waste. In no case vehicles shall be pared on the public road.
5. PP to prepare appropriate leachate collection and handling plan. PP to provide Zero Liquid Discharge based Effluent Treatment Plant.
6. PP to prepare On-Site and Off-Site Emergency plan and include details of flood emergency in the same. PP to submit copies to all Authorities.
7. PP to Design, develop and operate the landfill in accordance with CPCB Guidelines.
8. PP to ensure inspection of liners and other layers during construction phase for its uniformity, damage, and imperfectness. Take corrective action in case of damage.
9. PP to ensure to not operate the SLF during monsoon season. Make arrangements for temporary storage of land fillable wastes during monsoon.
10. PP to monitor the Groundwater in upstream and downstream areas of SLF on regular basis. If any adverse observation found inform to the concern Authority and take immediate corrective and mitigation measures.
11. The proposed plot is undulating and having steep slopes at few locations. PP to take utmost care to ensure that, none of the waste goes beyond the boundary of the proposed project site. PP to submit detailed mitigation plan in this regard.
12. Standard Operating Procedures for all activities and operations be prepared, established and implemented on site.
13. PP to provide repeated training courses on the operations, activities as well as roles and responsibilities of the personnel working on site be imparted and evaluated continuously.
14. PP to include VOC monitoring in continuous air quality monitoring plan.
15. PP to ensure that, the following emergency equipment must be easily accessible, in working condition, and regularly tested: -
    a) Internal communicants or alarm system capable of providing immediate emergency instruction to personnel. –
    b) Telephone or hand-held two-way radio capable of contacting local and emergency responders.
    c) Portable fire extinguishers and fire control equipment, including special extinguishing equipment (foam, inert gas, or dry chemicals).
    d) Fire hydrants or other source of water (reservoir, storage tank, etc.) with adequate volume and pressure, foam producing equipment, automatic sprinklers, or water spray system.
    e) Spill control equipment. - Secondary containment for liquid wastes.
16. PP to strictly implement Container Management plan on site. The important points are as below,
    a) Containers must be compatible with the waste in them.

b) Containers must be kept closed except when waste is actually being added or removed.
c) Containers must not be leaking, bulging, rusting, damaged, or dented.
d) Store liquid waste containers on secondary containment pallets.
e) For Large Quantity Generators Only: Containers holding ignitable or reactive wastes must be placed at least 15m (50) from the facility's property line and incompatible wastes must be separated by a berm or wall.

17. PP to ensure to utilize CER fund (Rs. 1.95 Cr.) to strengthen the public infrastructure in and around the proposed project area in consultation with the District Collector.
18. PP to prepare and submit detailed plan to mitigate odour nuisance through proper technological interventions for odour control.
19. PP to complete rain water harvesting facility before the commissioning of the manufacturing activity.

SEIAA Conditions

1. PP submitted plan approval vide letter no DE(R)/D-12628/2022, dated 19.09.2022. As per the said plan total plot area of the project is 247836.00 m2 and PP has provided 98842.00 m2 area as green belt i.e. 39.88 %.
2. PP to undertake Miyawaki plantation of native and indigenous trees such as Banyan, Peeple, Neem, Jamun and other suitable trees as per the Forest Department, Govt. of Maharashtra circular no SaVaVi-2019/C.R.3/F-11, dated 25th June, 2019. The said plantation to be completed in the first year of operation of Environmental Clearance under expert guidance of Miyawaki experts / arborist.
3. PP to ensure that, proposed project is a ZLD.
4. PP to strictly observe the Solid Waste Management Rules, 2016 as amended time to time.
5. PP to strictly observe the Hazardous and Other Wastes (Management & Trans boundary Movement) Rules, 2016 as amended time to time.
6. PP to identify all sources of fugitive air pollution on site and provide pollution control measures to mitigate pollution and meet the standard parameters stipulated in the Environment (Protection) Rules, 1986 amended time to time & Air (Prevention and Control of Pollution) Act, 1981 amended time to time.
7. PP to ensure storage of chemicals as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 amended time to time to ensure no release of any chemical to the atmosphere and leakage to the soil.
8. PP to ensure transport, storage, handling and use of the flammable/toxic chemicals as per conditions stipulated in license/approval of the Petroleum & Explosive Safety Organization (PESO).
9. PP to obtain approval and License from the Directorate of Industrial Health & Safety (DIHS) for proposed project and implement all condition stipulated therein. PP to carry out Safety Audit as stipulated in the Maharashtra Factories Rules, 1963 and ensure compliance of recommendation of the Audit.

10. PP to provide solar energy for illumination of Administrative Building, Street Lights and parking Area.
11. PP to ensure use of briquette /bio coal/ pellets/ or any such suitable product derived from scientific processing of appropriate stream of dry waste/agricultural waste , not less than 50 % of the total fuel requirement to the boiler.
12. PP to provide roof top Rain Water Harvesting facility.

General Conditions:

I. The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded Environmental Clearance and copies of Environmental Clearance letter are available with the Maharashtra Pollution Control Board, website of the company and may also be seen at Website at http://parivesh.nic.in

II. The project Proponent shall upload the status of compliance (soft copies) of the conditions stipulated Environmental Clearance letter including monitoring data of air, water, soil, noise etc. on their website and shall update the same periodically. The half yearly compliance report shall simultaneously be submitted to the Maharashtra Pollution Controls Board, SEIAA and the Regional Office off MoEF&CC at Nagpur, on 1st June & 1st December of each calendar year.

III. Separate fund shall be allocated for the implementation of Environmental Management Plan along with item wise break up and specific time line for its completion. The cost shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for other purpose and year-wise expenditure should be reported to the MPCB and the SEIAA.

IV. A separate Environmental Management Cell with qualified personnel shall be set up for implementation of the stipulated environmental safeguards.

V. In the event of failure of any pollution control equipment, the manufacturing activity shall be immediately stopped safely till the effective functioning of pollution control equipment's is regained.

VI. PP to strictly follow conditions stipulated in the Consent to Establish/Operate issued by the Maharashtra Pollution Control Board.

VII. PP to provide separate drains for storm water and effluent, and ensure that, the storm water drains are dry all the time and in no case the effluent shall mix with the storm water drain.

VIII. Periodic Monitoring of ground water in the study area as marked in the Environmental Impact Assessment Report shall be undertaken and results analysed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.

IX. The overall noise levels in and around the factory premises shall be kept within the prescribed standard under the Environment (Protection) Act, 1986 and Rule, 1989 as amended from time to time by providing adequate noise control measures and protective equipment's like ear muff and ear plug etc.

X. Adequate safety measures shall be ensured to limit the risk zone within the factory premises. Leak detection system shall be installed for early detection and mitigation purpose.

XI. PP to scrupulously follow the requirements of Maharashtra Factories Act, 1948 & Rules 1963 as amended from time to time.

XII. The Environmental Statement for each financial year ending on 31st March in Form-V as is mandated to be submitted by the Project Proponent to the concerned Pollution Control Board as prescribed under the Environment (Protection) Rule, 1989 as amended from time to time, it shall also be put on the website of the company along with the status of the compliance of the conditions stipulated in the Environmental Clearance letter.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, amended time to time.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Pravin Darade
(Member Secretary, SEIAA)

Copy to:

1. Chairman, SEIAA (Maharashtra), Mumbai.
2. Secretary, MoEF & CC
3. IA- Division MOEF & CC
4. Member Secretary, Maharashtra Pollution Control Board, Mumbai.
5. Regional Office MoEF & CC, Nagpur
6. District Collector, Pune.
7. Regional Officer, Maharashtra Pollution Control Board, Pune.

500

Signature Not Verified
Digitally signed by Shri Pravin C. Darade , I.A.S.
Member Secretary
Date: 1/9/2023 5:35:20 PM

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd, 3rd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/L.S.I (R14)
No:- Format1.0/CC/UAN No.MPCB-CONSENT-0000197268/CO/2501000725

Date: 09/01/2025

To,
Maharashtra Enviro Power Limited,
Plot No. P-56, Ranjangaon MIDC,
Tal. Shirur, Dist. Pune.

Your Service is Our Duty

Sub: **Grant of Consent to Operate (expansion) for rotary incinerator 2 MT/hr Under RED/LSI category and amalgamation of existing consent to operate with an overriding effect.**

Ref:
1. Consent to Operate granted by Board vide No. Format 1.0/CC/UAN No. 00000149606/CR/2212001293 Dated 19/12/2022 valid up to 31/10/2026.
2. Consent to Establish for rotary incinerator 2 MT/hr granted by Board vide no.Format1.0BO/RO(HQ)/HWMD/CE/CC-2011000929 dated 13/11/2020
3. Minutes of 5th Consent Committee Meeting held on 28.06.2024.

Your application No.MPCB-CONSENT-0000197268 Dated 03.02.2024

For: grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to operate is granted for a period up to 31/10/2026**
2. **The capital investment of the project is Rs.196.65 Crs. (As per C.A Certificate submitted by industry Existing CI-Rs.158.10 Cr.+ Expansion CI-Rs.38.55 Cr.)**
3. **Consent is valid for:**

Sr No	Treatment Facility	Maximum Quantity	UOM
1	Secured Landfill (Stabilization and landfillable Hazardous Waste and Incinerated ash i. e. 20 % of Hazardous Waste Incinerated)	60000	MT/A
2	Hazardous Waste Incineration	25000	MT/A
3	Liquid Hazardous Waste Incineration	1	MT/Hr
4	Pre- processing of Alternate Fuel from Organic Incinerable Hazardous Waste	15000	MT/A
5	Pre- processing of Alternate Fuel from inorganic Hazardous Waste	5000	MT/A

Sr No	Treatment Facility	Maximum Quantity	UOM
6	Pre- processing of Alternate Fuel from Non Hazardous Waste	5000	MT/A
7	Rotary Incinerator	2	MT/Hr

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	60.5	As per Schedule-I	100 % recycle/reuse treated effluent into process and for secondary purpose like cooling tower make-up, air conditioning, fire fighting etc. to achieve Zero Liquid Discharge.
2.	Domestic effluent	43	As per Schedule-I	Treated sewage shall be applied on land for gardening within premises

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	S-1	PGVR	1	As per Schedule -II
2	S-2	Boiler	1	As per Schedule -II
3	S-3	DG Set-1	1	As per Schedule -II
4	S-4	DG Set-2	1	As per Schedule -II
5	S-5	DG Set-3	1	As per Schedule -II
6	S-6	Liquid Waste Incinerator	1	As per Schedule -II
7	S-7	Process vent	1	As per Schedule -II
8	S-8	Rotary Incinerator	1	As per Schedule -II

6. **Non-Hazardous Wastes:**

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
NA					

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

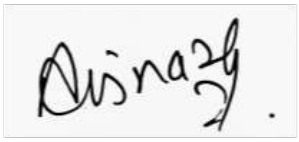
Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	26.1 Process waste sludge/residues containing acid, toxic metals, organic compounds	500	MT/A	NA	CHWTSDF

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
2	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	48000	Nos./Y	Recycle	Sale to authorised party / CHWTSDF

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
10. Industry shall install online night vision Camera at pre-processing facility and its connectivity to CPCB & MPCB server.
11. The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent. (Operate/Renewal)
12. PP shall send details of pre-processing waste disposal on monthly basis to Regional Officer & Sub-Regional Officer regularly.
13. PP shall strictly follow the Guidelines of CPCB for the development of the facility.
14. The CHWTSDF shall cater to the requirements of environments of environmentally sound management as required under the HW Rules for the land-fillable hazardous wastes generated by the industries possessing valid authorization by the Maharashtra Pollution Control Board (MPCB) and operating in the following MIDC and nearby non-MIDC Industrial Areas, as per revised area allocation order of the Board No. MPCB/RO(HQ)/HSMD/TSDF/B-7446, dated 11/12/2008.
15. Depending upon the technical capacity and feasibility, hazardous wastes from Industries operating in non-MIDC Industrial areas and also industries operating in MIDC areas within Maharashtra authorized by or prior permission of MPCB can also be accepted by the CHWTSDF.
16. PP shall accept the Hazardous Waste only from those industries having disposal path mentioned in their Consent for pre-processing only.
17. This consent is issued with an overriding effect on the existing Consent to Operate granted by Board vide No. Format 1.0/CC/UAN No. 00000149606/CR/2212001293 Dated 19/12/2022 valid up to 31/10/2026.
18. Project Proponent shall strictly follow guideline for pre-processing and co-processing of Hazardous & Other Wastes in Cement Plants published by Central Pollution Control Board as per H & OW (M & TBM) Rules. 2016.
19. The Operator of the TSDF shall comply with the conditions laid down in this environment clearance-F.No.10-16/2017-IA-III dated 02/09/2019
20. The Operator shall ensure that collection, storage of the incinerable hazardous waste shall be according to the CPCB guidelines issued/amended from time to time
21. This consent to operate (expansion) is issued pursuant to the decision of the 5th (2024-25) meeting of the consent committee held on 26.06.2024

22. The CHWTSDF facility shall not carry out any excess processing of Hazardous Waste without Consent of the Board and without Environmental Clearance wherever it applicable
23. This Consent is issued for rotary incinerator without change in processing capacity of hazardous waste.
24. The industry shall create an Environment Cell by appointing an Environmental Engineer / Expert for looking after day-to-day activities related to Environment / Pollution control.

This consent is issued on the basis of information/documents submitted by the Applicant/Project Proponent, if it has been observed that the information submitted by the Applicant/Project Proponent is false, misleading or fraudulent, the Board reserves its right to revoke the consent & further legal action will be initiated against the Applicant/Project Proponent.



Signed by: Dr.Avinash Dhakne
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2025-01-09 10:24:58 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	375000.00	TXN2402000740	06/02/2024	Online Payment
2	233748.00	TXN2410004739	29/10/2024	Online Payment
3	107836.00	TXN2410004734	30/10/2024	Online Payment

Consent fees balance of Rs. 40000/- (C to O dated 19/12/2022) and Consent fees balance of Rs. 150000/- (present application dated 03.02.2024) with the Board and will be adjusted at the time renewal of consent.

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune II
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1. A] As per your application, you have to treat 60.50 CMD trade effluent into existing Effluent Treatment Plant (ETP).

B]

Sr.No	Parameters	Limiting concentration not to exceed in mg/l, except for pH
(1)	pH	5.5 to 9.0
(2)	Temperature	45 C
(3)	Oil & Grease	10
(4)	Phenolic Compounds	5.0
(5)	Ammonical Nitrogen (as N)	50
(6)	Cyanide (as CN)	2.0
(7)	Hexavalent Chromium (as Cr+6)	2.0
(8)	Total Chromium (as Cr)	2.0
(9)	Copper (as Cu)	3.0
(10)	Lead (as Pb)	1.0
(11)	Nickel (as Ni)	3.0
(12)	Zinc (as Zn)	15
(13)	Arsenic (as As)	0.2
(14)	Mercury (as Hg)	0.01
(15)	Cadmium	1.0
(16)	Selenium (as Se)	0.05
(17)	Fluoride (as F)	15
(18)	Boron (as B)	2.0
(19)	BOD, 3days 27 degree C	30
(20)	COD	250
(21)	Suspended Solid	100
(22)	Residual Chlorine	1
(23)	TKN(as N)	50
(24)	Sulphide (as S)	5
(25)	Pesticide	Absent

C] 100% recycle/reuse treated effluent into process and for secondary purpose like cooling tower make-up, air conditioning, fire fighting etc. to achieve Zero Liquid Discharge. In no case treated effluent shall find its way outside factory premises.

D] Disposal: The treated effluent shall be used on land for irrigation by adopting High rate Transpiration System(HRTS). In no case, the treated effluent shall find its way to any water body at any time and / or any location other than the prescribed mode of disposal as above.

2. A] As per your consent application, you have to treat 43 CMD sewage in existing Sewage Treatment Plant.

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

Sr.No	Parameters	Standards (mg/l)	
1	Suspended Solids	Not to exceed	50
2	BOD 3 days 27°C	Not to exceed	30
3	COD	Not to exceed	100

C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way for gardening / outside factory premises.

3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.

4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	315.00
2.	Domestic purpose	48.50
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	53.70
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	150

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
S-1	Plasma Gasification Vitrification Reactor	Ventury Scrubber, Direct Contact Scrubber, Wet ESP & Polishing Scrubber	45.00	Plasma Heat (Electricity) 0 --NA--	-	TPM	50 Mg/Nm^3
						HCL	50 Mg/Nm^3
						SO2	200 Mg/Nm^3
						Total Organic Carbon	20 Mg/Nm^3
						HF	4 Mg/Nm^3
						NOx	400 Mg/Nm^3
						Total Dioxins & Furans	0.1 ng TEQ/Nm3
						Cd + Th + Their Compound	0.05 Mg/Nm^3
						Sb + As + Pb + Cr + CO + Cu + Mn + Ni + V + Their Compounds	0.05 Mg/Nm^3
S-2	Boiler	Multi Cyclone	45.00	Coal 8 MT/Day	0.5	TPM	150 Mg/Nm^3
						SO2	80 Kg/Day
S-3	DG Set	Acoustic Enclosure	8.00	Diesel 73 Ltr/Hr	1	SO2	35.04 Kg/Day
S-4	DG Set	Acoustic Enclosure	8.00	Diesel 73 Ltr/Hr	1	SO2	35.04 Kg/Day
S-5	DG Set	Acoustic Enclosure	8.00	Diesel 73 Ltr/Hr	1	SO2	35.04 Kg/Day
S-6	Liquid Hazardous Waste Incinerator	Stack	45.00	-	-	NA	-
S-7	Liquid Blending Section & Solid Blending Section	Activated Carbon based adsorption followed by wet scrubber	20.00	-	-	NA	-
S-8	Rotary Incinerator	Ventury Scrubber, Direct Contact Scrubber, Polishing Scrubber, Wet ESP.	45.00	LDO 800 Ltr/Hr	-	TPM	50 Mg/Nm^3
						HCL	50 Mg/Nm^3
						SO2	200 Mg/Nm^3
						CO	100 Mg/Nm^3
						Total Organic Carbon	20 Mg/Nm^3
						HF	4 Mg/Nm^3
						NOx	400 Mg/Nm^3
						Total Dioxins and furans	0.1 ng TEQ/Nm3
						Cd + Th + their compounds	0.05 Mg/Nm^3
						Hg and its compounds	0.05 Mg/Nm^3
						Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds	0.5 Mg/Nm^3

All values corrected to 11% oxygen on a dry basis.

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C2R	Rs.500000/-	submitted	O & M of Pollution Control System and compliance of Consent Conditions	Continuous	31/10/2026
2	C2O	Rs.1000000/-	submitted	O & M of Pollution Control System and compliance of Consent Conditions for Preprocessing unit.	Continuous	31/10/2026
3	C2O	Rs.1000000/-	submitted	O & M of Pollution Control System and compliance of Consent Conditions for Liquid Incinerator	Continuous	31/10/2026
4	C2O	Rs.500000/-	Submitted	Towards Operation and maintenance of Rotary incinerator compliance condition	Continuous	31/10/2026

****Existing BG obtained for above purpose if any, may be extended for period of validity as above.**

If the above Bank Guarantee is not submitted within stipulated period, then 12% interest will be levied as a penalty as per circular dtd 29/02/2024 No. BO/MPCB/AS(T)/Circular/B-240229FTS0122

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

General Conditions:

1. The industry should not cause any nuisance in surrounding area.
2. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
3. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
4. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
5. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
6. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
7. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
8. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
9. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
10. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
11. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
12. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
13. The Energy source for lighting purpose shall preferably be LED based

14. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
15. Conditions for D.G. Set
    a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
    b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
    c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
    d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
    e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
    f) D.G. Set shall be operated only in case of power failure.
    g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
    h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
16. The applicant shall maintain good housekeeping.
17. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
18. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
19. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
20. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
21. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
22. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
23. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
24. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

25. The PP shall provide personal protection equipment as per norms of Factory Act
26. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
27. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
28. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
29. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
30. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
31. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
32. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
33. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
34. Incinerator: General Characteristics of Incinerator:
    1. The incinerator chambers (primary & secondary- if required) shall be compact, rotary type, lined with refractory and insulation furnace connected with ?ue gas chimney of height of at least 40 meters.
    2. The incinerator should be LDO/Diesel/ LSHS oil ?red.
    3. The incinerator shall be capable of operating at severe operating conditions in the ambient temperature range 0-50?C and humidity upto 95%.
    4. The incinerator shall be designed to incinerate/ burn industrial waste with capacity as per requirement.
    5. The incinerator should be designed/ manufactured in accordance with the speci?cations and norms of Central Pollution Control Board, Ministry of environment & Forest and State Pollution Control Board as may be published from time to time
    6. The incinerator should be capable of burning the hazardous waste.

35. Technical Features
    1. The incinerator should be rotary kiln type lined with high grade refractory bricks capable of with standing temperature up to 15000c.
    2. In the rotary kiln the temperature should be maintained by temperature controller up to 800+500c. Controlled ?ow of air should be maintained for complete volatization of solid waste.
    3. In secondary chamber the temperature should be controlled up to 1200+1000c by the temperature controllers. Here complete combustion should take place and all smoke produced in the primary chamber shall also get burnt completely. Residence time in secondary chamber should be minimum 2 seconds or more so as to bring complete combustion of volatile matter evolved from primary combustion chamber.
    4. The flue gases from the secondary chamber should pass through the air pollution control system. The system should be designed to remove pollutants and particulate matter presents in the ?ue gases from secondary chamber.
    5. The emission control system comprises of spray dryer, cyclone separator, reagent system, lime silo, bag filter, ventury (Alkali) scrubber, packed bed scrubber, droplet separator, followed by I.D. fan connected to stack etc. to meet the emission norms as given at S.N 14.7, 14.7.1, 14.7.2, 14.7.3 of this document. This system should also bring down the outlet temperature of flue gases to approx. 800c, by using air blower etc
    6. There should be two ?ring systems, fully automatic type, of suitable capacity attached/ provided one each for kiln and secondary incinerator chamber.
    7. Burners shall be of standard make pressure atomized type, capable of maintaining the temperature uniform inside the chambers.
    8. The kiln and secondary chamber of the incinerator shall be made of mild steel conforming to IS: 2062 and of suitable thickness lined with high grade refractory and insulation.
    9. The unit shall run on excessive air to ensure fast and complete burning of wastes. The blower shall have capability to provide the appropriate supply of combustion air as well as to dilute the ?ue gases.
    10. Exit door for ash removed shall be provided at suitable place one each on primary and secondary chamber of incinerator.
    11. The waste charging shall be having provisions for automatic loading.
    12. Easily operatable charging door shall be provided to facilitate easy loading.
    13. Drum pyrolyser system for incineration of liquid waste which is not suitable for handling and pumping shall be provided
    14. The charging door should be ?tted with limit switches which in turn shall cut o? the burner in the primary chamber and shall provide all safety measures to the operator while charging.
    15. There shall be no waste accumulation inside the incinerator and shall have capability of smooth working.
    16. The control panel housing provided with the unit shall be of L & T or Siemens or any other reputed make, button, starters and contractors shall have digital temperature controls. The on o? switch shall have light indication etc.

17. Scrap metals, if incinerated alongwith the waste shall come back into ash for disposal.
18. Fuel consumption for incinerating hazardous waste is important consideration while selection of the vendor. Power/ electrical consumption should also be considered.
19. A chimney of 40 meter height with conical base should be provided alongwith incinerator. It should be made as per the speci?cations of guidelines of CPCB/ IS-6533 as applicable
20. It should be made as per the speci?cations of guidelines of CPCB/ IS-6533 as applicable
21. The incinerator shall be provided with suitable lifting lugs for maintenance purpose, as required.
22. The incinerator shall have a window fitted with 50 mm safety view glass in both the chambers for viewing.
23. The residence time for the flow gases should not be less than 2 secs. to achieve complete combustion in Secondary Combustion Chamber (SCC)
24. Sampling platform should be provided as per CPCB norms to collect stack samples from the chimney for monitoring the air pollutants, as and when required. Ports to be provided on chimney as per standard CPCB norms against diametric calculations.
25. The FD fan should be centrifugal type, having standards make suitable power motor of suitable material.
26. The ID fan should be centrifugal type, with suitable power motor to meet with efective control of emission from chimney.
27. The venture scrubber and wet scrubber unit shall be of high energy type of stainless steel ? 316 make. The scrubbing medium should be water with 5 % caustic approximately. It should bring the outlet temperature of gas to 800c.
28. Depending on the requirement, a cyclonic type droplet separator made out of MS plate an adequate thickness and lined with neoprene rubber of atleast 3 mm thickness should be provided to separate water droplet from the flue gases.
29. Recirculation pumps of appropriate capacity and of standards make motor should be provided for recirculation of scrubbing medium.
30. Oil service tank capacity 1000 liters made out of 5 mm thick MS plate complete with piping alongwith required MS supporting structure, control valve and fuel indicators / gauge, fuel lifting pumps etc should be provided.
31. The whole equipment should be painted with two coats of heat resistant aluminum paint.
32. Any other necessary system required to bring the ?ue gas parameters within limits as per Central/ State Pollution Control Board norms should be provided.
33. You shall provide all civil works drawing for incinerator room, foundation of chimney and static water tank etc. You should also provide effluent treatment plant for the treatment of efluents at the discharge point of the scrubbing medium so that discharge of waste water comply with the General Standards of Waste Water Quality notified under the Environment (Protection) Act, 1986 and rules made under.

36. Material of Construction:
    1. Body: Fabricated from MS sheet.
    2. Lining: Both the kiln and secondary combustion chamber to be lined with high quality refractory and insulation.
    3. Interlock system: Burners electrically interlocked while loading / unloading with micro switches.
    4. Alarm: Audio visual alarm for all
        i. drive failures.
        ii. Excess temperature in PCC/ SCC.
        iii. ID fan failure / FD fan failure. iv.
        iv. Any other failure in the equipment, plant
    5. Accessories : Standard spares:- Two nos. fully automatic burners of suitable
        i. capacity and make as provided on the PCC and SCC
        ii. Refractory material 500 kgs.
        iii. Temperature controller and indicators ? one set
37. Requirement of Chimney:
    1. Height: 40 meters
    2. Material of chimney: Mild steel with rubber lining.
    3. Type: It shall be self supported having sampling point at appropriate place of appropriate dia. alongwith ladder and platform for testing emission level from chimney. Ports to be provided at distances as required for standard method of testing.
    4. Chimney should be made as per the speci?cations of guidelines of CPCB/ IS-6533 as applicable.
38. Approximate life of incinerator: Expected life of incinerator shall not be less than 20 years. You shall furnish the expected minimum life of the incinerator for burning waste in terms of kgs/day for moderate working of 24 hours/day.
39. Combustion efficiency: Combustion efficiency should be at least 99.99 %. After combustion the ash left should be white ash. DRE for POHC shall be 99.999%.

40. Emission Standards:

Sr.No.	Parameter	Limiting concentration in mg/ Nm^3 unless stated	Sampling Duration in (minutes) unless stated
1.	Particulate matter	50	30
2.	HCL	50	30
3.	SO_2	200	30
4.	CO	100	30
5.		50	24 Hrs
6.	Total Organic Carbon	20	30
7.	HF	4	30
8.	NOx (NO and NO_2 expressed as NO_2)		
9.	Total dioxins and furans	0.1mg TEQ/Nm^3	8 hrs
10.	Cd + Th + their compounds	0.05	2 hrs
11.	Hg and its compounds	0.05	2 hrs
12.	Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds	0.05	2 hrs

Note : All values corrected to 11% oxygen on a dry basis.

41. Hydrocarbons: 10 ppm, over an hourly rolling average dry basis, measured as propane

42. Opacity: While operating properly at 100% rated capacity, the system shall have a visible emission rate of less than or equal to 10%, except for condensed water Vapor, from the discharge stack to atmosphere (one hour rolling average)

43. Dioxin/ Furans: While operating properly at 100% rated capacity, the system shall have an emission of dioxins and furans of less than or equal to 0.1 ng TEQ/Nm3 corrected to 11% oxygen. Sampling period shall be minimum 6 hours and maximum 8 hours. Analysis of dioxin and furans as well as reference measurement methods to calibrate automated measurement systems shall be carried out as given by CEN- standards. If CEN-standards are not available, ISO standards, National or International Standards which will ensure the provision data of an equivalent scienti?c quality shall apply. [Note: You should monitor the Dioxins and Furans quarterly up to two years after commissioning of the Incinerator and submit quarterly emission reports to MPCB.]

44. Metals: While operating properly at rated capacity, the system shall have an emission rate from the discharge of stack to atmosphere less than or equal to:

45. Air Pollution control devices: The emission control system shall be installed for gas cleaning and removal of air pollutants. The system shall comprise of following equipment, singly or in combination, with design e?ciencies to meet the emission norms:

    1. Waste heat boiler / heat exchanger/ quencher.
    2. Bag filters /ESP/ Cyclone/spray dryer
    3. Dry/ wet scrubber with hydrated lime or sodium hydroxide injection.
    4. Chimney stack of minimum 40 m height or as per formula 14 (Q) 0.3 [where Q is emission rate of SO2 in kg /hr] which ever is more and designed as per GEP.

    Note:Dry /wet ESP, spray dryer, dediox ?lter and mist eliminator shall also be considered as may be required to meet the emission standards.

46. Monitoring requirements: Three Continuous stack air quality monitoring system and recording system for opacity, CO, SO2, and NOx shall be installed and reports shall be sent to the Maharashtra Pollution Control Boards on regular basis. Interlocking arrangements for CO and temperature controls (in primary and secondary chamber) with feeding devices shall also be provided. - Waste feed has also to be terminated on loss of ignition in the afterburner. - Safety valve in case of high pressure development in the furnace.
47. Online stack monitoring with display and recording system of standard makes for maximum possible parameters shall be provided. Digital temperature with display and recording system shall be provided at primary chamber, secondary chamber, stack outlet and other places as required to incinerator
48. Laboratory The CHWTSDF Operator shall set up the laboratory for analysis of hazardous wastes in accordance with the provisions contained in the RFP document. 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. The laboratory shall be adequately staffed and equipped to carry out the above work. The laboratory shall be responsible to maintain the analytical records. Laboratory instruments and equipments as indicated in the RFP documents of MIDC and the techno-business proposal submitted by the CHWTSDF Operator shall be installed and commissioned. Any additional instruments/equipments required for sampling, storage, transportation, analysis etc. shall also be procured by CHWTSDF Operator
49. Transportation of Wastes The CHWTSDF Operator shall also be responsible for safe transportation of hazardous wastes as transporter from HW generated/occupier authorized by MPCB to CHWTSDF. The transportation vehicle and containers shall be suitably designed to handle the hazardous wastes and bio-medical wastes. The transporter shall carry/ display the TREM card during transportation of the hazardous waste and comply with the provisions under Motor Vehicles Act (MVA), 1988; as amended and rules made hereunder and as per Guidelines of HW transportation issued by CPCB as amended from time to time. CHWTSDF Operator shall carry out Transportation activity through Authorizaed vehicles. The CHWTSDF Operator shall be responsible for cleanup and remedial operation in case of spillage, leakage or any other accidental/ incidental discharge of hazardous wastes at its own costs as consequences and shall keep the MPCB suitably informed. The transporter shall be responsible to maintain the manifest system.
50. The transporter shall ensure that the hazardous wastes are packed, based on the composition in a manner suitable for handling and transportation. The labeling and packaging shall be easily visible and shall be such as to withstand physical conditions and climatic factors.
51. The packaging, labeling and transportation of hazardous wastes shall be in accordance with the provisions or rules made by the Central Government under the Motor Vehicles Act, 1988 and other guidelines issued from time to time.
52. All hazardous wastes containers shall be provided with a general label as given in Form-8 of hazardous waste rules.
53. The Transporter shall not accept hazardous waste from an occupier/generator for storage, treatment for disposal unless it is accompanied by six copies of the manifest (Form-10) as per the colour codes. The transporter shall give two copies of the manifest signed and dated to the generator/ occupier and retain the remaining four copies to be used as prescribed in Sub-rule (5),
54. Industry shall accept Hazardous waste only online manifest system through MPCB web portal instead of hardcopy.

55.
1. The transporter shall obtain relevant information in Form-11 from occupier, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency.
2. The transporter shall not export or import any type of hazardous wastes.
3. No processing of hazardous wastes shall be carried out by the transporter.
4. The transporter remaining proper record for receipt and delivery of the hazardous wastes. This record shall be made available for inspection.
5. It shall be the responsibility of the transporter to take all steps to ensure that the waste listed in schedule -1, 2 and 3 are properly handled and transported without any adverse effects on the environment.
6. The transporter of hazardous wastes shall maintain record of such transportation in Form-3. The transporter of hazardous waste shall send annual returns to the concern State Pollution Control Board / MPCB in Form-4.
7. The transporter shall be liable for damages caused to the environmental resulting due to improper handling & or transport of hazardous wastes and shall be liable to reinstate or restore damaged and destroyed elements of the environment.
8. The transporter shall comply with the provisions of Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016.

56. PACKAGING:- The containers must be able to withstand normal handling and retain integrity for a minimum of 6 months. In general, packaging for hazardous substances must meet the following requirement.
1. Items must be of such a strength, construction and type as not to break open or become defective during transportation.
2. Items must be constructed and closed in a manner to prevent spillage of hazardous substances.
3. Re-packaging materials including fastening must not be affected by the contents or form a dangerous combination with them

57. The containers when used for packaging of the hazardous wastes should meet the following requirements:-
    1. Container shall be of mild steel with suitable corrosion resistance coating and roll-on-roll-off cover which may either be handled by articulated crane or by a hook lift system works comfortably for a large variety of wastes. Other modes of packaging like collection in 200L MS and plastic drums, card board cartons, PP and HDPE/LDPE containers also works for variety of wastes. However, all such container should be amenable to mechanical handling. The design and use of containers should be case specific
    2. It should be leak proof.
    3. In general, containers for liquid hazardous waste should be completely closed (in fact: sealed). There should be no gas generation due to chemical reaction and therefore, no need for air vents; expansion due to temperature increase/ decrease normally does not need air vents.
    4. Container should be covered with solid lid or canvas to avoid emissions, spillage, and dust and to minimize odor generation both at the point of loading as well as during transportation.
    5. Container should be easy to handle during transportation and emptying.
    6. CHWTSDF shall not exceed the hazardous waste carrying capacity of the transportation vehicle.
    7. As far as possible, manual handling of containers should be minimized. Appropriate material handling equipments shall be used to load, transport and unload containers. This equipment includes drum, dollies, forklifts, drum handling equipments, lift gates and pallets. Drums should not be rolled on or off vehicles.
    8. Where 2-tier or 3-tier storage is envisaged the frame should have adequate strength to hold the containers;

    i. The multi-use containers should be re-usable. One way containers (especially 160 L-drums) are also allowed.

    ii. Loads are to be properly placed on vehicles. HW containers are not to overhang, perch, lean or be placed in other unstable position. Load should be secured with straps, clamps, braces or other measures to prevent movement and loss. Design of the container should be such that it can be safely accommodated on the transport vehicle.

    iii. Dissimilar wastes shall not be collected in the same container. Wastes shall be segregated and packed separately. This is necessary to ensure that each waste ?nds its way to the right disposal pathway.

    iii. Occupier/ hazardous waste generator shall not resort to the dilution of wastes (predominantly organic wastes)

58. LABELING:- There are two types of labeling requirements:- I] Labeling of individual transport containers [ranging from a print-size to tank] and II] Labeling of transport vehicles.
    1. All hazardous wastes containers must be clearly marked with current contents. The marking must be water proof and ?rmly attached so that they cannot be removed.
    2. Previous content labels, when di?erent, should be obliterated. Proper marking of containers is essential.
    3. Background colour of label - fluorescent yellow. The word, HAZARDOUS WASTES and HANDLE WITH CARE to be prominent and written in red, in Hindi, English and in vernacular language. 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.

59. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage e?uents, air emissions and hazardous waste to the Board sta? at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
60. Labeling of containers is important for tracking the wastes from the point of generation upto the final disposal. Following are the requirements for labeling:-
    1. The label should contain the name and address of the waste management facility where it is being sent for treatment and final disposal.
    2. Emergency contact phone numbers shall be prominently displayed. For example respective Regional O?cer of the State Pollution Control Board, Fire Station, Police Station
61. TRANSPORTATION:- Following are the requirements pertaining to the transportation of hazardous wastes.
    1. Vehicle used for transportation shall be in accordance with the provisions under the Motor Vehicles Act, 1988 and rules made there under.
    2. Transporter shall possess valid authorization from State Pollution Control Board for transportation of wastes.
    3. PUCC (Pollution Under Control Certificate) shall be properly displayed.
    4. Vehicles should be painting preferably in blue colour with white strip of 15 to 30 cm width running centrally all over the body. This is to conciliate easy recti?cation;
    5. Vehicle should be fitted with mechanical handling equipment as may be required for safe handling and transportation of the wastes.
    6. The words HAZARDOUS WASTE, shall be displayed on all sides of the vehicle;
    7. Name of the facility operator or the transporter, as the case may be shall be displayed.
    8. Emergency phone numbers and TREM Card shall be displayed properly.
    9. Vehicle shall be fitted with rollon-roll-off covers if the individual containers do not possess the same.
    10. Carrying of passenger expected in the cabin and those working with the waste haulers, shall be strictly prohibited.
    11. Transporter shall carry documents of manifest for the wastes during Transportation as required under the Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016.
    12. The truck shall be dedicated for transportation of hazardous wastes and they shall not be used for any other purpose.
    13. Each vehicle shall carry first aid kit and fire extinguisher.
    14. Educational quali?cation for the driver shall be minimum of 10th pass (SSC). Drivers shall be properly trained for handling the emergency situation and safety aspects involved in the transportation of hazardous wastes.
    15. The design of the trucks should be such that it should prevent spillages during transportation.
    16. Transporter shall promptly attend spillages/accident, if any, by providing suitable remedial action as may be required and shall inform concern, agencies the occupier, MPCB & Police.
    17. Exposure of community to the odor, spillages and emission from hazardous waste shall be avoided during transportation.

62. Emergency Preparedness Plan: The CHWTSDF Operator shall prepare an on-site emergency plan and provide adequate training to the staff at the facility. The emergency preparedness plan shall be prepared and put in place prior to the commencement of CHWTSDF Operations and shall be submitted to MPCB along with application for consent to Operate.
63. All operations involving collection, transport, storage and disposal shall comply with the guidelines / regulations issued by CPCB / MoEF as may be adopted by the MPCB 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 MPCB.
64. Overall responsibility of the Operator :
    1. Accepting hazardous wastes at CHWTSDF from the generators authorized by MPCB.
    2. Establishing a system for optimal movement of hazardous wastes transportation and treatment and disposal operations, which may include resources recovery / recycling, regarding as the case may be.
    3. Operating the CHWTSDF as per conditions stipulated in the authorization.
    4. Undertaking cleanup operation and remediation in case of communication resulting from CHWTSDF or during hazardous waste transport by CHWTSDF facility operator.
    5. Abatement of pollution and the odor arising out of CHWTSDF operations
    6. Compliance of regulations concerning occupational safety and health of CHWTSDF employees.
65. Sequence of Operations at the CHWTSDF :
    1. Hazardous wastes and its analysis report shall be received by Operator from the generator.
    2. The operator shall examine the report and plan pathway for hazardous waste treatment and disposal.
    3. Upon conFIrmation of the same by the operator to the generator the waste shall be dispatched to the CHWTSDF accompanied by transport manifest.
    4. Upon receipt at the facility, the hazardous wastes shall be weighed and properly logged.
    5. Hazardous waste shall then undergo a visual inspection to confirm the physical appearance.
    6. A representative sample of the hazardous waste shall be collected and sent to the onsite laboratory for analysis.
    7. The result of the analysis shall be compared with the results of earlier analysis.
    8. Upon con?rmation, hazardous waste shall be sent for CHWTSDF operations according to the identified pathway.
66. 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 see that the problems like odour, surface water contaminations, ground water percolation etc. does not occur.

67. Characterization : 5.1 Generator shall provide declaration to the effect that hazardous wastes generated are as per authorizations by the Board. 5.2 Generation of hazardous wastes shall identify and provide analysis report including CRIT criteria of the waste consignments. The operator should ensure that the generator provides such information regarding: a. Through put and process that generates the waste, with quantities and. b. The physical and chemical description waste as per parameters 5.3 The operator should ensure that hazardous waste codes are properly placed as per HW Rules.
68. This aspect is basically for making the waste more amenable for transport and further treatment. This can be done by way of incinerator neutralization, oil & grease removal, change in form, dewatering etc. so as to render such waste less hazardous. This activity should be done in engineering like manner and the pollution so generated would have to be treated so as to meet the standards stipulated in this consent order.
69. Pre-Transport: The Operator shall not accept hazardous wastes from a generator unless six-copy (with colour codes) manifest is provided by the generator. 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. This aspect shall include the envisaged strength of fleet of hazardous waste transportation vehicles that the Operator desires to place in service. 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, it has to be seen that noncompatible wastes are not mixed. The wastes shall be transported in closed containers at all times. Necessary precautions should be taken as envisaged under the guidelines issued by MoEF in 1991, CPCG in 1998 and Central Motor Vehicles Rules, 1989. There should be a garage / workshop to inspect cushioning springs, sparking form silencer, engine geeing hot, staring trouble, washing of vehicles, closing arrangement etc. Pretransportation operations shall include pre-inspection of tankers/ containers before filing, to check for cleanliness / washing followed by packaging labeling 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.
70. Loading & Transportation Since the transportation cargo would be hazardous, 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. Manifest / shipping 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.
71. Spillage Handling Spillage during handling should be avoided by adopting good housekeeping practices and upkeep of storages / handling equipment. Operator would have to train transporting staff and provide them with instructions to use the TREM (Transport Emergency) Cards to deal with ?les and accidents and should equip them with road sings, placards, etc. This respect should also be covered under the insurance scheme. The Operator shall immediately inform MPCB and other regulatory authorities in case of spillage, leakage or other accidents during transportation.

72. Waste Treatment / Stabilization Waste Treatment / Stabilization is a process designed to convert hazardous wastes in the form of non-aqueous liquids, semi-solids or reactive solids in to less leachable solids that can be then deposited directly into the secured land?ll. The treatment / stabilization operations will be carried out for all wastes identi?ed for the purpose so as to minimize their contaminant leaching potential. This will change the nature of these wastes to a less hazardous category. Treatment / stabilization could involve immobilization of leachable materials by fixation of nonreactive solids, reduction of volume, reducing contaminant level of organic / inorganic components. Selection of technology would depend on the nature of waste, physical properties, option for technology applications cost. etc. The treated wastes will be assessed for compatibility with other wastes as with liner system used before being land ?lled. The term treatment / stabilization is intended to cover a number of mechanisms including.
    1. Immobilization / Chemical Fixation: The chemical binding of contaminants within a cementing structure to reduce the mobility or leach ability of the waste constituent.
    2. Encapsulation: The occlusion or entrapment of contaminant particles within a solids matrix.
    3. Solidification: The conversion of slurries that do not readily de-waste into solids by addition of solidi?cation and absorption agents. General Operations for waste treatment / stabilization may include

    3.i Receiving waste and its storage at designed place.

    ii. Reagent addition as per the preestimated place.

    iii. Mixing and curing.

    iv. Thermal treatment to remove moisture, organic etc.

    v. Analysis of the stabilized sample.

    vi. Transfer of stabilized material to landfill. Ambient odor due to CHWTSDF operations has to be neutralized by the operator.

73. Placing bulks, containerized, or non-containerized liquid hazardous wastes containing free liquids (whether or not absorbent have been added, liquids that have absorbed I biodegradable materials and liquid that have been stabilized by absorbents but will release liquids when compressed under normal pressure that might occur during and after landfiling in the landfill is prohibited regardless of the length of time, presence of liners or leachate collection system. The Operator shall use the paint filter liquid test (PFLT) to comply with requirement. This test determines whether the waste can be accepted to landfill. If the work does not pass the PFLT, it must be treated before it can be placed in the landfill.

74. Waste treatment / stabilization would have to be performed on all wastes that find their final disposal into the secured landfill but do not meet the landfill disposal criteria (placed at Annexure-I of this schedule). 13.0 Identification of parameters required for waste treatment / stabilization.

75. Identification of parameters required for waste treatment / stabilization. Waste treatment / stabilization parameters shall include both physical and chemical tests. Physical tests shall be performed to characterize wastes before and after stabilizations / solidification / treatment. The chemical tests shall primarily be the leaching tests, which will be conducted to evaluate the performance of specific treatment processes.

76. Analysis protocol to confirm treatment / stabilizations of waste. The operator has to conduct and document the results of the following physical tests applicable to incoming waste as well as on treated / stabilized hazardous waste

77. Chemical Test : Leading tests shall be used in evaluating the performance of treatment / stabilization / solidi?cation processes for wastes as per the recommended TCLP procedure for the identified chemical constituents in the stabilized waste. The waste stabilized should meet the BDAT standards of USEPA before their disposal to secured landfill till the Indian Standards for BDAT are notified. It should be as per the criteria specified in Table 1 of this consent for disposal of hazardous waste directly in to the secured landfill.
78. Storage at CHWTSDF : Separate area should be earmarked for storing the waste at CHWTSDF. The storage area may consist of different cells for storing different kinds of hazardous wastes. In designing these cells, the following points may be taken into consideration.
    1. That ignitable, reactive and non-compatible wastes should be stored separately.
    2. That wastes containing volatile solvents or other low vapour pressure chemicals should be adequately protected from direct exposure to sunlight.
    3. The storage are should have a proper containment system. The containment system should have a collection area to collect and remove any leak, spill or precipitation.
    4. 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.
    5. The operator should put in place a system for inspection of the storage area to check the conditions of the containers, spillages, leakages etc and maintain proper records as may specified by MPCB in the authorization to operate CHWTSDF.
    6. The hazardous wastes should not be stored for more than 90 days at this temporary storage area.
    7. In case the waste is not in accordance with the authorization issued by MPCB to the generator, the operator shall reject the wastes. Information to this effect shall be immediately sent to MPCB for advice.
    8. Incinerable hazardous wastes shall be stored as per the guidelines issued by Central Pollution Control Board for storing of Incinerable hazardous wastes.
79. Post treatment : Even after complete treatment there may be some residues left and care of this post treatment residue has to be taken through physico-chemical, biological treatment i.e. separation of oil, de-water sludge, mother liquor during solvent recovery reappearance of Leachate, incinerator's ash. Salt treatment and disposal of this waste shall be done within the CHWTSDF.
80. Safety: Safe work environment should be considered, provided and maintained for the staff by operator. Safety and security considerations should be made for all facts like pretreatment at generator's site, loading, transportation and unloading of hazardous waste, spill control, treatment and disposal, laboratory and also in the post closure period. Personal protection equipment and fire control system should be provided at site (e.g. fire extinguishers sand pails etc., water tanks). Training and mock drills etc. should be conducted with staff for emergency situations. A complete primary health unit with medicines/ antidotes would have to be provided a per the factory act, 1948 and 1987. Aspects like ventilation illumination and safe duration of limited working hours would also have to be considered. Periodical check-up of health shall be undertaken and the persons be kept rotated. This should also cover other emergencies like snake bite of sabotage. EIA recommendations, statutory rules and regulations act, etc. should be considered while providing for this aspect of operations.

81. Security : Entry of persons or livestock shall be prevented both during operations and post closure period. Arti?cial barriers like fence, watchtowers should be provided. Entry hates shall be minimum and preferably one only apart from emergency gates. Cautionary boards in appropriates language and in readable letter size shall be displayed at various locations within ands on the periphery of the CHWTSDF. Register of entry ands exist shall be maintained.
82. Risk management, Contingency Plans & Emergency procedures: An on site contingency plan and emergency procedure shall be prepared and approved from district emergency officer who in turn will prepare the off-site management plan. The contingency plan shall describe the reprocess in case of fires, explosion, unforeseen acts or events, sudden releases due to natural calamity. The strategic administrative arrangements with local police, fire dept. medical facilities of the area, dept dealing safety, health & environment officer of MIDC and revenue authority shall be designed. Latest phone and fax numbers of concerned authorities shall be printed and distributed. Evacuation plan with evacuation route shall be demonstrated by mock drills. Documentation should be immediately prepared for benefits of future planning. Other consideration as per EIA has to be integrated within this aspect of the operations of the CHWTSDF.
83. Public Consultation Precaution will have to be taken by the operator to satisfy any peculiar situation as may be demanded by the people relating as aesthetics, discomfort etc. Regular Public Consultation and awareness programme shall be undertaken.
84. Greenbelt A green belt of 20 meters should be provided at the periphery at the site to have better visual impact, to protect the surrounding environment by abating gaseous and particulate pollution as well as reduce the noise levels and to protect area from the cyclonic winds. The plant species should be per EIA, and MoEF/ CPCB guidelines.
85. Occupational Health This is a CHWTSDF where all kinds of hazardous waste are getting collected. Workers and sta? are exposed to high levels of toxins, pollution and pathogenic environment. There is high risk of occupational hazards at such sites. It is therefore essential to formulate a health policy/ plan for the workers by the Operator. Periodical checking of workers should not show any deteriorating in their immunity levels. A medical room, concession for workers in working hours, not employing the people of tender age or old age, early retirement bene?ts, daily nutritional support, group insurance scheme and other such measure shall have to be adopted.
86. All above aspects inter-alia as prescribed under the Factory act, 1948, amended in 1987 and the rules framed there under will have to be complied with. The detailed risk analysis as per the technology adopted, and an on risk mitigation plan should be prepared and the impact on the occupational health of the workers should be as mitigates as identified in the plan.
87. Waste acceptance criteria for disposal of hazardous wastes into the secured landfill are placed at Appendix-I of this schedule.
88. Issues regarding rates of wastes treatment and disposal, analysis of wastes and any other controversy shall be informed to redresser committee.
89. The Transporter shall not accept hazardous waste from an occupier/generator for storage, treatment for disposal unless it is accompanied by six copies of the manifest (Form-13) as per the colour codes. The transporter shall give two copies of the manifest signed and dated to the generator/ occupier and retain the remaining four copies to be used as prescribed in Sub-rule (5), in following manner.

Copy number with colour code	Purpose
Copy 1 (White)	To be forwarded by the occupier to the concern Regional Officer, MPCB
Copy 2 (Yellow)	To be retained by the occupier after taking signature on it from the transporter and rest of the four copies to be carried by the transporter.
Copy 3 (Pink)	To be retained by the operator of the facility after signature
Copy 4 (Orange)	To be returned to the transporter by the operator of facility after accepting waste
Copy 5 (Green)	To be returned by the operator of the facility to concern Regional Officer, MPCB
Copy 6 (Blue)	To be returned by the operator of the facility to the occupier after treatment and disposal of wastes

This certificate is digitally & electronically signed.

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd, 3rd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/L.S.I (R14)
No:- Format1.0/CC/UAN
No.0000165392/CE/2405000435

Date: 07/05/2024

To,
Maharashtra Enviro Power Limited (Unit -2),
Plot No. H-4 & H-4/1, MIDC Ranjangaon,
Tal. Shirur, Dist. Pune

Your Service is Our Duty

Sub: Consent to Establish under RED category for common hazardous waste treatment, storage and disposal facility.

Ref: Minutes of 32nd meeting of consent committee held on 06/03/2024.

Your application No.MPCB-CONSENT-0000165392 Dated 17.03.2023

For: grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to establish is granted for a period up to commissioning of the unit or up to 5 year whichever is earlier.**
2. **The capital investment of the project is Rs.130 Crs. (As per undertaking submitted by pp)**
3. **Consent is valid for:**

Sr No	Treatment Facility	Maximum Quantity	UOM
1	Secured Landfill (Stabilization and landfillable Hazardous Waste)	4	No.

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	6	As per Schedule-I	100 % recycle/reuse treated effluent into process and for secondary purpose like cooling tower make-up, air conditioning, fire fighting etc. to achieve Zero Liquid Discharge.
2.	Domestic effluent	9	As per Schedule-I	On land for gardening

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	S-1	Steam Boiler (Packaged)	1	As per Schedule -II
2	S-2	DG Set	1	As per Schedule -II
3	S-3	Stabilizer	1	As per Schedule -II

6. **Non-Hazardous Wastes:**

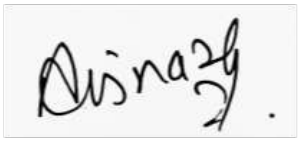
Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
NA					

7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	5.1 Used or spent oil	10	Lit/Day	NA	Sale to authorised party / CHWTSDF
2	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	200	No/M	NA	Sale to authorised party / CHWTSDF

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
10. Industry shall install online night vision Camera at pre-processing facility and its connectivity to CPCB & MPCB server.
11. PP shall send details of pre-processing waste disposal on monthly basis to Regional Officer & Sub-Regional Officer regularly.
12. This consent is issued pursuant to the decision of the 32nd Meeting of Consent Committee held on 06/03/2024.
13. The CHWTSDF shall cater to the requirements of environments of environmentally sound management as required under the HW Rules for the land-fillable hazardous wastes generated by the industries possessing valid authorization by the Maharashtra Pollution Control Board (MPCB) and operating in the following MIDC and nearby non-MIDC Industrial Areas, as per revised area allocation order of the Board No. MPCB/RO(HQ)/HSMD/TSDF/B-7446, dated 11/12/2008.
14. The applicant shall comply with the conditions of the Environmental Clearance granted vide letter No. SIA/MH/MIS/76141/2021 dated 09/01/2023.
15. Industry shall install online continuous monitoring system as per CPCB guidelines & data to be transmitted directly from Data Logger to Board server .
16. Depending upon the technical capacity and feasibility, hazardous wastes from Industries operating in non-MIDC Industrial areas and also industries operating in MIDC areas within Maharashtra authorized by or prior permission of MPCB can also be accepted by the CHWTSDF.

17. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/Activity.



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Signed by: Dr.Avinash Dhakne
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2024-05-07 11:25:42 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	260000.00	MPCB-DR-17768	17/03/2023	NEFT

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune II
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1. A] As per your application, you have proposed to provide Effluent Treatment Plant (ETP) of designed capacity of 35.00 CMD consisting of Primary (Collection tank, Equalization tank), Tertiary (Pressure sand filter, Activated carbon filter), Advanced treatment (Multi effective evaporator) for the treatment of 6 CMD of trade effluent.

B]

Sr.No	Parameters	Limiting concentration not to exceed in mg/l, except for pH
(1)	pH	5.5 to 9.0
(2)	Temperature	45 C
(3)	Oil & Grease	10
(4)	Phenolic Compounds	5.0
(5)	Ammonical Nitrogen (as N)	50
(6)	Cyanide (as CN)	2.0
(7)	Hexavalent Chromium (as Cr+6)	2.0
(8)	Total Chromium (as Cr)	2.0
(9)	Copper (as Cu)	3.0
(10)	Lead (as Pb)	1.0
(11)	Nickel (as Ni)	3.0
(12)	Zinc (as Zn)	15
(13)	Arsenic (as As)	0.2
(14)	Mercury (as Hg)	0.01
(15)	Cadmium	1.0
(16)	Selenium (as Se)	0.05
(17)	Fluoride (as F)	15
(18)	Boron (as B)	2.0

C] Treatment and disposal for combined Industrial and Domestic effluent.Treatment: The CETP authority shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality for strong stream and weak stream and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:

D] Disposal: The treated effluent shall be used on land for irrigation by adopting High rate Transpiration System(HRTS). In no case, the treated effluent shall find its way to any water body at any time and / or any location other than the prescribed mode of disposal as above.

2. A] As per your application, you have provided Sewage Treatment Plant of designed capacity 40 CMD for the treatment of 9 CMD of sewage.

B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

Sr.No	Parameters	Standards (mg/l)	
1	Suspended Solids	Not to exceed	50
2	BOD 3 days 27°C	Not to exceed	30
3	COD	Not to exceed	100

C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way for gardening / outside factory premises.

3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	25.00
2.	Domestic purpose	10.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	25

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to provide the Air pollution control (APC) system and also to erect following stack (s) to observe the following fuel pattern:

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
S-1	Steam Boiler (Packaged)	Multi Cyclone Separator & Alkali Scrubber	30.00	Coal 4 MT/Day	0.5	TPM	150 Mg/Nm^3
						SO2	40 Kg/Day
S-2	DG Set	Acoustic Enclosure	20.00	LDO 30 Lit/Day	1.8	SO2	25.92 Kg/Day
S-3	Stabilizer	Scrubber & Activated Carbon Bed	10.00	-	-	NA	-

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
NA						

If the above Bank Guarantee is not submitted within stipulated period, then 12% interest will be levied as a penalty as per circular dtd 29/02/2024 No. BO/MPCB/AS(T)/Circular/B-240229FTS0122

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

General Conditions:

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
   a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
   b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
   c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
   d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
   e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
   f) D.G. Set shall be operated only in case of power failure.
   g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
   h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
5. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
6. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
7. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding upon you.
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

13. You shall operate OCEMS installed for source emission round 'O' clock and transmit data online to CPCB and MPCB server. You shall also monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in year and submit report to Sub Regional Officer.
14. You shall ensure collection, and segregation of BMW regularly to treat and dispose Off within 48 hrs from generation.
15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board’s officers during their visit to the applicant.
19. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport the Bio Medical waste for any other purpose without obtaining prior written permission of the MPC Board.
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
24. You shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the facility premises.
25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board’s Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.

26. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto
27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
31. You should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in every year and submit report to Sub Regional Officer.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
34. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
35. You shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
36. You shall create the Environmental Cell by appointing an Environmental Engineer and Chemist for looking after day-to-day activities related to compliance of CCA.

37. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 , Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year
38. Laboratory The CHWTSDF Operator shall set up the laboratory for analysis of hazardous wastes in accordance with the provisions contained in the RFP document. 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. The laboratory shall be adequately staffed and equipped to carry out the above work. The laboratory shall be responsible to maintain the analytical records. Laboratory instruments and equipments as indicated in the RFP documents of MIDC and the techno-business proposal submitted by the CHWTSDF Operator shall be installed and commissioned. Any additional instruments/equipments required for sampling, storage, transportation, analysis etc. shall also be procured by CHWTSDF Operator
39. Transportation of Wastes The CHWTSDF Operator shall also be responsible for safe transportation of hazardous wastes as transporter from HW generated/occupier authorized by MPCB to CHWTSDF. The transportation vehicle and containers shall be suitably designed to handle the hazardous wastes and bio-medical wastes. The transporter shall carry/ display the TREM card during transportation of the hazardous waste and comply with the provisions under Motor Vehicles Act (MVA), 1988; as amended and rules made hereunder and as per Guidelines of HW transportation issued by CPCB as amended from time to time. CHWTSDF Operator shall carry out Transportation activity through Authorizaed vehicles. The CHWTSDF Operator shall be responsible for cleanup and remedial operation in case of spillage, leakage or any other accidental/ incidental discharge of hazardous wastes at its own costs as consequences and shall keep the MPCB suitably informed. The transporter shall be responsible to maintain the manifest system.
40. The transporter shall ensure that the hazardous wastes are packed, based on the composition in a manner suitable for handling and transportation. The labeling and packaging shall be easily visible and shall be such as to withstand physical conditions and climatic factors.
41. The packaging, labeling and transportation of hazardous wastes shall be in accordance with the provisions or rules made by the Central Government under the Motor Vehicles Act, 1988 and other guidelines issued from time to time.
42. All hazardous wastes containers shall be provided with a general label as given in Form-8 of hazardous waste rules.
43. The Transporter shall not accept hazardous waste from an occupier/generator for storage, treatment for disposal unless it is accompanied by six copies of the manifest (Form-10) as per the colour codes. The transporter shall give two copies of the manifest signed and dated to the generator/ occupier and retain the remaining four copies to be used as prescribed in Sub-rule (5),
44. Industry shall accept Hazardous waste only online manifest system through MPCB web portal instead of hardcopy.
45. 1. The transporter shall obtain relevant information in Form-11 from occupier, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency.
    2. The transporter shall not export or import any type of hazardous wastes.
    3. No processing of hazardous wastes shall be carried out by the transporter.
    4. The transporter remaining proper record for receipt and delivery of the hazardous wastes. This record shall be made available for inspection.

5. It shall be the responsibility of the transporter to take all steps to ensure that the waste listed in schedule -1, 2 and 3 are properly handled and transported without any adverse effects on the environment.
6. The transporter of hazardous wastes shall maintain record of such transportation in Form-3. The transporter of hazardous waste shall send annual returns to the concern State Pollution Control Board / MPCB in Form-4.
7. The transporter shall be liable for damages caused to the environmental resulting due to improper handling & or transport of hazardous wastes and shall be liable to reinstate or restore damaged and destroyed elements of the environment.
8. The transporter shall comply with the provisions of Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016.

46. PACKAGING:- The containers must be able to withstand normal handling and retain integrity for a minimum of 6 months. In general, packaging for hazardous substances must meet the following requirement.
    1. Items must be of such a strength, construction and type as not to break open or become defective during transportation.
    2. Items must be constructed and closed in a manner to prevent spillage of hazardous substances.
    3. Re-packaging materials including fastening must not be affected by the contents or form a dangerous combination with them

47. The containers when used for packaging of the hazardous wastes should meet the following requirements:-
    1. Container shall be of mild steel with suitable corrosion resistance coating and roll-on-roll-off cover which may either be handled by articulated crane or by a hook lift system works comfortably for a large variety of wastes. Other modes of packaging like collection in 200L MS and plastic drums, card board cartons, PP and HDPE/LDPE containers also works for variety of wastes. However, all such container should be amenable to mechanical handling. The design and use of containers should be case specific
    2. It should be leak proof.
    3. In general, containers for liquid hazardous waste should be completely closed (in fact: sealed). There should be no gas generation due to chemical reaction and therefore, no need for air vents; expansion due to temperature increase/ decrease normally does not need air vents.
    4. Container should be covered with solid lid or canvas to avoid emissions, spillage, and dust and to minimize odor generation both at the point of loading as well as during transportation.
    5. Container should be easy to handle during transportation and emptying.
    6. CHWTSDF shall not exceed the hazardous waste carrying capacity of the transportation vehicle.
    7. As far as possible, manual handling of containers should be minimized. Appropriate material handling equipments shall be used to load, transport and unload containers. This equipment includes drum, dollies, forklifts, drum handling equipments, lift gates and pallets. Drums should not be rolled on or off vehicles.
    8. Where 2-tier or 3-tier storage is envisaged the frame should have adequate strength to hold the containers;
    i. The multi-use containers should be re-usable. One way containers (especially 160 L-drums) are also allowed.

ii. Loads are to be properly placed on vehicles. HW containers are not to overhang, perch, lean or be placed in other unstable position. Load should be secured with straps, clamps, braces or other measures to prevent movement and loss. Design of the container should be such that it can be safely accommodated on the transport vehicle.

iii. Dissimilar wastes shall not be collected in the same container. Wastes shall be segregated and packed separately. This is necessary to ensure that each waste ?nds its way to the right disposal pathway.

iii. Occupier/ hazardous waste generator shall not resort to the dilution of wastes (predominantly organic wastes)

48. LABELING:- There are two types of labeling requirements:- I] Labeling of individual transport containers [ranging from a print-size to tank] and II] Labeling of transport vehicles.
    1. All hazardous wastes containers must be clearly marked with current contents. The marking must be water proof and ?rmly attached so that they cannot be removed.
    2. Previous content labels, when di?erent, should be obliterated. Proper marking of containers is essential.
    3. Background colour of label - fluorescent yellow. The word, HAZARDOUS WASTES and HANDLE WITH CARE to be prominent and written in red, in Hindi, English and in vernacular language. 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.
49. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage e?uents, air emissions and hazardous waste to the Board sta? at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
50. Labeling of containers is important for tracking the wastes from the point of generation upto the final disposal. Following are the requirements for labeling:-
    1. The label should contain the name and address of the waste management facility where it is being sent for treatment and final disposal.
    2. Emergency contact phone numbers shall be prominently displayed. For example respective Regional O?cer of the State Pollution Control Board, Fire Station, Police Station
51. TRANSPORTATION:- Following are the requirements pertaining to the transportation of hazardous wastes.
    1. Vehicle used for transportation shall be in accordance with the provisions under the Motor Vehicles Act, 1988 and rules made there under.
    2. Transporter shall possess valid authorization from State Pollution Control Board for transportation of wastes.
    3. PUCC (Pollution Under Control Certificate) shall be properly displayed.
    4. Vehicles should be painting preferably in blue colour with white strip of 15 to 30 cm width running centrally all over the body. This is to conciliate easy recti?cation;
    5. Vehicle should be fitted with mechanical handling equipment as may be required for safe handling and transportation of the wastes.
    6. The words HAZARDOUS WASTE, shall be displayed on all sides of the vehicle;

7. Name of the facility operator or the transporter, as the case may be shall be displayed.
8. Emergency phone numbers and TREM Card shall be displayed properly.
9. Vehicle shall be fitted with rollon-roll-off covers if the individual containers do not possess the same.
10. Carrying of passenger expected in the cabin and those working with the waste haulers, shall be strictly prohibited.
11. Transporter shall carry documents of manifest for the wastes during Transportation as required under the Hazardous & Other Wastes (Management & Transboundry Movement) Rules 2016.
12. The truck shall be dedicated for transportation of hazardous wastes and they shall not be used for any other purpose.
13. Each vehicle shall carry first aid kit and fire extinguisher.
14. Educational quali?cation for the driver shall be minimum of 10th pass (SSC). Drivers shall be properly trained for handling the emergency situation and safety aspects involved in the transportation of hazardous wastes.
15. The design of the trucks should be such that it should prevent spillages during transportation.
16. Transporter shall promptly attend spillages/accident, if any, by providing suitable remedial action as may be required and shall inform concern, agencies the occupier, MPCB & Police.
17. Exposure of community to the odor, spillages and emission from hazardous waste shall be avoided during transportation.

52. Emergency Preparedness Plan: The CHWTSDF Operator shall prepare an on-site emergency plan and provide adequate training to the staff at the facility. The emergency preparedness plan shall be prepared and put in place prior to the commencement of CHWTSDF Operations and shall be submitted to MPCB along with application for consent to Operate.
53. All operations involving collection, transport, storage and disposal shall comply with the guidelines / regulations issued by CPCB / MoEF as may be adopted by the MPCB 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 MPCB.
54. Overall responsibility of the Operator :
    1. Accepting hazardous wastes at CHWTSDF from the generators authorized by MPCB.
    2. Establishing a system for optimal movement of hazardous wastes transportation and treatment and disposal operations, which may include resources recovery / recycling, regarding as the case may be.
    3. Operating the CHWTSDF as per conditions stipulated in the authorization.
    4. Undertaking cleanup operation and remediation in case of communication resulting from CHWTSDF or during hazardous waste transport by CHWTSDF facility operator.
    5. Abatement of pollution and the odor arising out of CHWTSDF operations
    6. Compliance of regulations concerning occupational safety and health of CHWTSDF employees.

55. Sequence of Operations at the CHWTSDF :
    1. Hazardous wastes and its analysis report shall be received by Operator from the generator.
    2. The operator shall examine the report and plan pathway for hazardous waste treatment and disposal.
    3. Upon conFIrmation of the same by the operator to the generator the waste shall be dispatched to the CHWTSDF accompanied by transport manifest.
    4. Upon receipt at the facility, the hazardous wastes shall be weighed and properly logged.
    5. Hazardous waste shall then undergo a visual inspection to confirm the physical appearance.
    6. A representative sample of the hazardous waste shall be collected and sent to the onsite laboratory for analysis.
    7. The result of the analysis shall be compared with the results of earlier analysis.
    8. Upon con?rmation, hazardous waste shall be sent for CHWTSDF operations according to the identified pathway.
56. 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 see that the problems like odour, surface water contaminations, ground water percolation etc. does not occur.
57. Characterization : 5.1 Generator shall provide declaration to the effect that hazardous wastes generated are as per authorizations by the Board. 5.2 Generation of hazardous wastes shall identify and provide analysis report including CRIT criteria of the waste consignments. The operator should ensure that the generator provides such information regarding: a. Through put and process that generates the waste, with quantities and. b. The physical and chemical description waste as per parameters 5.3 The operator should ensure that hazardous waste codes are properly placed as per HW Rules.
58. This aspect is basically for making the waste more amenable for transport and further treatment. This can be done by way of incinerator neutralization, oil & grease removal, change in form, dewatering etc. so as to render such waste less hazardous. This activity should be done in engineering like manner and the pollution so generated would have to be treated so as to meet the standards stipulated in this consent order.

59. Pre-Transport: The Operator shall not accept hazardous wastes from a generator unless six-copy (with colour codes) manifest is provided by the generator. 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. This aspect shall include the envisaged strength of fleet of hazardous waste transportation vehicles that the Operator desires to place in service. 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, it has to be seen that noncompatible wastes are not mixed. The wastes shall be transported in closed containers at all times. Necessary precautions should be taken as envisaged under the guidelines issued by MoEF in 1991, CPCG in 1998 and Central Motor Vehicles Rules, 1989. There should be a garage / workshop to inspect cushioning springs, sparking form silencer, engine geeing hot, staring trouble, washing of vehicles, closing arrangement etc. Pretransportation operations shall include pre-inspection of tankers/ containers before filing, to check for cleanliness / washing followed by packaging labeling 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.
60. Loading & Transportation Since the transportation cargo would be hazardous, 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. Manifest / shipping 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.
61. Spillage Handling Spillage during handling should be avoided by adopting good housekeeping practices and upkeep of storages / handling equipment. Operator would have to train transporting staff and provide them with instructions to use the TREM (Transport Emergency) Cards to deal with ?les and accidents and should equip them with road sings, placards, etc. This respect should also be covered under the insurance scheme. The Operator shall immediately inform MPCB and other regulatory authorities in case of spillage, leakage or other accidents during transportation.

62. Waste Treatment / Stabilization Waste Treatment / Stabilization is a process designed to convert hazardous wastes in the form of non-aqueous liquids, semi-solids or reactive solids in to less leachable solids that can be then deposited directly into the secured land?ll. The treatment / stabilization operations will be carried out for all wastes identi?ed for the purpose so as to minimize their contaminant leaching potential. This will change the nature of these wastes to a less hazardous category. Treatment / stabilization could involve immobilization of leachable materials by fixation of nonreactive solids, reduction of volume, reducing contaminant level of organic / inorganic components. Selection of technology would depend on the nature of waste, physical properties, option for technology applications cost. etc. The treated wastes will be assessed for compatibility with other wastes as with liner system used before being land ?lled. The term treatment / stabilization is intended to cover a number of mechanisms including.
    1. Immobilization / Chemical Fixation: The chemical binding of contaminants within a cementing structure to reduce the mobility or leach ability of the waste constituent.
    2. Encapsulation: The occlusion or entrapment of contaminant particles within a solids matrix.
    3. Solidification: The conversion of slurries that do not readily de-waste into solids by addition of solidi?cation and absorption agents. General Operations for waste treatment / stabilization may include

    3.i Receiving waste and its storage at designed place.

    ii. Reagent addition as per the preestimated place.

    iii. Mixing and curing.

    iv. Thermal treatment to remove moisture, organic etc.

    v. Analysis of the stabilized sample.

    vi. Transfer of stabilized material to landfill. Ambient odor due to CHWTSDF operations has to be neutralized by the operator.

63. Placing bulks, containerized, or non-containerized liquid hazardous wastes containing free liquids (whether or not absorbent have been added, liquids that have absorbed I biodegradable materials and liquid that have been stabilized by absorbents but will release liquids when compressed under normal pressure that might occur during and after landfiling in the landfill is prohibited regardless of the length of time, presence of liners or leachate collection system. The Operator shall use the paint filter liquid test (PFLT) to comply with requirement. This test determines whether the waste can be accepted to landfill. If the work does not pass the PFLT, it must be treated before it can be placed in the landfill.
64. Waste treatment / stabilization would have to be performed on all wastes that find their final disposal into the secured landfill but do not meet the landfill disposal criteria (placed at Annexure-I of this schedule). 13.0 Identification of parameters required for waste treatment / stabilization.
65. Identification of parameters required for waste treatment / stabilization. Waste treatment / stabilization parameters shall include both physical and chemical tests. Physical tests shall be performed to characterize wastes before and after stabilizations / solidification / treatment. The chemical tests shall primarily be the leaching tests, which will be conducted to evaluate the performance of specific treatment processes.
66. Analysis protocol to confirm treatment / stabilizations of waste. The operator has to conduct and document the results of the following physical tests applicable to incoming waste as well as on treated / stabilized hazardous waste

67. Chemical Test : Leading tests shall be used in evaluating the performance of treatment / stabilization / solidi?cation processes for wastes as per the recommended TCLP procedure for the identified chemical constituents in the stabilized waste. The waste stabilized should meet the BDAT standards of USEPA before their disposal to secured landfill till the Indian Standards for BDAT are notified. It should be as per the criteria specified in Table 1 of this consent for disposal of hazardous waste directly in to the secured landfill.
68. Storage at CHWTSDF : Separate area should be earmarked for storing the waste at CHWTSDF. The storage area may consist of different cells for storing different kinds of hazardous wastes. In designing these cells, the following points may be taken into consideration.
    1. That ignitable, reactive and non-compatible wastes should be stored separately.
    2. That wastes containing volatile solvents or other low vapour pressure chemicals should be adequately protected from direct exposure to sunlight.
    3. The storage are should have a proper containment system. The containment system should have a collection area to collect and remove any leak, spill or precipitation.
    4. 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.
    5. The operator should put in place a system for inspection of the storage area to check the conditions of the containers, spillages, leakages etc and maintain proper records as may specified by MPCB in the authorization to operate CHWTSDF.
    6. The hazardous wastes should not be stored for more than 90 days at this temporary storage area.
    7. In case the waste is not in accordance with the authorization issued by MPCB to the generator, the operator shall reject the wastes. Information to this effect shall be immediately sent to MPCB for advice.
    8. Incinerable hazardous wastes shall be stored as per the guidelines issued by Central Pollution Control Board for storing of Incinerable hazardous wastes.
69. Post treatment : Even after complete treatment there may be some residues left and care of this post treatment residue has to be taken through physico-chemical, biological treatment i.e. separation of oil, de-water sludge, mother liquor during solvent recovery reappearance of Leachate, incinerator's ash. Salt treatment and disposal of this waste shall be done within the CHWTSDF.
70. Safety: Safe work environment should be considered, provided and maintained for the staff by operator. Safety and security considerations should be made for all facts like pretreatment at generator's site, loading, transportation and unloading of hazardous waste, spill control, treatment and disposal, laboratory and also in the post closure period. Personal protection equipment and fire control system should be provided at site (e.g. fire extinguishers sand pails etc., water tanks). Training and mock drills etc. should be conducted with staff for emergency situations. A complete primary health unit with medicines/ antidotes would have to be provided a per the factory act, 1948 and 1987. Aspects like ventilation illumination and safe duration of limited working hours would also have to be considered. Periodical check-up of health shall be undertaken and the persons be kept rotated. This should also cover other emergencies like snake bite of sabotage. EIA recommendations, statutory rules and regulations act, etc. should be considered while providing for this aspect of operations.

71. Security : Entry of persons or livestock shall be prevented both during operations and post closure period. Arti?cial barriers like fence, watchtowers should be provided. Entry hates shall be minimum and preferably one only apart from emergency gates. Cautionary boards in appropriates language and in readable letter size shall be displayed at various locations within ands on the periphery of the CHWTSDF. Register of entry ands exist shall be maintained.
72. Risk management, Contingency Plans & Emergency procedures: An on site contingency plan and emergency procedure shall be prepared and approved from district emergency officer who in turn will prepare the off-site management plan. The contingency plan shall describe the reprocess in case of fires, explosion, unforeseen acts or events, sudden releases due to natural calamity. The strategic administrative arrangements with local police, fire dept. medical facilities of the area, dept dealing safety, health & environment officer of MIDC and revenue authority shall be designed. Latest phone and fax numbers of concerned authorities shall be printed and distributed. Evacuation plan with evacuation route shall be demonstrated by mock drills. Documentation should be immediately prepared for benefits of future planning. Other consideration as per EIA has to be integrated within this aspect of the operations of the CHWTSDF.
73. Public Consultation Precaution will have to be taken by the operator to satisfy any peculiar situation as may be demanded by the people relating as aesthetics, discomfort etc. Regular Public Consultation and awareness programme shall be undertaken.
74. Greenbelt A green belt of 20 meters should be provided at the periphery at the site to have better visual impact, to protect the surrounding environment by abating gaseous and particulate pollution as well as reduce the noise levels and to protect area from the cyclonic winds. The plant species should be per EIA, and MoEF/ CPCB guidelines.
75. Occupational Health This is a CHWTSDF where all kinds of hazardous waste are getting collected. Workers and sta? are exposed to high levels of toxins, pollution and pathogenic environment. There is high risk of occupational hazards at such sites. It is therefore essential to formulate a health policy/ plan for the workers by the Operator. Periodical checking of workers should not show any deteriorating in their immunity levels. A medical room, concession for workers in working hours, not employing the people of tender age or old age, early retirement bene?ts, daily nutritional support, group insurance scheme and other such measure shall have to be adopted.
76. All above aspects inter-alia as prescribed under the Factory act, 1948, amended in 1987 and the rules framed there under will have to be complied with. The detailed risk analysis as per the technology adopted, and an on risk mitigation plan should be prepared and the impact on the occupational health of the workers should be as mitigates as identified in the plan.
77. Waste acceptance criteria for disposal of hazardous wastes into the secured landfill are placed at Appendix-I of this schedule.
78. Issues regarding rates of wastes treatment and disposal, analysis of wastes and any other controversy shall be informed to redresser committee.
79. The Transporter shall not accept hazardous waste from an occupier/generator for storage, treatment for disposal unless it is accompanied by six copies of the manifest (Form-13) as per the colour codes. The transporter shall give two copies of the manifest signed and dated to the generator/ occupier and retain the remaining four copies to be used as prescribed in Sub-rule (5), in following manner.

Copy number with colour code	Purpose
Copy 1 (White)	To be forwarded by the occupier to the concern Regional Officer, MPCB
Copy 2 (Yellow)	To be retained by the occupier after taking signature on it from the transporter and rest of the four copies to be carried by the transporter.
Copy 3 (Pink)	To be retained by the operator of the facility after signature
Copy 4 (Orange)	To be returned to the transporter by the operator of facility after accepting waste
Copy 5 (Green)	To be returned by the operator of the facility to concern Regional Officer, MPCB
Copy 6 (Blue)	To be returned by the operator of the facility to the occupier after treatment and disposal of wastes

This certificate is digitally & electronically signed.

M/s. Maharashtra Enviro Power Ltd.,
Plot No. P-56, Ranjangoan MIDC, Tal. Shirur, Dist. Pune

Parameter	Standard	STP Outlet	STP Outlet	STP Outlet	STP Outlet
		17-10-2024	11-11-2024	20-01-2025	26-03-2025
pH	5.5-9.0	7.9	---	---	8
BOD	30	---	9	6.7	6.2
Oil & Grease	20	BDL	---	---	BDL
Suspended Soilds	100	10	9	10	14
Residual Chlorine	1	---	---	---	---
Total Ammonical Nitrogen	50	0.75	---	---	---
COD	250	---	36	24	20.2
Chlorides	---	47.69	---	---	73.63
Sulphate	---	60	---	---	67.52
TDS	---	395	---	---	565
Arsenic	0.2	BDL	---	---	---
Mercury	0.01	0.03	---	---	---
Lead	1	BDL	---	---	---
Cadmium	2	BDL	---	---	---
Copper	3	0.14	---	---	---
Zinc	15	0.07	---	---	---
Nickel	5	0.01	---	---	---
Fluoride	15	0.22	---	---	---
Phenol	5	BDL	---	---	---
Boron	2	0.87	---	---	---
Total Chromium	2	BDL	---	---	---
Chromium Hexa	2	BDL	---	---	---

M/s. Maharashtra Enviro Power Ltd.,
Plot No. P-56, Ranjangoan MIDC, Tal. Shirur, Dist. Pune

Parameter	Standard	ETP Outlet	ETP Outlet	ETP Outlet	ETP Outlet	ETP Outlet	ETP Outlet	ETP Outlet	ETP Outlet
		13-03-2023	25-09-2023	19-09-2024	17-10-2024	11-11-2024	20-01-2025	26-03-2025	23-04-2025
pH	5.5-9.0	7.6	6.8	7.1	6.5	6.2	8.1	7.2	6.5
BOD	30	---	---		---	---	36.4	30	138
Oil & Grease	20	2.4	BDL	BDL	BDL	BDL	BDL	BDL	2.2
Suspended Soilds	100	---			94	86	18	34	57
Residual Chlorine	1	---	---		---	---		NIL	NIL
Total Ammonical Nitrogen	50	0.94	1.66	20.00	4.50	33.00	27.70	23.45	22.90
COD	250	---	216	---	---	---	128	96.8	349.4
Chlorides	---	---	---	---	422.37	755.27	280.91	253.12	
Sulphate	---	---	---	---	124.50	178.00	148.70	146.60	
TDS	---	---	---	---	3132	4674	1490	1570	2562
Arsenic	0.2	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Mercury	0.01	NA	BDL	BDL	0.04	0.01	0.03	BDL	BDL
Lead	1	BDL	0.08	BDL	BDL	BDL	BDL	0.38	BDL
Cadmium	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper	3	BDL	0.10	0.02	0.02	0.03	BDL	0.05	0.08
Zinc	15	0.06	0.30	0.16	0.24	0.31	BDL	0.20	0.43
Nickel	5	BDL	0.18	0.03	0.01	0.10	BDL	BDL	0.16
Fluoride	15	0.90	1.12	0.07	0.36	0.12	0.12	0.60	BDL
Phenol	5	0.84	---	0.06	BDL	BDL	BDL	BDL	0.35
Boron	2	3.76	1.23	0.32	0.53	1.80	0.59	BDL	BDL
Total Chromium	2	BDL	BDL	0.27	BDL	BDL	BDL	BDL	BDL
Chromium Hexa	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

M/s. Maharashtra Enviro Power Ltd.,
Plot No. P-56, Ranjangoan MIDC, Tal. Shirur, Dist. Pune

Parameter	Standard	U/s Pizzo Well	D/s Pizzo Well near Landfill No.4	Pizzo Well Downside	Pizzo Well Near Office	Piezometric well - I	Piezometric well - II	Piezometric well - I	Piezometric well - II
		21-08-2023	21-08-2023	01-08-2024	01-08-2024	26-03-2025	26-03-2025	23-04-2025	23-04-2025
pH	5.5-9.0	8.3	7.3	7.8	8.2	8	7.2	8	7.7
BOD	30	20	26	---	---	3.6	29.2	4.9	5.8
Oil & Grease	20	BDL	BDL	BDL	BDL	BDL		BDL	BDL
Suspended Soilds	100	---	---	---	---	69	57	15	15
Residual Chlorine	1	---	---	---	---	NIL	NIL	NIL	NIL
Total Ammonical Nitrogen	50	0.53	0.88	0.69	0.81	0.91	0.96	0.54	0.74
COD	250	56	76	---	---	16.1	92.7	16.1	20.1
Chlorides	---	---	---	---	---	49.98	312.3		
Sulphate	---	---	---	---	---	52.36	78.20		
TDS	---	---	---	---	---	582	2005	656	514
Arsenic	0.2	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL
Mercury	0.01	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL
Lead	1	BDL	BDL	BDL	BDL	0.39	0.81	BDL	BDL
Cadmium	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper	3	0.03	0.03	0.04	0.03	0.11	0.12	0.08	0.07
Zinc	15	0.04	0.06	BDL	BDL	0.14	0.15	0.08	0.16
Nickel	5	0.03	0.02	BDL	BDL	BDL	BDL	BDL	BDL
Fluoride	15	0.45	0.56	1.21	1.32	0.60	0.50	0.40	0.60
Phenol	5	---	---	BDL	BDL	BDL	BDL	0.20	0.20
Boron	2	1.02	1.04	1.24	1.08	BDL	0.18	BDL	1.04
Total Chromium	2	---	---	BDL	BDL	BDL	BDL	BDL	BDL
Chromium Hexa	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

M/s. Maharashtra Enviro Power Ltd., Plot No. P-56, Ranjangoan MIDC, Tal. Shirur, Dist. Pune

Parameter	Standard	Water sample from Kattcha Pond	Kattcha Pond Inside Premises	Kattacha Pond storage contaminated water	Kattacha Pond storage contaminated water	Kattacha Pond storage contaminated water	Kattacha Pond storage contaminated water	Kattacha Pond Water	Kattacha Pond storage
		21-08-2023	01-08-2024	19-09-2024	17-10-2024	11-11-2024	20-01-2025	26-03-2025	23-04-2025
pH	5.5-9.0	7.9	7.5	7.7	7.7	7.7	7.5	7.5	7.6
BOD	30	700	634.4	625	---	---	464	392	576
Oil & Grease	20	---	BDL	BDL	BDL	BDL	BDL	BDL	2.6
Suspended Soilds	100	---	---	---	145	127	64	159	108
Residual Chlorine	1	---	---	---	---	---	---	NIL	NIL
Total Ammonical Nitrogen	50	1.28	2.59	93.25	49.50	127.00	33.90	41.60	78.25
COD	250	1824	1776	1776	---	---	1376	1293.2	1494
Chlorides	---	---	---	---	14595.47	15865.08	11741.36	18914.13	
Sulphate	---	---	---	---	438	282.8	386.50	270.20	
TDS	---	---	27856	34840	29470	31412	23622	28260	22120
Arsenic	0.2	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Mercury	0.01	NA	BDL	BDL	0.05	0.02	0.03	0.01	BDL
Lead	1	BDL	BDL	BDL	BDL	BDL	BDL	1.05	BDL
Cadmium	2	BDL	BDL	BDL	BDL	BDL	BDL	0.09	BDL
Copper	3	0.04	0.03	0.01	0.01	0.01	BDL	0.07	0.08
Zinc	15	0.05	0.02	0.03	0.04	0.06	BDL	0.30	0.18
Nickel	5	0.03	0.34	0.31	0.33	0.30	0.32	0.36	0.30
Fluoride	15	2.84	0.21	0.45	0.24	0.20	2.24	0.80	BDL
Phenol	5	---	BDL	0.08	0.10	BDL	0.12	0.14	0.20
Boron	2	3.24	BDL	2.10	7.16	6.00	9.05	8.45	6.07
Total Chromium	2	---	0.01	BDL	BDL	BDL	BDL	BDL	BDL
Chromium Hexa	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

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Parameter	Standard	Seepage water from industry premises	Seepage water from industry premises	Percolation water
		19-09-2024	17-10-2024	26-03-2025
pH	5.5-9.0	7.6	7.7	5.8
BOD	30	480	---	727.5
Oil & Grease	20	BDL	BDL	4.2
Suspended Soilds	100	---	135	622
Total Ammonical Nitrogen	50	109.25	44.50	45.80
COD	250	1464	---	1774.1
Chlorides	---	---	14990.35	18094.39
Sulphate	---	---	512	1469.00
TDS	---	32460	32930	27580
Arsenic	0.2	BDL	BDL	BDL
Mercury	0.01	BDL	0.05	0.01
Lead	1	BDL	BDL	0.91
Cadmium	2	BDL	BDL	0.08
Copper	3	0.02	0.02	0.12
Zinc	15	0.04	0.03	0.24
Nickel	5	0.30	0.33	0.36
Fluoride	15	0.13	0.18	1.20
Phenol	5	0.09	0.10	0.18
Boron	2	1.21	7.18	7.85
Total Chromium	2	BDL	BDL	BDL
Chromium Hexa	2	BDL	BDL	BDL

Parameter	Standard	Water sample of Pazar Talav at Nimgaon Bhogi	Water sample of Pazar Talav at Nimgaon Bhogi	Water sample of Talav / Pond at Nimgaon Bhogi	Water sample collected at Pazar Talav, Nimgaon Bhogi	Water sample collected at Pazar Talav (Bandhara)	Water sample collected at Pazar Talav, Nimgaon Bhogi	Water sample collected at Pazar Talav, Nimgaon Bhogi
		21-08-2023	09-05-2024	01-07-2024	01-08-2024	01-08-2024	17-10-2024	23-04-2025
pH	5.5-9.0	7.7	7.9	7.9	7.9	7.5	7.8	7.8
BOD	30	160	156.2	122	141.5	146.4	160	44
Oil & Grease	20	---	2.2	---	---	---	---	---
Suspended Soilds	100	129		67	69	52	92	78
COD	250	416	564	352	400	404	468	293.2
Chlorides	---	1289.60	---	4523.60	4713.54	5698.23	4773.52	8492.37
Sulphate	---	338	---	733.20	265.60	258.90	191.00	491.50
Nitrate Nitrogen	---	3.21	4.80	---	47	72	8.62	3.27
Total Alkalinity	---	43350	154	---	140	216	114	110
Ca Hardness	---	2700	1960	---	1960	1600	1060	2280
Total Hardness	---	4950	3540	---	3750	3650	1880	3340
TDS	---	8992	---	12276	10182	12034	13064	14760
Turbidity	---	19.10	6.79	---	7.87	8.40	8.91	13.60
Mg Hardness	---	2250	1580	---	1790	2050	820	1060
Arsenic	0.2	---	BDL	---	---	---	---	BDL
Mercury	0.01	---	BDL	---	---	---	---	BDL
Lead	1	---	BDL	---	---	---	---	0.26
Nickel	5	---	0.18	---	---	---	---	0.22
Fluoride	15	---	1.44	---	---	---	---	BDL
Phenol	5	---	BDL	---	---	---	---	0.16
Chromium Hexa	2	---	BDL	---	---	---	---	BDL
Dissolved Oxygen		---	---	---	---	---	NIL	2.1
Total Coliform		---	---	---	---	---	140	130
Faecal Coliform		---	---	---	---	---	BDL	33
Faecal Streptococci		---	---	---	---	---	BDL	6.8

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M/s. Maharashtra Enviro Power Ltd., Plot No. P-56, Ranjangoan MIDC, Tal. Shirur, Dist. Pune						
Ambient						
Sr. No.	Parameter	21-08-2023	21-08-2023	22-04-2024	22-04-2024	23-04-2024
1	PM10	88	93	120	101	131
2	SO2	7.5	7.5	6.5	5.5	6
3	Nox	24	24	26	22	31.5

Stack			
Sr. No.	Parameter	21-08-2023	23-04-2024
1	SO2	32	128
2	TPM	141	54

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune	Latitude : 18.80152	Longitude : 74.290698		
Location :	MEPL Ranjangaon.	Report Type:	Mean	
Date:	08-April-2024 to 09-April-2024	Time Base:	Hourly	

Date & Time	PM10	PM2.5	SO2	CO	OZONE	NO	NO2	NOX	Remark
	ug/m3	ug/m3	ug/m3	mg/m3	ug/m3	ug/m3	ug/m3	PPB	
4/8/2024 18:00	72.53	33.36	12.95	0.23	103.20	2.91	26.81	15.40	
4/8/2024 19:00	62.05	29.06	8.64	0.22	82.51	6.99	54.59	43.36	
4/8/2024 20:00	67.39	31.25	3.58	0.31	65.61	5.89	47.04	28.51	
4/8/2024 21:00	106.89	47.44	6.44	0.35	67.10	3.94	43.30	24.99	
4/8/2024 22:00	121.80	53.56	12.16	0.33	78.85	1.31	30.25	16.06	
4/8/2024 23:00	106.89	47.44	15.06	0.51	87.89	1.88	38.69	21.09	
4/9/2024 0:00	104.55	46.48	9.42	0.36	97.35	0.56	30.12	15.55	
4/9/2024 1:00	108.19	47.98	6.35	0.45	74.87	1.07	34.40	18.20	
4/9/2024 2:00	110.28	48.83	5.82	0.49	61.58	0.98	29.48	15.55	
4/9/2024 3:00	110.33	48.86	5.90	0.50	55.68	1.94	32.27	17.78	
4/9/2024 4:00	108.26	48.00	4.56	0.51	47.89	0.96	40.53	21.31	
4/9/2024 5:00	106.39	47.24	6.96	0.53	49.08	1.03	35.62	18.80	
4/9/2024 6:00	101.82	45.37	7.70	0.40	47.87	1.04	29.88	15.81	
4/9/2024 7:00	100.17	44.69	7.43	0.39	47.90	0.91	26.12	13.75	
4/9/2024 8:00	93.17	41.82	8.13	0.42	52.03	1.25	28.52	15.27	
4/9/2024 9:00	91.75	41.24	9.97	0.49	64.60	3.66	46.69	26.69	
4/9/2024 10:00	108.39	48.06	18.83	0.43	94.55	1.63	34.89	18.90	
4/9/2024 11:00	120.68	53.10	10.77	0.28	98.57	1.06	31.23	16.53	
4/9/2024 12:00	112.01	49.54	13.84	0.28	112.32	1.42	25.13	13.86	
4/9/2024 13:00	100.10	44.66	12.37	0.27	112.78	0.91	22.54	11.88	
4/9/2024 14:00	91.05	40.95	6.82	0.23	119.17	1.36	17.23	9.46	
4/9/2024 15:00	75.66	34.64	9.78	0.19	130.52	0.67	22.15	13.58	
4/9/2024 16:00	85.56	38.70	11.36	0.21	138.20	0.86	26.57	13.94	
4/9/2024 17:00	110.08	48.75	11.13	0.20	139.62	0.58	22.21	11.44	
_									
Min	62.05	29.06	3.58	0.19	47.87	0.56	17.23	9.46	
Date & Time	4/8/2024 19:00	4/8/2024 19:00	4/8/2024 20:00	4/9/2024 15:00	4/9/2024 6:00	4/9/2024 0:00	4/9/2024 14:00	4/9/2024 14:00	
Max	121.80	53.56	18.83	0.53	139.62	6.99	54.59	43.36	
Date & Time	4/8/2024 22:00	4/8/2024 22:00	4/9/2024 10:00	4/9/2024 5:00	4/9/2024 17:00	4/8/2024 19:00	4/8/2024 19:00	4/8/2024 19:00	
AVG	99.00	44.21	9.42	0.36	84.57	1.87	32.34	18.24	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :

ENVEA INDIA PRIVATE LIMITED.

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.80		Longitude : 74.29	
Location :	MEPL Ranjangaon.			Report Type:	Mean
Date:	08-April-2024 to 09-April-2024			Time Base:	Hourly

Date & Time	Benzene	Toulene	Ethylbenzene	M+P Xylene	Oxylene	Remark
	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	
4/8/2024 18:00	0.84	10.91	5.75	4.85	2.65	
4/8/2024 19:00	1.03	14.72	8.34	6.11	3.16	
4/8/2024 20:00	2.14	24.88	14.31	9.08	5.15	
4/8/2024 21:00	1.99	13.56	10.39	7.83	4.35	
4/8/2024 22:00	2.49	20.15	17.37	12.67	7.11	
4/8/2024 23:00	3.21	15.33	13.02	10.09	5.37	
4/9/2024 0:00	4.96	14.26	11.53	8.40	4.18	
4/9/2024 1:00	5.52	32.62	23.74	18.16	8.16	
4/9/2024 2:00	4.83	35.66	24.55	19.71	8.34	
4/9/2024 3:00	2.94	7.51	4.66	5.90	2.37	
4/9/2024 4:00	7.42	29.27	61.80	38.01	17.96	
4/9/2024 5:00	5.57	57.35	57.31	36.15	16.57	
4/9/2024 6:00	4.42	39.22	35.89	23.00	10.64	
4/9/2024 7:00	2.88	22.63	19.08	14.88	6.68	
4/9/2024 8:00	3.16	18.12	10.34	11.05	4.86	
4/9/2024 9:00	3.01	18.22	13.02	10.50	4.90	
4/9/2024 10:00	5.06	7.26	2.84	4.59	2.06	
4/9/2024 11:00	3.97	45.51	9.74	21.97	11.96	
4/9/2024 12:00	2.34	66.59	16.93	35.46	18.68	
4/9/2024 13:00	6.08	17.65	8.59	14.44	6.85	
4/9/2024 14:00	0.56	3.71	1.80	2.82	1.07	
4/9/2024 15:00	0.56	2.78	1.25	1.57	0.61	
4/9/2024 16:00	0.61	3.14	1.67	1.92	0.72	
4/9/2024 17:00	0.68	3.36	1.48	1.80	0.69	
_						
Min	0.56	2.78	1.25	1.57	0.61	
Date & Time	4/9/2024 14:00	4/9/2024 15:00	4/9/2024 15:00	4/9/2024 15:00	4/9/2024 15:00	
Max	7.42	66.59	61.80	38.01	18.68	
Date & Time	4/9/2024 4:00	4/9/2024 12:00	4/9/2024 4:00	4/9/2024 4:00	4/9/2024 12:00	
AVG	3.18	21.85	15.64	13.37	6.46	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :

ENVEA INDIA PRIVATE LIMITED.

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.80152		Longitude : 74.290698		
Location	MEPL Ranjangaon.			Report Type:		Mean
Date:	08-April-2024 to 09-April-2024			Time Base:		Hourly

Date & Time	TEMPERATURE	RH	Solar Rad	WS	WD	Rain	Remark
	°C	%	W/M²	m/s	degree	mm	
4/8/2024 18:00	34.54	18.35	125.18	1.42	317.38	0.00	
4/8/2024 19:00	32.81	21.28	96.51	0.85	316.34	0.00	
4/8/2024 20:00	30.28	25.11	77.66	2.03	273.06	0.00	
4/8/2024 21:00	29.00	25.98	75.26	1.93	282.60	0.00	
4/8/2024 22:00	28.30	26.04	73.94	2.26	300.66	0.00	
4/8/2024 23:00	28.66	25.04	74.25	2.96	272.76	0.00	
4/9/2024 0:00	27.33	30.21	73.64	2.33	291.09	0.00	
4/9/2024 1:00	25.41	35.16	73.84	2.27	313.54	0.00	
4/9/2024 2:00	23.99	40.83	76.26	2.55	304.35	0.00	
4/9/2024 3:00	23.05	44.54	75.27	2.51	311.31	0.00	
4/9/2024 4:00	22.52	48.57	76.31	2.32	324.36	0.00	
4/9/2024 5:00	22.06	51.57	77.03	2.04	313.68	0.00	
4/9/2024 6:00	22.18	52.91	75.75	1.86	311.73	0.00	
4/9/2024 7:00	22.09	55.04	75.23	2.41	299.28	0.00	
4/9/2024 8:00	24.02	50.44	76.85	2.30	316.55	0.00	
4/9/2024 9:00	27.09	40.16	81.78	1.84	106.12	0.00	
4/9/2024 10:00	30.13	29.80	119.36	1.53	113.11	0.00	
4/9/2024 11:00	31.92	24.61	143.27	3.18	97.28	0.00	
4/9/2024 12:00	33.14	20.91	168.44	2.18	92.97	0.00	
4/9/2024 13:00	34.04	19.26	168.66	1.43	229.46	0.00	
4/9/2024 14:00	34.85	18.21	155.69	2.94	243.15	0.00	
4/9/2024 15:00	35.41	17.89	152.48	3.21	234.55	0.00	
4/9/2024 16:00	35.57	18.26	139.53	3.48	236.52	0.00	
4/9/2024 17:00	35.39	18.36	129.24	2.86	251.82	0.00	
_							
Min	22.06	17.89	73.64	0.85	92.97	0.00	
Date & Time	4/9/2024 5:00	4/9/2024 15:00	4/9/2024 0:00	4/8/2024 19:00	4/9/2024 12:00	4/8/2024 18:00	
Max	35.57	55.04	168.66	3.48	324.36	0.00	
Date & Time	4/9/2024 16:00	4/9/2024 7:00	4/9/2024 13:00	4/9/2024 16:00	4/9/2024 4:00	4/8/2024 18:00	
AVG	28.91	31.61	102.56	2.28	256.40	0.00	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :
ENVEA INDIA PRIVATE

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.801844	Longitude : 74.290684	
Location :	MEPL Ranjangaon.		Report Type:	Mean
Date:	12-August-2024 to 13-August-2024		Time Base:	Hourly

Date & Time	PM10	PM2.5	SO2	CO	OZONE	NO	NO2	NOX	Remark
	ug/m3	ug/m3	ug/m3	mg/m3	ug/m3	ug/m3	ug/m3	PPB	
8/12/2024 23:00	32.38	16.37	9.62	0.30	7.39	3.56	11.51	8.87	
8/13/2024 0:00	61.13	26.14	9.26	0.29	7.06	2.98	11.69	8.50	
8/13/2024 1:00	84.14	33.97	9.75	0.09	7.73	3.95	10.27	8.53	
8/13/2024 2:00	80.09	32.59	8.72	0.26	8.38	11.21	17.29	18.02	
8/13/2024 3:00	67.93	28.45	7.55	0.26	7.69	14.14	15.65	19.51	
8/13/2024 4:00	58.41	25.22	5.84	0.26	5.18	18.71	20.37	25.65	
8/13/2024 5:00	43.86	20.27	7.14	0.28	4.88	8.54	17.57	16.03	
8/13/2024 6:00	37.86	18.23	6.39	0.24	4.26	14.93	18.89	21.83	
8/13/2024 7:00	37.84	18.23	8.86	0.38	5.25	13.90	16.16	19.59	
8/13/2024 8:00	38.60	18.48	5.81	0.30	8.85	10.92	13.51	15.81	
8/13/2024 9:00	43.82	20.26	8.69	0.19	9.63	10.93	13.94	16.04	
8/13/2024 10:00	56.05	24.42	9.23	0.17	14.60	11.69	13.93	16.65	
8/13/2024 11:00	57.24	24.82	8.48	0.11	21.18	12.45	14.87	17.75	
8/13/2024 12:00	59.21	25.49	10.11	0.09	21.52	11.80	13.65	16.60	
8/13/2024 13:00	56.09	24.43	9.06	0.07	20.04	10.61	11.00	14.22	
8/13/2024 14:00	49.01	22.02	9.81	0.09	22.48	12.23	13.98	17.11	
8/13/2024 15:00	42.46	19.79	7.12	0.11	23.06	8.99	14.69	14.89	
8/13/2024 16:00	43.65	20.20	7.70	0.12	27.61	12.17	19.28	19.84	
8/13/2024 17:00	42.39	19.77	8.85	0.17	26.83	9.33	16.47	16.08	
8/13/2024 18:00	35.10	17.30	9.15	0.17	27.67	10.40	18.48	17.99	
8/13/2024 19:00	38.93	18.60	9.59	0.23	29.61	6.36	13.30	12.05	
8/13/2024 20:00	45.37	20.78	6.05	0.21	29.40	8.66	15.43	15.00	
8/13/2024 21:00	53.45	23.53	5.37	0.21	23.00	7.78	6.78	7.33	
8/13/2024 22:00	56.39	24.53	5.16	0.22	23.01	8.98	5.79	7.15	
_									
Min	32.38	16.37	5.16	0.07	4.26	2.98	5.79	7.15	
Date & Time	8/12/2024 23:00	8/12/2024 23:00	8/13/2024 22:00	8/13/2024 13:00	8/13/2024 6:00	8/13/2024 0:00	8/13/2024 22:00	8/13/2024 22:00	
Max	84.14	33.97	10.11	0.38	29.61	18.71	20.37	25.65	
Date & Time	8/13/2024 1:00	8/13/2024 1:00	8/13/2024 12:00	8/13/2024 7:00	8/13/2024 19:00	8/13/2024 4:00	8/13/2024 4:00	8/13/2024 4:00	
AVG	50.89	22.66	8.05	0.20	16.10	10.22	14.35	15.46	

Remark :

Sampling Done By :

ENVEA INDIA PRIVATE LIMITED.

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.80		Longitude : 74.29	
Location :	MEPL Ranjangaon.			Report Type:	Mean
Date:	12-August-2024 to 13-August-2024			Time Base:	Hourly

Date & Time	Benzene	Toulene	Ethylbenzene	M+P Xylene	Oxylene	Remark
	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	
8/12/2024 23:00	1.25	11.85	9.09	3.81	9.01	
8/13/2024 0:00	2.12	13.29	9.84	4.36	10.50	
8/13/2024 1:00	1.58	12.00	10.42	4.03	9.41	
8/13/2024 2:00	3.64	17.74	4.78	8.49	4.55	
8/13/2024 3:00	4.80	21.64	4.43	10.84	5.41	
8/13/2024 4:00	6.08	28.66	5.78	13.59	6.62	
8/13/2024 5:00	5.42	32.45	5.84	13.60	6.59	
8/13/2024 6:00	2.94	16.48	2.76	7.11	3.49	
8/13/2024 7:00	1.94	11.24	2.59	5.29	2.52	
8/13/2024 8:00	2.15	14.10	2.80	5.44	2.87	
8/13/2024 9:00	2.01	12.35	2.52	4.78	2.50	
8/13/2024 10:00	2.42	12.23	2.20	4.96	2.51	
8/13/2024 11:00	3.50	14.44	2.23	6.17	3.06	
8/13/2024 12:00	3.90	17.26	5.53	9.35	4.42	
8/13/2024 13:00	5.12	18.70	4.13	9.35	4.51	
8/13/2024 14:00	4.02	17.30	4.30	8.38	5.94	
8/13/2024 15:00	2.40	9.35	2.76	4.45	2.28	
8/13/2024 16:00	1.69	9.09	1.74	3.86	1.88	
8/13/2024 17:00	2.17	11.02	1.92	4.85	2.37	
8/13/2024 18:00	2.86	12.99	2.69	6.06	3.11	
8/13/2024 19:00	6.16	46.30	11.17	17.10	8.25	
8/13/2024 20:00	8.13	34.98	10.18	19.49	9.60	
8/13/2024 21:00	8.45	40.49	8.88	19.33	9.57	
8/13/2024 22:00	5.84	28.86	6.67	13.86	6.72	
_						
Min	1.25	9.09	1.74	3.81	1.88	
Date & Time	8/12/2024 23:00	8/13/2024 16:00	8/13/2024 16:00	8/12/2024 23:00	8/13/2024 16:00	
Max	8.45	46.30	11.17	19.49	10.50	
Date & Time	8/13/2024 21:00	8/13/2024 19:00	8/13/2024 19:00	8/13/2024 20:00	8/13/2024 0:00	
AVG	3.77	19.37	5.22	8.69	5.32	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :

ENVEA INDIA PRIVATE LIMITED.

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.801844		Longitude : 74.290684		
Location	MEPL Ranjangaon.			Report Type:		Mean
Date:	12-August-2024 to 13-August-2024			Time Base:		Hourly

Date & Time	TEMPERATURE	RH	Solar Rad	WS	WD	Rain	Remark
	°C	%	W/M²	m/s	degree	mm	
8/12/2024 23:00	25.08	77.53	29.18	0.72	273.68	0.00	
8/13/2024 0:00	24.82	79.59	29.13	0.50	265.67	0.00	
8/13/2024 1:00	24.70	81.45	29.13	0.65	241.62	0.00	
8/13/2024 2:00	24.83	80.27	29.43	0.40	194.59	0.00	
8/13/2024 3:00	25.05	77.11	29.48	0.67	255.00	0.00	
8/13/2024 4:00	24.76	76.47	32.13	0.57	232.61	0.00	
8/13/2024 5:00	25.09	76.60	68.78	0.63	240.35	0.00	
8/13/2024 6:00	26.33	75.27	134.53	0.31	183.13	0.00	
8/13/2024 7:00	27.52	70.29	310.13	0.18	39.16	0.00	
8/13/2024 8:00	28.73	73.82	368.25	0.20	162.13	0.00	
8/13/2024 9:00	29.29	77.99	404.68	0.08	257.78	0.00	
8/13/2024 10:00	30.57	76.83	624.65	0.67	251.72	0.00	
8/13/2024 11:00	30.22	77.53	258.05	0.28	300.46	0.00	
8/13/2024 12:00	30.75	77.80	355.35	0.30	9.41	0.00	
8/13/2024 13:00	30.15	72.82	212.53	0.02	315.93	0.00	
8/13/2024 14:00	30.14	77.77	247.30	0.42	279.65	0.00	
8/13/2024 15:00	29.24	76.38	117.45	0.41	264.07	0.00	
8/13/2024 16:00	28.19	77.69	53.70	0.64	264.65	0.00	
8/13/2024 17:00	27.22	76.77	29.83	0.23	295.91	0.00	
8/13/2024 18:00	26.63	78.27	29.25	0.44	258.48	0.00	
8/13/2024 19:00	26.35	79.71	30.25	0.71	255.59	0.00	
8/13/2024 20:00	26.02	81.81	29.93	0.51	229.59	0.00	
8/13/2024 21:00	25.61	80.36	29.78	0.71	245.51	0.00	
8/13/2024 22:00	25.57	81.86	29.63	0.49	244.37	0.00	
_							
Min	24.70	70.29	29.13	0.02	9.41	0.00	
Date & Time	8/13/2024 1:00	8/13/2024 7:00	8/13/2024 0:00	8/13/2024 13:00	8/13/2024 12:00	8/12/2024 23:00	
Max	30.75	81.86	624.65	0.72	315.93	0.00	
Date & Time	8/13/2024 12:00	8/13/2024 22:00	8/13/2024 10:00	8/12/2024 23:00	8/13/2024 13:00	8/12/2024 23:00	
AVG	27.20	77.58	146.36	0.45	231.71	0.00	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :
ENVEA INDIA PRIVATE

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.801839	Longitude : 74.290722	
Location :	Maharashtra Enviro Power Ltd,Ranjangaon.		Report Type:	Mean
Date:	11-November-2024 to 12-November-2024		Time Base:	Hourly

Date & Time	PM10	PM2.5	SO2	CO	OZONE	NO	NO2	NOX	Remark
	ug/m3	ug/m3	ug/m3	mg/m3	ug/m3	ug/m3	ug/m3	PPB	
11/11/2024 17:00	104.35	40.84	27.79	0.47	64.09	13.76	12.04	17.32	
11/11/2024 18:00	99.47	39.18	23.75	0.31	103.23	15.16	14.80	19.85	
11/11/2024 19:00	99.57	39.21	22.62	0.28	94.41	23.09	16.74	27.26	
11/11/2024 20:00	108.30	42.19	24.89	0.23	97.13	16.57	17.70	22.54	
11/11/2024 21:00	127.09	48.57	25.40	0.22	95.47	13.90	18.93	21.03	
11/11/2024 22:00	133.59	50.78	24.77	0.16	94.31	15.50	17.60	21.62	
11/11/2024 23:00	130.55	49.75	23.87	0.21	92.57	17.09	17.97	23.09	
11/12/2024 0:00	139.94	52.94	20.72	0.26	84.70	16.06	19.13	22.87	
11/12/2024 1:00	160.11	59.80	19.66	0.87	88.68	18.82	22.18	26.68	
11/12/2024 2:00	153.30	57.48	20.46	0.83	84.27	17.98	20.43	25.10	
11/12/2024 3:00	156.46	58.56	14.48	0.74	73.56	23.00	24.85	31.42	
11/12/2024 4:00	149.23	56.10	14.44	0.75	75.54	4.83	16.22	12.35	
11/12/2024 5:00	137.66	52.16	15.84	0.78	71.31	9.23	15.25	15.37	
11/12/2024 6:00	132.56	50.43	16.42	0.77	68.17	31.84	18.95	35.44	
11/12/2024 7:00	129.68	49.45	14.86	0.75	66.53	53.54	21.49	54.16	
11/12/2024 8:00	124.18	47.59	12.84	0.71	69.64	41.51	25.70	46.71	
11/12/2024 9:00	117.37	45.26	12.95	0.74	80.62	50.23	27.15	54.47	
11/12/2024 10:00	125.13	47.90	14.80	0.82	97.31	35.52	23.78	40.89	
11/12/2024 11:00	155.19	58.13	21.84	0.70	115.11	38.49	27.27	45.11	
11/12/2024 12:00	156.97	58.73	26.79	0.66	121.54	25.64	21.63	31.83	
11/12/2024 13:00	146.26	55.09	26.82	0.65	121.70	20.04	15.84	24.35	
11/12/2024 14:00	123.45	47.33	24.12	0.65	123.00	25.20	18.32	29.78	
11/12/2024 15:00	125.58	48.06	24.14	0.76	123.83	17.17	16.97	22.63	
11/12/2024 16:00	133.37	50.71	24.76	0.66	122.90	21.68	18.89	27.25	
_									
Min	99.47	39.18	12.84	0.16	64.09	4.83	12.04	12.35	
Date & Time	11/11/2024 18:00	11/11/2024 18:00	11/12/2024 8:00	11/11/2024 22:00	11/11/2024 17:00	11/12/2024 4:00	11/11/2024 17:00	11/12/2024 4:00	
Max	160.11	59.80	27.79	0.87	123.83	53.54	27.27	54.47	
Date & Time	11/12/2024 1:00	11/12/2024 1:00	11/11/2024 17:00	11/12/2024 1:00	11/12/2024 15:00	11/12/2024 7:00	11/12/2024 11:00	11/12/2024 9:00	
AVG	132.06	50.26	20.79	0.58	92.90	23.58	19.58	29.13	

Remark :

Sampling Done By :

ENVEA INDIA PRIVATE LIMITED.

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune	Latitude : 18.80		Longitude : 74.29	
Location :	Maharashtra Enviro Power Ltd,Ranjangaon.		Report Type:	Mean
Date:	11-November-2024 to 12-November-2024		Time Base:	Hourly

Date & Time	Benzene	Toulene	Ethylbenzene	M+P Xylene	Oxylene	Remark
	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	
11/11/2024 17:00	3.06	0.26	1.03	0.20	0.36	
11/11/2024 18:00	1.14	0.55	2.92	0.92	1.83	
11/11/2024 19:00	1.01	1.56	4.25	1.01	2.70	
11/11/2024 20:00	2.50	3.93	11.79	2.19	6.79	
11/11/2024 21:00	3.65	3.20	9.71	2.16	6.30	
11/11/2024 22:00	3.37	11.76	5.83	8.09	5.47	
11/11/2024 23:00	3.53	16.99	3.28	10.78	4.68	
11/12/2024 0:00	3.66	17.78	3.85	11.51	5.19	
11/12/2024 1:00	7.65	32.96	7.54	20.87	9.60	
11/12/2024 2:00	5.98	27.00	6.28	17.35	7.94	
11/12/2024 3:00	4.32	21.03	4.45	13.75	6.17	
11/12/2024 4:00	3.39	16.53	3.31	10.78	4.57	
11/12/2024 5:00	2.82	15.54	2.62	9.70	4.07	
11/12/2024 6:00	1.09	6.93	0.87	4.59	1.72	
11/12/2024 7:00	0.41	3.09	0.34	2.06	0.76	
11/12/2024 8:00	0.19	1.83	0.28	1.34	0.45	
11/12/2024 9:00	4.15	8.97	10.98	11.10	6.57	
11/12/2024 10:00	5.47	11.63	14.73	14.69	8.45	
11/12/2024 11:00	5.32	11.58	15.06	14.76	8.68	
11/12/2024 12:00	5.32	11.38	14.63	14.49	8.81	
11/12/2024 13:00	5.28	11.70	14.78	14.72	8.62	
11/12/2024 14:00	5.32	11.61	14.66	14.60	8.44	
11/12/2024 15:00	5.51	11.60	14.92	14.65	8.43	
11/12/2024 16:00	5.36	11.61	14.68	14.87	8.53	
_						
Min	0.19	0.26	0.28	0.20	0.36	
Date & Time	11/12/2024 8:00	11/11/2024 17:00	11/12/2024 8:00	11/11/2024 17:00	11/11/2024 17:00	
Max	7.65	32.96	15.06	20.87	9.60	
Date & Time	11/12/2024 1:00	11/12/2024 1:00	11/12/2024 11:00	11/12/2024 1:00	11/12/2024 1:00	
AVG	3.73	11.29	7.62	9.63	5.63	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :
ENVEA INDIA PRIVATE LIMITED.

MAHARASHTRA POLLUTION CONTROL BOARD
MOBILE VAN AMBIENT AIR MONITORING

Van No: MH01:EE2202 : Pune		Latitude : 18.801839		Longitude : 74.290722		
Location	Maharashtra Enviro Power Ltd,Ranjangaon.				Report Type:	Mean
Date:	11-November-2024 to 12-November-2024				Time Base:	Hourly

Date & Time	TEMPERATURE	RH	Solar Rad	WS	WD	Rain	Remark
	°C	%	W/M²	m/s	degree	mm	
11/11/2024 17:00	34.05	34.55	62.24	3.21	275.91	0.00	
11/11/2024 18:00	32.89	31.89	36.58	2.89	306.18	0.00	
11/11/2024 19:00	29.80	30.47	22.89	2.59	298.99	0.00	
11/11/2024 20:00	28.50	29.79	167.29	2.62	275.33	0.00	
11/11/2024 21:00	23.58	29.43	582.31	0.87	178.19	0.00	
11/11/2024 22:00	22.96	33.38	481.64	1.21	174.28	0.00	
11/11/2024 23:00	22.76	37.88	169.30	1.60	274.15	0.00	
11/12/2024 0:00	20.27	39.39	39.83	2.02	264.41	0.00	
11/12/2024 1:00	20.43	45.63	108.54	1.89	247.69	0.00	
11/12/2024 2:00	19.41	64.38	66.49	1.49	276.51	0.00	
11/12/2024 3:00	24.48	73.74	102.78	0.72	272.68	0.00	
11/12/2024 4:00	23.38	74.80	17.42	1.76	261.97	0.00	
11/12/2024 5:00	24.30	72.09	18.32	1.47	320.85	0.00	
11/12/2024 6:00	21.89	70.16	63.02	0.66	195.66	0.00	
11/12/2024 7:00	23.85	74.41	412.83	0.93	277.68	0.00	
11/12/2024 8:00	26.61	78.40	295.99	1.88	115.51	0.00	
11/12/2024 9:00	27.07	53.79	29.99	3.17	248.12	0.00	
11/12/2024 10:00	28.00	42.11	56.33	2.40	191.35	0.00	
11/12/2024 11:00	27.90	35.94	89.95	1.41	98.95	0.00	
11/12/2024 12:00	26.71	37.35	268.85	1.22	94.59	0.00	
11/12/2024 13:00	25.59	38.24	195.25	1.74	121.64	0.00	
11/12/2024 14:00	26.16	39.46	158.96	2.15	86.92	0.00	
11/12/2024 15:00	27.99	36.17	60.13	1.77	124.58	0.00	
11/12/2024 16:00	32.28	38.83	81.33	3.20	141.14	0.00	
_							
Min	19.41	29.43	17.42	0.66	86.92	0.00	
Date & Time	11/12/2024 2:00	11/11/2024 21:00	11/12/2024 4:00	11/12/2024 6:00	11/12/2024 14:00	11/11/2024 17:00	
Max	34.05	78.40	582.31	3.21	320.85	0.00	
Date & Time	11/11/2024 17:00	11/12/2024 8:00	11/11/2024 21:00	11/11/2024 17:00	11/12/2024 5:00	11/11/2024 17:00	
AVG	25.87	47.60	149.51	1.87	213.47	0.00	

Remark :

Envea India Pvt. Ltd. Navi Mumbai

Sampling Done By :
ENVEA INDIA PRIVATE

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL OFFICE - PUNE

Phone No. 020-25811694
Fax No. 020-25811701
e-mail : ropune@mpcb.gov.in
visit us : www.mpcb.gov.in

Jog Centre, 3rd Floor,
Wakdewadi,
Old-Pune Mumbai Road,
Pune- 411003

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MPCB/ROP/ID/ 2408260001 Date: 26/08/2024

To,
M/s. Maharashtra Enviro Power Ltd.,
Plot No. P-56, Ranjangaon MIDC,
Tal. Shirur, Dist. Pune – 412 220.

Sub : Directions under section 33 A of Water (Prevention & Control of Pollution) Act, 1974, 31 A of Air (Prevention & Control of Pollution) Act, 1981 & Hazardous and Other Wastes (M & TM) Rules, 2016 and amendments thereafter.

Ref :
1) Consent to Operate granted by the Board vide no. Format1.0/CC/UAN no. MPCB-CONSENT-00001449606/CR/2212001293, Dtd. 19/12/2022 valid upto 31/10/2026.
2) Board's Interim Directions vide no. MPCB/ROP/ID/220808-FTS-0199, Dtd. 08/08/2022.
3) Board's directions vide no. MPCB/Directions/231230002, Dtd. 13/12/2023.
4) Complaint Received from Grmpanchayat Nimgaon Bhogi, Tal. Shirur, Dist. Pune vide letter Dtd. 01/06/2024
5) Complaint Received from Grmpanchayat Annapur, Tal. Shirur, Dist. Pune vide letter Dtd. 01/07/2024 and Dtd. 01/08/2024
6) Visit of the Board Official on 01/08/2024
7) Legal Action Proposal submitted by the Sub Regional Officer, MPCB, Pune-II vide no. 240522019, Dtd. 02/08/2024

WHEREAS, the Common Hazardous Waste Transport, Storage and Disposal Facility (CHWTSDF) – M/s. Maharashtra Enviro Power Ltd., Ranjangaon Plant is located in the "Pollution Prevention Area" under the Water Act 1974, under the Air Act 1981 and Hazardous Waste (Management and handling) Rules, 1989 followed by further amendments made therein from time to time.

AND WHEREAS, the Board has granted conditional consent to operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974, under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rules of the Hazardous and Other Wastes (M &TM) Rules, 2016 on 19/12/2022 valid upto 31/10/2026, subject to certain terms and conditions.

AND WHERAS, Board has issued directions under section 33A of the Water (P &CP) Act, 1974 and 31A of the Air (P & CP) Act, 1981 vide letter no. ROP/MPCB/Directions /2312130002, Dtd. 13/12/2023.

AND WHEREAS, the Board Office has received complaint vide referance (4) and (5) regarding pollution nuisance to the surrounding area by you.

AND WHEREAS, Board officials have visited to your facility on 01/07/2024 and 01/08/2024 to verify the complaint, and to check compliance of consent conditions and Board's earlier directions and accordingly Sub Regional Officer, MPCB, Pune-II submitted legal action proposal and therein reported that,

1) You have stored about 8000 m3 accumulated surface runoff water in Kaccha Pit, thereby violating the conditions of Board's earlier directions dtd. 13/12/2023.

2...

2) You have not submitted geological and geohydrological report for the proposed landfill site at Plot No. H-4 & H-4/1 as per earlier directions dtd. 13/12/2023.
3) You have not taken any effective steps to prevent the overflow of surface runoff water outside the premises, which meets to Pazar Talav at Nimgaon Bhogi.

AND WHEREAS, you have failed to achieve water quality standards as analysis results of samples collected on 01/07/2024 are found exceeding the prescribed water quality standards under E (P) Act, 1986.

AND WHEREAS, Board's competent authority decided to issue directions under section 33A of the Water (P & CP) Act, 1974 and 31A of the Air (P & CP) Act, 1981. **NOW THEREFORE**, in exercise of the powers conferred upon me under section 33 A of Water (Prevention & Control of Pollution) Act, 1974, 31 A of Air (Prevention & Control of Pollution) Act, 1981, I, J. S. Salunkhe, Regional Officer of the Board, at Pune hereby issue directions as under-

1) You shall directed to carryout the work of Garland Drains so as to arrest the surface runoff water to avoid further contamination of water bodies / groundwater within 01 months.
2) The existing bank guarantee of Rs. 5,00,000/- is being forfeited as you have failed to compliance of consent codntions and failed to achieve JVS standards.
3) You shall submit geological and geohydrological report for the proposed landfill site at Plot No. H-4 & H-4/1 within 01 month.

You are directed to submit corrective action plan towards the compliance of above directions forthwith and submit the compliance and progresses report on monthly basis till to resolve the above said problems, failing which Board will have no option than to issue appropriate directions as deem fit under the provisions of Water (P. & C. P.) Act, 1974 and under the provisions of Air (P. & C. P.) Act, 1981 & Hazardous & Other Waste (M & TM) Rules, 2016, which may please be noted.

This is issued as directed by Higher Authorities of the Board.

For and on behalf of
Maharashtra Pollution Control Board

26.8.24

(J. S. Salunkhe)
Regional Officer, Pune

Copy submitted for favor of information to:-

1. Member Secretary, MPCB, Mumbai.
2. District Collector, Pune.
3. Joint Director (WPC), MPCB, Mumbai.
4. Law Officer (P & L Div), MPCB, Mumbai.
5. Sub Divisional Officer, Shirur, Dist. Pune

Copy to Sub Regional Officer, Pune-II :-

He is directed to serve the directions to **addressee** and keep necessary follow up.

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL OFFICE - PUNE

Phone No. 020-25811694
Fax No. 020-25811701
e-mail : ropune@mpcb.gov.in
visit us : www.mpcb.gov.in

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Jog Centre, 3rd Floor,
Wakdewadi,
Old-Pune Mumbai Road,
Pune- 411003

Ref. No.ROP/MPCB-BG- 240826-FTS-0137 **Date :** 26/08/2024

To,
The Manager,
Axis Bank Limited,
Shankar Nagar Nag MH,
Chandak Bhavan, Ground Floor,
North Ambazari, Nagpur- 440010

Sub: - Forfeiture of the Bank Guarantee amount of Rs. 5,00,000/- (Rs. Five Lakhs Only) issued by you in favor of M/s. Maharashtra Enviro Power Ltd., Plot No. P-56, MIDC Ranjangaon, Tal. Shirur, Dist. Pune.

Ref :- 1. Consent to Operate granted by the Board vide no. Format1.0/CC/UAN no.MPCB-CONSENT-0000120288/CR/2207001194, Dtd. 24/7/2022 valid upto 31/10/2026.
2. Board's Directins vide no. MPCB/ROP/ID/220218-FTS-0151, Dtd. 18/02/2022.
3. Board's Interim Directions vide no. MPCB/ROP/ID/220808-FTS-0199, Dtd. 08/08/2022.
4. Board's directions vide no. MPCB/Directions/231230002, Dtd. 13/12/2023
5. Board' directions Dtd. 26/08/2024.

Sir,

M/s. Maharashtra Enviro Power Ltd., Plot No. P-56, MIDC Ranjangaon, Tal. Shirur, Dist. Pune had submitted the Bank Guarantee of your esteem bank amounting Rs. 5,00,000 (Rs. Five Lakh Only) bearing no. 18280100000656 dated 18/03/2023 as per directions referred at (2) towards compliance of said directions.

Thereafter, Board has issued directions vide letter dtd. 26/08/2024 and decided to forfeit the existing Bank Guarantee of Rs. 5 Lakhs as M/s. MEPL failed to achive JVS standards and compliance of consent conditions.

In view of above, you are therefore requested to forfeit the Bank Guarantee amount of Rs. 5,00,000/- (Rs. Five Lakhs Only) bearing no. 18280100000656 dated 18/03/2023 of M/s. Maharashtra Enviro Power Ltd., and send the **Demand Draft amounting to Rs. 5,00,000/- (Rs. Five Lakhs Only) in favour of the 'Regional Officer, MPCB, Pune' on office address i.e. Regional Office, Maharashtra Pollution Control Board, 3rd Floor, Jog Centre, Wakadewadi, Shivajinagar, Pune Pin Code 411003 immediately.**

The Bank Guarantee duly discharged in original is enclosed herewith for encashment.

Yours faithfully,

26.8.24

(J. S. Salunkhe)
Regional Officer, Pune

D.A.:- Original Bank Guarantee. [B.G. No. 18280100000656 Dtd. 18/03/2023 - Rs. 5 Lakh]
Copy to:- For information and necessary follow up
1) Sub Regional Officer, MPC Board, Pune-II :- Keep necessary follow up please.
2) M/s. Maharashtra Enviro Power Ltd., Plot No. P-56, MIDC Ranjangaon, Tal. Shirur, Dist. Pune.

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL OFFICE - PUNE

Phone No. 020-25811694
Fax No. 020-25811701
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Wakdewadi,
Old-Pune Mumbai Road,
Pune- 411003

MPCB/ROP/ID/ 2410010002 **Date:** 01 **/10/2024**

To,
M/s. Maharashtra Enviro Power Ltd.,
Plot No. P-56, Ranjangaon MIDC,
Tal. Shirur, Dist. Pune – 412 220.

Sub: Interim Directions under section 33 A of Water (Prevention & Control of Pollution) Act, 1974, 31 A of Air (Prevention & Control of Pollution) Act, 1981 & Hazardous and Other Wastes (M & TM) Rules, 2016 and amendments thereafter.

Ref: 1) Consent to Operate granted by the Board vide no. Format1.0/CC/UAN no. MPCB-CONSENT-00001449606/CR/2212001293, Date 19/12/2022 valid upto 31/10/2026.
2) Board's Interim Directions vide no. MPCB/ROP/ID/220808-FTS-0199, Date 08/08/2022.
3) Board's directions vide no. MPCB/Directions/231230002, Date 13/12/2023.
4) Complaint Received from Grampanchayat Nimgaon Bhogi, Tal. Shirur, Dist. Pune vide letter Date 01/06/2024
5) Complaint Received from Grmpanchayat Annapur, Tal. Shirur, Dist. Pune vide letter Date 01/07/2024 and Dtd. 01/08/2024
6) Visit of the Board Official on 01/08/2024
7) Legal Action Proposal submitted by the Sub Regional Officer, MPCB, Pune-II vide no. 240522019, Date 02/08/2024
8) Directions issued vide MPCB/ROP/ID/2408260001 Date 26/08/2024
9) Personal Hearing extended at HQ on 24/09/2024 & MoM.

WHEREAS, the Common Hazardous Waste Transport, Storage and Disposal Facility (CHWTSDF) – M/s. Maharashtra Enviro Power Ltd., Ranjangaon Plant is located in the "Pollution Prevention Area" under the Water Act 1974, under the Air Act 1981 and Hazardous Waste (Management and handling) Rules, 1989 followed by further amendments made therein from time to time.

AND WHEREAS, the Board has granted conditional consent to operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974, under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rules of the Hazardous and Other Wastes (M &TM) Rules, 2016 on 19/12/2022 valid upto 31/10/2026, subject to certain terms and conditions.

AND WHERAS, Board has issued directions under section 33A of the Water (P &CP) Act, 1974 and 31A of the Air (P & CP) Act, 1981 vide above reference letters no. 2, 3 & 8.

AND WHEREAS, the Board Office has received complaints vide reference (4) and (5) regarding pollution nuisance to the surrounding area by you.

AND WHEREAS, Board officials have visited to your facility on 01/07/2024 and 01/08/2024 to verify the complaint, and to check compliance of consent conditions and Board's earlier directions and accordingly Sub Regional Officer, MPCB, Pune-II has submitted legal action proposal and reported the non-compliances.

AND WHEREAS, your personal hearing was held on 24/09/2024 and after due deliberation it is decided to issue the direction by imposing the conditions.

NOW THEREFORE, in exercise of the powers conferred upon me under section 33 A of Water (Prevention & Control of Pollution) Act, 1974, 31 A of Air (Prevention & Control of Pollution) Act, 1981, I, J. S. Salunkhe, Regional Officer of the Board, at Pune hereby issue directions as under-

1. PP should immediately stop all seepages/percolation from the facility area by providing retaining wall and submit the compliance report immediately to the Board.
2. PP shall lift the entire contaminated water accumulated in the katccha pond and treat the same into their existing ETP and MEE within period of 02 months. PP should submit daily report of treatment of contaminated water to the Board office through e-mail. For the compliance of the same, facility should submit the Bank Guarantee of Rs. 10.0 Lakhs.
3. PP shall provide impervious lining to the Katchha pond and ensure that, there should not be any contamination of ground water/soil/well/water bodies around the facility area. PP shall provide piezometric well at the downstream of the Katchha pond along the boundary of compound wall and regularly check the ground water quality and submit the report regularly to the Board. For compliance of the same, Bank Guarantee of Rs. 5.0 Lakhs shell be submitted.
4. PP shall provide storm water drainage to avoid the mixing of rainwater surface run-oof into the katchha pond.
5. PP shall take all necessary measures to reduce smell in the area by providing fume extraction system and scrubbers of adequate capacity for all point source of VOC emissions in the facility during handling of waste.
6. PP shall plant aromatic trees in the massive quantity inside the facility premises and all along the boundary wall and compliance report along with photographs of tree plantation shall be submitted to the Board office.
7. PP shall not take any effective steps for development of additional land acquired for expansion of the facility until obtaining all necessary permissions from the competent authority.

. You are hereby directed to submit corrective action plan towards the compliance of above directions forthwith and submit the compliance and progress report on regular basis till to resolve the above said problems, failing which Board will have no option than to issue appropriate directions as deem fit under the provisions of Water (P. & C. P.) Act, 1974 and under the provisions of Air (P. & C. P.) Act, 1981 & Hazardous & Other Waste (M & TM) Rules, 2016, which may please be noted.

This is issued with approval of the competent authority of the Board.

For and on behalf of
Maharashtra Pollution Control Board

01.10.24

(J. S. Salunkhe)
Regional Officer, Pune

Copy submitted for favor of information to:-

1. The Member Secretary, MPCB, Mumbai.
2. The Joint Director (APC), MPCB, Mumbai.
3. The Law Officer (P & L Div), MPCB, Mumbai.

Copy to Sub Regional Officer, Pune-II:-

He is directed to serve the directions to **addressee** and keep necessarily follow up & submit the compliance report in time.

MAHARASHTRA
ENVIRO POWER LTD
ISO 9001:2018 I EMS 14001 : 2004 I OHSAS 18001 : 2007 Certified Company
(Common Hazardous Waste Treatment, Storage and Disposal Facility)
The Corporate Identity Number (CIN) : U40105MH2005PLC150780

SMS

Ref. No: MEPL/MPCB/DIR/2023-24/OCT-03

Date: 14.10.2024

Received on Dt. 15/10/2024
Clerk
R. O. M. P. C. B. Pune

To,

The Regional Officer,
Maharashtra Pollution Control Board
Jog Centre, 3rd Floor,
Wakewadi, Old- Pune Mumbai Road,
Pune -411003

Subject: Submission of Corrective Action plan for the Interim Directions dated 01.10.2024

References:

1. *Interim Directions under section 33A of Water (Prevention & Control of Pollution) Act, 1974, 31 A of Air (Prevention & Control of Pollution) Act, 1981 & Hazardous and Other Wastes (M&TM) Rules, 2016 and amendments thereafter.*
2. *Consent to Operate granted by the Board vide no. Format 1.0/CC/UAN no. MPCB-CONSENT -00001449606/CR/2212001293 dated 19/12/2022 valid upto 31/10.2026*
3. *Boards Interim Directions vide no. MPCB /ROP/ID/220808-FTS-0199 Dated 08/08/2022*
4. *Board's direction vide no. MPCB/Directions/231230002, Dated 13/12/2023*
5. *Compliant Received from Gram panchayat Nimgaon Bhogi , Tal : Shirur, Dist , Pune vide letter Dated 01/06/2024*
6. *Compliant received from Gram Panchayat Nimgaon Bhogi, Tal: Shirur, Dist. Pune vide letter dated 01/08/2024*
7. *Visit of Board Official on 01/08/2024*
8. *Legal Action Proposal submitted by the Sub Regional Officer, MPCB, Pune-II vide no. 240522019 dated 02/08/2024*
9. *Directions issued vide MPCB/ROP/ID/2408260001 dated 26/08/2024*
10. *Personal hearing extended at HQ on 24/09/2024 & MoM*

Dear Sir,

This is with reference to the above mentioned subject and references, we hereby submit our Corrective Actions for the points mentioned in the Interim Directions:

1. PP should immediately stop all seepages /percolations from the facility area by providing retaining wall and submit the compliance report immediately to the Board.

Corrective Actions from MEPL:

1. Based on the major mitigation measures taken in the past to arrest water percolations from all directions like **Construction of Cut of Trench, Construction of Storm water drain** and **diversion of nallah streams, Cement Grouting Work** and looking into the success rate of all our attempts towards these measures and the huge cost incurred in execution of the same, we have now again initiated steps to identify and stop all seepages/percolation from the facility area. A comprehensive inspection of the site is being conducted to identify any potential points of leakages.

a) A retaining wall will be constructed toward downstream of the facility area to provide a secure barrier against any further seepage. The design of the retaining wall is aligned with the necessary specifications to ensure effective containment. The time period of designing and construction will take approximately six months.

b) A brief draft summary of the technical proposal is submitted here for your kind perusal based on the actual site scenario.

c) The technical proposal will be vetted and approved through a government institution. Once it is approved we will start the activity.

d) Detail technical proposal of the retaining wall construction will be submitted to the Board. Along with the vetting report from the reputed educational Institution.

Existing Site Scenario:

- Natural Slope of MEPL Plot from South-West to North-West and from South to North.
- Soil strata of land is marginal soil / black cotton soil in top surface, rest is formation of soft rock / weathered rock or fractured rock.
- The site of MEPL is in lowermost part of entire MIDC.
- There is a continuous ingress of industrial effluent storm from South-west & south side of plot, passes through MEPL plot and accumulated in pond and also some quantity leads to nala located in North-East & North side of MEPL plot.
- There is ingress of Industrial Effluent from SW & South part in subsoil of MEPL plot.
- Continuous seepage from NW side of reclaimed soil are observed, it has been reduced significantly by reclaiming the pond since last six month.

Suggestive Measures:

- It is recommended to construct retaining wall parallel to MEPL boundary wall from South, South-West to North-west side of MEPL plot boundary.
- It is recommended to construct retaining wall at least 2-3 m away inside from existing boundary wall
- It is recommended to generate separate open storm water trench between existing boundary wall and retaining wall, which leads all storm from outside MEPL plot directly to natural storm nallah. This storm trench helpful to restrict outside storm water entering into the MEPL plot
- It is recommended to provide invert filter / drainage layer in between retaining wall and reclaimed soil. This drainage layer collects the seepages from subsoil water flow and leads through the collection trench to existing pond located at bottom near the north-west side of the boundary wall.

The above mentioned scheme will be submitted to the board after approval from the reputed government educational institution.

2. PP shall lift the entire contaminated water accumulated in the Katccha pond and treat the same into the existing ETP and MEE within period of 02 months. PP should submit daily report of treatment of contaminated water to the Board office through email. For the compliance of the same, facility should submit the Bank Guarantee of Rs. 10 Lakhs.

Corrective Actions from MEPL:

1. As directed we will lift the water accumulated in the katcha pond and will treat it by using our existing Effluent Treatment Plant (ETP) and Multi-Effect Evaporator (MEE). This is address here that we have been doing this practice already. The process of transferring and treating the water has been initiated.
2. There is continuous ingress of effluents in our premises from upstream side as informed earlier to the Board and the MIDC. However we are still continuously lifting and treating at our end. Due to the existing capacity of ETP it will take 6 to 7 months to completely treat and reclaim the existing water storage area. This may vary if there is continuous water ingress. This was also informed during our personal hearing.
3. As directed, we will submit daily reports detailing the quantity of contaminated water lifted and treated at our facility. These reports will be sent to the Board office via email for regular monitoring and compliance verification.
4. We will submit the Bank Guarantee of ₹5.0 Lakhs to the Board. The necessary documentation and processing for the Bank Guarantee are being arranged, and it will be submitted at the earliest. We have already submitted a fresh Bank Guarantee for the directions dated 13.12.2023 The details of this BG are as below:

MPCB UAN Number	BG Number	Amount	Date of Issue	Date of Expiry	Bank Name	MPCB Directions / Date	Status of BG	BG to be returned / Not returned
MPCB-BG-0000031767	1828010 0000656	500000	05-03-2024	14-03-2025	Axis Bank	MPCB/ROP/ID/220218-FTS-0151/18.02.2022	Live	Not to be returned

3. PP shall provide impervious lining to the Katcha pond and ensure that, there should not be any contamination of ground water /soil/well/water bodies around the facility area. PP shall provide piezo metric well at the downstream of the Katcha pond along the boundary of compound wall and regularly check the ground water quality and submit the report regularly to the Board. For compliance of the same, Bank Guarantee of Rs. 5.0 Lakhs shall be submitted.

Corrective Actions from MEPL:

1. As per the directions to provide an impervious lining to the katcha pond to prevent any contamination of groundwater, soil, or nearby water bodies, we would like to address here that we have initiated this process and the process is based on the overall current site contours and the storm water pattern w.r.t the site topography. The pond area reclamation is planned and executed. We are reclaiming the entire pond area by adding reclaiming material.
2. As mentioned earlier also in our previous reply about the detailed study to understand the storm water pattern & current contours of the site so that we can come up with the accurate design, the study was completed successfully and based on the study report we had prepared the time bound action plan and executed the same with the objective to achieve the 100 % reclamation and the remediation of the area under the pond. We started the pod reclamation work from 30.01.2024 onwards and since then the current status of the work execution is as below:

- Based on the overall current site contours and the storm water pattern w.r.t the site topography, pond area reclamation is planned and executed. We are reclaiming the entire pond area by adding reclaiming material.
- The reclamation work was under progress at site since January 2024 onwards and continue till 11.06.2024. Our aim was to achieve 100% reclamation of the entire area before monsoon i.e. by 15th of May 2024 subject to the condition that there will be no further sub-surface water ingress at the lower most pond area. Therefore since January 2024 onwards we continued ongoing reclamation works by adding reclaiming material irrespective of the fact that this reclamations works consumed huge quantity of reclaiming material which impacted us with the huge cost.

- Due to monsoon commencement we stopped the reclamation works at site on 12.06.2024. we submitted the reclamation work status till 11.06.2024 through our letter as referred below:
  MEPL Reply letter to the MPCB directions dated 13/12/2023 vide letter reference no MEPL/MPCB/DIR/2023-24/June-01 dated ***11.06.2024***

- The pond area is reclaimed up to 70% till 31.05.2024.
  100% reclamation was expected by Dec-2024 subject to the condition that there will be no further sub-surface water ingress at the lower most pond area.

- Simultaneously, we are already treating and disposing the accumulated water at the rate of 100 KL per day through Effluent Treatment Plant followed by Multiple Effect Evaporator, and using it with in the premises for the green belt development and dust mitigations measures at site.

3. As per Compliance, we are regularly submitting quarterly report in Annexure 4 of environmental monitoring report (Water, Air, Soil) including piezometric well at the downstream location of the katcha pond along the boundary of the compound wall.

4. To compliance of these measures, we will submit the Bank Guarantee of ₹5.0 Lakhs to the Board as requested

4. PP shall provide storm water drainage to avoid the mixing of rainwater surface run-off into Katcha pond

Corrective Actions from MEPL:

STORM WATER DRAINAGE TO AVOID THE MIXING OF RAINWATER SURFACE RUN-OFF INTO KATCHA POND

In the past years storm water drainage system was provided at and around roadsides and also constructed storm drain in north-east area in upstream to collect the sub surface runoff water. The basis of design of storm water drain with in site premises in 2015 is explained below:

a) The GSDA survey was conducted to understand the sub-soil geology, water table levels and water flow directions in and through our premises. This study reports that, there is out-side source water which comes inside our premises. The GW flow in the area is from NE to NW. We have also been advised by MPCB to construct the storm water drain along the compound wall of north-East side based on the recommendations of GSDA report.

b) The detailed design and proposal of storm water drain was submitted to EE, MIDC for its approval and the same was approved. As recommended in the survey reports and as advised by MPCB following Mitigation measures were further taken by MEPL.

- **Construction of Storm Water Drain & diversion of nallah stream:** The detailed technical discussion held with the hon. Chief Engineer MIDC Pune and Executive Engineer MIDC at Pune office. Hon. Chief Engineer accepted the proposal and approved and storm water drain was constructed complying to the MPCB directions and GSDA recommendations as well. A storm water drain was designed and constructed to carry the discharge expected from streams. The total discharge of 3.04 cum per sec. however we have made provision for seepage of water from the surface area of cut of storm water drain oozing out directly in to the drain. The storm water drain was constructed as per the recommendations of GSDA.

  Details of Storm water drain constructed at site:

  - Storm water drain -Length 700 M.
  - Lined section of drain having bottom width of 1.50 M.
  - Full Supply Depth (FSD) as 2.00 M.
  - Gentle bed grade of 1:700 M (as per Irrigation Department norms).
  - The discharge carrying capacity of the section with this bed grade is 7.93 cum / sec.

- We have provided storm water drain along boundary wall to divert the water coming into our premises. For this we have done preliminary level survey then the L-Section for the same was formed and then according to the topography of the land the slope was decided. The bottom of the storm water drain was also grouted upto 4-6 mtrs with cement grouting as detailed below. The bottom/sides of the drain was done coal-grouting to avoid the infiltration of water through drain inside.
- The detailed plan for the excavation for the storm water drain and the construction of falls on the drain was prepared.
- From execution and maintenance point of view for this storm water drain of length 700 M. we have lined section of drain having bottom width of 1,50 M. and Full Supply Depth (FSD) as 2.00 M. with a gentle bed grade of 1:700 M.(as per Irrigation Department norms). The discharge carrying capacity of the section with this bed grade is 7.93 Cum / sec.
- So as to keep the velocity with in permissible limits for concrete lined section, we constructed falls at appropriate locations. As the difference in bed level at start to the confluence of drain with parent nallah is 21 M and bed grade allowance is of 1 M (1:700 for 700 M length of drain) 5 falls of 3 M, 1 fall of 4 M and 1 fall of 2 m are constructed.

- Sufficient water cushion is provided at the fall structure so that the energy created due to sudden fall of water can be killed at the spot and it will not erode the bed of the drain.
- Entire length of storm water drain is lined with cement concrete in CC M-15 grade concrete for bed as well as side slopes up to 2.50 M. depth so as to protect the drain from erosion.

- **Cement Grouting Work:** There is sub-surface water coming into our plant premises. To arrest this water we have adopted cement grouting technology. Bore holes were drilled with 125mm diamond drill upto 6mtr approx. up to hard strata with PVC casing. Then Cement-Grouting was done with specified cement water ratio with increasing pressure up to 3-4 kgs. This was done to close the gaps between fractured rocks so that water should not enter through this. All the periphery was grouted with same methodology. Cement grouting work was executed based on the recommendations given in the GSDA report. Bore holes were drilled every 3 meter centre to centre alternatively and minimum 25 number of cement bags were used to fill the single bore hole.

5. PP shall take all necessary measures to reduce smell in the area by providing fume extraction system and scrubbers of adequate capacity for all point source of VOC emissions in the facility during handling of waste.

Corrective Actions from MEPL:

- At MEPL we have following provisions to mitigate the odor issues if any and to monitor the ambient air & VOC emissions in the facility during handling of the waste and also during day to day regular operations of the site.
- Ambient air monitoring at site: At MEPL we have our in-house ambient air monitoring system installed at upstream and downstream locations of the site. The details of the ambient air monitoring system is as below:

AirSENCE – Continuous Ambient Air Quality Micro Monitoring stations manufactured by AUG Signals – Canada to monitor ambient air around our facility.

Item	Description
AirSENCE – Continuous Ambient Air Quality Micro Monitoring system (caaqMMS) includes	
AirSENCEB	**GAS AND PM SENSORS**
	1. PM10 Optical Particle Sensor 0 – 1000 µg/m3
	2. PM2.5 Optical Particle Sensor 0 – 1000 µg/m3
	3. PM1 Optical Particle Sensor 0 – 1000 µg/m3
	4. NO Gas Sensor 0 – 6.0 ppm of NO
	5. NO2 Gas Sensor 0 – 9.0 ppm of NO2
	6. CO Gas Sensor 0 – 8.0 ppm CO
	7. O3 Gas Sensor 0 – 9.0 ppm of O3
	8. Temperature & Humidity sensor
	OTHER COMPONENTS OF SYSTEM
	a. Sensor Board Printed Circuit Board (PCB)
	b. Central PCB for Data processing & Communication
	c. Communication modes – i. Wi-Fi modem, ii. LAN iii. GPRS modem
	d. Fan for ACTIVE SAMPLING
	e. Weatherproof Polycarbonate enclosure
	f. AUG SW for Data viewing and Downloading
	g. Pole mounting Kit for installation on pole i. Steel slotted strut channel ii. Pan Head Screws iii. Quick release worm drive clamp
	h. Wall Mounting kit for installation on Wall i. Polycarbonate Flange ii. Flat headed screws
Add-onsensors	9. SO2 Gas Sensor 0 – 10 ppm of SO2
	10. VOC Gas Sensor 0 – 40 ppm of TVOC
	11. H2S Gas Sensor 0 – 2 ppm of H2S
	12. Wind Speed & Direction Sensor
	13. Rainfall Sensor

- VOC monitoring at site: At MEPL we have NABL & MOEF&CC accredited laboratory and we have experienced team of chemist who are working in our Hazardous Waste Laboratory for more than 10 years. We have following Environmental Monitoring Plan which is executed at our site:

Detail Environmental Monitoring Plan

Sr. No	Discription	Frequency	Locations	Facility Name
1	Ambient Air Monitoring	Twice in week	1. Near Main Gate 2. Near Assenmbly Point.02 3.Opposite to Landfill-5 Area	MEPL
2	Emission Source Monitoring	Monthly	1. PGVR	MEPL
3	Emission Source Monitoring	Quarterly	1. WHRB	MEPL
4	Emission Source Monitoring	Quarterly	D G Sets - 01(320 KVA) D G Sets - 02(320 KVA) D G Sets - 03(320 KVA)	MEPL
5	Vent Monitoring(VOC)	Quarterly	SLF-1 SLF-2 SLF-3 SLF-4	MEPL
6	Ground Water Sample Analysis	Monthly	1. Upstream 2. Downstream	MEPL
7	DG Set Noise Monitoring	Quarterly	D G Sets - 01(320 KVA) D G Sets - 02(320 KVA) D G Sets - 03(320 KVA)	MEPL
8	Noise Monitoring	Monthly	1. Near Main Gate 2. Near Assenmbly Point.02 3.Opposite to Landfill-5 Area	MEPL
9	Leachate Sample Analysis	Monthly	Leachate Well No. 05 Leachate Well No. 06	MEPL
10	Soil Sample Analysis	Six Monthly	EAST SIDE WEST SIDE NORTH SIDE SOUTH SIDE	MEPL
11	PGVR Slag Analysis	Yearly	Slag sample	MEPL
12	Illumination Monitoring	Monthly	1. Spectrum shed 2. Plasma shed 3. Hazardous waste shed	MEPL
13	Ventillation Monitoring	Monthly	1. Spectrum shed 2. Plasma shed 3. Hazardous waste shed	MEPL
14	Ambient Air Monitoring	Monthly	Nimgaon Bhogi village Near ZP School Phalke mala Near ZP School Dhok sangvi village	NABL Accredited Third Party Lab

15	Ground Water Analysis	Quarterly	MEPL Borewell-1(Upstream)	NABL Accredited Third Party Lab
			MEPL Borewell-2(Downstream)	
			Ichake Constructed Well	
			Ichake Unconstructed Well	
			Nimgaon Bhogi Borewell	
			Dhok Sanghvi Borewell	
16	Dioxin & Furan Testing	Yearly	01 No(PGVR Stack)	SGS Services

- At MEPL we have efficient fume extraction and scrubber systems at all point source and system is already implemented and regularly monitored to ensure its operation at optimal levels, and its working satisfactorily. The photographs of the existing fume extraction and scrubber systems is annexed as Annexure-5.
- At pre processing system and LAT also fume extraction
- All necessary actions will be made if required to maintain odor control and environmental safety.

6. PP shall plant aromatic trees in the massive quantity inside the facility premises and along the boundary wall and compliance report along with photographs of tree plantation shall be submitted to the Board Office.

Corrective Actions from MEPL:

- With the existing green belt already developed at MEPL site we propose to expand our green belt with aromatic trees in the massive quantity inside the facility premises and along the boundary wall and compliance report along with photographs of tree plantation shall be submitted to the Board Office.
- Also this is to inform you that we had already planted more than 7200 trees with different species including aromatic trees in significant quantities in the facility premises to contribute to odor management, creating a natural barrier to improve air quality.

- The proposed plan of green belt development with different species of trees is given below:

MAHARASHTRA
ENVIRO POWER LTD
ISO 9001:2018 I EMS 14001 : 2004 I OHSAS 18001 : 2007 Certified Company
(Common Hazardous Waste Treatment, Storage and Disposal Facility)
The Corporate Identity Number (CIN) : U40105MH2005PLC150780

Name of Trees	Number of Trees	Area of plantation	Date of Plantation
Neem (Azadirachta indica	200 nos	5000 sqm	Oct,24 –Jan,25
Peepal Tree (Ficus religiosa)	100 nos	6400 sqm	Oct,24 –Jan,25
Sheesham (*Dalbergia sissoo*)	100 nos	3600 sqm	Oct,24 –Jan,25
Bamboo (Bambusa spp.)	50 nos	800 sqm	Oct,24 –Jan,25
Arjun Tree (Terminalia arjuna)	50 nos	2500 sqm	Oct,24 –Jan,25

7. PP shall not take any effective steps for development of additional land acquired for expansion of the facility until obtaining all necessary permissions from the competent authority

Corrective Actions from MEPL:

- For the development of additional land acquired for the expansion of the facility, MEPL has obtained Environmental Clearance from the MoEF&CC (09/01/2023) and the CTE (07/05/2024) from MPCB. We have completed one geohydrological study at the project site as directed by MPCB. For any further proposed developmental activity at project site we will wait for the further instructions from the MPCB..

Sir, with above submissions we ensure that we will continue complying to all the conditions specified in our consent & regulatory guidelines and also we will meet the compliances towards the suggested points and our corrective actions proposed herewith.

Thanking You,

For, Maharashtra Enviro Power Limited

Authorized Signatory

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL OFFICE - PUNE

Phone No. 020-25811694
Fax No. 020-25811701
e-mail : ropune@mpcb.gov.in
visit us : www.mpcb.gov.in

"Your Service is our Duty"

Jog Centre, 3rd Floor,
Wakdewadi,
Old-Pune Mumbai Road,
Pune- 411003

***ROP/** MPCB/Directions /* 2504240002 **Date:** 24/04/2025

To,
M/s. Maharashtra Enviro Power Ltd.,
Plot No. P-56, MIDC Ranjangaon,
Tal. Shirur, Dist. Pune.

Sub: Conditional Directions under section 33A of the Water (Prevention & Control of Pollution) Act, 1974 and 31A of Air (Prevention & Control of Pollution) Act,1981.

Ref : 1) Legal Action Proposal Submitted by Sub Regional Officer, Pune-II vide MPCB- LEGAL-ACTIONS-240522019.
2) Letter received from the Central Pollution Control Board vide no. CP-21/87/2024-WM-II-HO-CPCB-HO 5290, Dtd. 12/09/2024
3) Personal hearing extended at MPCB-HQ, Mumbai on 02/04/2025
4) Interim directions issued by the Board vide no. MPCB/ROP/ID/2410010002, Dtd. 01/10/2024
5) Minutes of personal hearing received on 24/04/2025

With reference to the above, the personal hearing extended on 02/04/2025 before the Board's Competent Authority at MPCB-HQ, Sion, Mumbai and the minutes of personal hearing received on 24/04/2025, Considering your submissions during the hearing and Report of Sub Regional Officer Pune-II. The Board has decided to issue the following directions,

(1) You shall submit an explanation regarding the failure of compliance of interim directions issued by the Board letter Dtd. 01/10/2024.
(2) You shall provide storm water drain to avoid the mixing of surface runoff into the Kaccha Pond.
(3) You shall take measures to control / avoid leakages / seepages from facility to earthen Pond (Pazar Talav) and nearby well.
(4) You shall ensure compliance as above by 31/05/2025 and shall submit report accordingly.
(5) The Bank Guarantee amount of Rs. 5.0 Lakh out of submitted Bank Guarantees as per the consent conditions have been forfeited.
(6) You shall submit the top up Bank Guarantee of Rs. 10 Lakh towards ensuring compliance of the consent conditions and the Board's directions. The Bank Guarantee shall submit in favor of Regional Officer, Maharashtra Pollution Control Board, Pune within 15 days.

You shall submit the action taken report on the above directions within 07 Days, in case you fail to comply with the above directions the Board will have no option to initiate further legal action as deemed fit, which may please be noted.

For and on behalf of
Maharashtra Pollution Control Board

(J. S. Salunkhe)
Regional Officer,
M. P. C. Board Pune

Copy submitted to:-
1. Joint Director (APC), MPCB, Mumbai
2. P & Law Division / Law Officer, MPCB, Mumbai.

Copy to: - Sub Regional Officer, MPCB, Pune-II : You are directed to submit the compliance report of the directions within time.

Item No.6 (Pune Bench)

BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE

[THROUGH PHYSICAL HEARING (WITH HYBRID OPTION)]

ORIGINAL APPLICATION NO.14 OF 2025(WZ)

Kailas Narke

.....Applicant

Versus

Maharashtra Enviro Power Ltd. & 10 Ors.

....Respondents

Date of hearing: 04.04.2025

CORAM: HON'BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. VIJAY KULKARNI, EXPERT MEMBER

Applicant	:	Mr. Tanaji Gambhire, Advocate along-with Ms. Mukta Pranav Ranade, Advocate
Respondents	:	Ms. Manasi Joshi, Advocate along-with Ms. Pooja Natu, Advocate for R-2/MPCB

ORDER

1. From the side of applicant, learned counsel Mr. Tanaji Gambhire along-with Co-Counsel- Ms. Mukta Pranav Ranade have appeared before us. Learned counsel Mr. Tanaji Gambhire submits that he would also be representing the applicant in this case and is going to file his Vakalatnama today itself before this Tribunal.

2. By our previous order dated 10.02.2025, we had directed the applicant to place before us the affidavit showing therein as to what are the evidences indicating air pollution, water pollution and soil pollution etc., as has been alleged in the present Original Application and also disclose the violations of the terms & conditions of either EC or CTO, if applicable, point-wise. In compliance with that order, applicant has filed

an affidavit dated 17.03.2025, wherein evidences with respect to above pollution have been given.

3. Further, by our previous order dated 10.02.2025, we had also directed the Registry to issue notice to respondent No.2- MPCB directing therein to submit their reply as to what action has been taken at their end for the violations, which were noted in the Visit Report dated 19.09.2024. In compliance with that order, Respondent No.2 has filed reply affidavit dated 02.04.2025 before this Tribunal, wherein in para no.8 sub-para (I) to (VII), observations made at the time of site inspection have been mentioned, which include during the visit, percolation of water was noticed outside the compound wall and to prevent the same, retaining wall was being constructed by the Project Proponent. COD parameters were found exceeding. It is further submitted in this affidavit that Respondent No.2-MPCB has also filed a Regular Criminal Complaint bearing No.4179/2015 against Respondent No.1-MEPL under Section 15 of the Environment (Protection) Act, 1986 read-with the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008, which is pending before the Chief Judicial Magistrate, Pune.

4. In view of above averments made by Respondent No.2, it is clear that there was certain violation to have been committed by Respondent No.1- M/s. Maharashtra Enviro Power Ltd. Therefore, we deem it appropriate to admit this application and accordingly admit the same.

5. Registry is directed to issue Notice to the respondents, returnable within 04(four) weeks.

6. Since learned counsel Ms. Manasi Joshi accepts notice on behalf of Respondent No.2- MPCB, notice is waived against Respondent No.2.

7. Applicant is directed to take necessary steps for service to the respondents by both ways (Dasti as well as by Registered Post) and also on available e-mail/WhatsApp. and submit service affidavit within one week.

8. Applicant is also directed to supply copy of the application/appeal and relevant documents to the respondents within a week.

9. Respondents are directed to submit their reply affidavits within four weeks through e-filing portal of NGT and also circulate the same to the applicant as also other respondents by available e-mail.

10. Learned counsel for the applicant prays before us that he may be allowed time to file rejoinder affidavit against the reply affidavit of Respondent No.2. We allow two weeks' time for the same as prayed.

11. Put up this matter for further consideration on 23.06.2025.

Dinesh Kumar Singh, JM

Dr. Vijay Kulkarni, EM

April 04, 2025
ORIGINAL APPLICATION NO.14 OF 2025(WZ)
P.Kr

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

SPEED POST

F. No. CP-21/87/2024-WM-II-HO-CPCB-HO 5290

12th September 2024

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
7 OCT 2024
पुणे/आवक संख्या 1457

To

The Member Secretary,
Maharashtra Pollution Control Board,
Kalptaru Point, 2nd - 4th Floor,
Opp. Cine Planet, Sion Circle, Sion (E),
Mumbai – 400 022, Maharashtra

Sub: Matter raised during zero hour on 29/07/2024, by Dr. Amol Ramsingh Kolhe, Hon'ble M.P., regarding water & land contamination in Shirur Parliamentary Constituency – reg.

Sir,

With reference to the Office Memorandum No. ZH/XVIII/II/2024/LSS/TO/934, dated 30/07/2024, from Lok Sabha Secretariat (copy enclosed), regarding matter raised in zero hour on 29/07/2024, by Dr. Amol Ramsing Kolhe, Hon'ble M.P., Lok Sabha, for alleged water & land contamination in Shirur Parliamentary Constituency due to the operations of the M/s Maharashtra Enviro Power Ltd., (MEPL) MIDC, Ranjangaon, a Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF).

In this regard, Central Pollution Control Board (CPCB), Regional Directorate-Pune (RD-Pune) carried out inspection of the facility during 13/08/2024 to 14/08/2024 wherein various issues related to water pollution were observed. The observations made during the said visit is enclosed herewith for ready reference. It was reported that MPCB has also received several complaints about groundwater contamination resulting from the facility's operations and discharges into nearby villages and MPCB has taken action from time to time by issuing directions to the facility.

In view of the above, it is requested to take cognizance of the observations made in the CPCB report and ensure time bound compliance by the facility for containment of sources of contamination and remediation of contaminated surface and groundwater bodies. The Action Taken Report may please be provided to this office at the earliest.

Yours faithfully,

Encl: As Above

(B. Vinod Babu)
Scientist 'F' & Head
Waste Management-II Division

Copy to:
The Regional Directorate : For follow-up, please.
Central Pollution Control Board
Survey No. 110, Dhankude, Multi-Purpose Hall,
Baner Road, Baner, Pune

For N/A please.

(B. Vinod Babu)

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032
दूरभाष/Tel: 43102030, 22305792, वेबसाईट/Website : www.cpbc.nic.in

OBSERVATIONS MADE BY CPCB DURING INSPECTION OF M/S MAHARASHTRA ENVIRO POWER LTD., (CHWTSDF) MIDC RANJANGAON W.R.T. MATTER RAISED DURING ZERO HOUR BY DR. AMOL RAMSINGH KOLHE, HON'BLE MEMBER OF PARLIAMENT REGARDING WATER AND LAND CONTAMINATION

Background:

Hon'ble MP Dr. Amol Ramsingh Kolhe has raised the issue of Water and Soil Pollution by M/s Maharashtra Enviro Power Ltd., (MEPL), Ranjangaon, Maharashtra (a Common Hazardous Waste Treatment Storage and Disposal facility). To verify the ground status, a team from CPCB, RD-Pune, conducted an inspection and monitoring of M/S Maharashtra Enviro Power Ltd., (MEPL) and the surrounding areas from 13/08/2024 to 14/08/2024. Water and effluent samples were collected both within the facility and from nearby areas for analysis.

Observations and Findings of CPCB Team:

- The existing hydro-geological conditions at site indicate that subsurface water flow comes in contact with a portion of secured landfill below the ground level, thereby the risk of contamination from landfills exists.
- The facility has constructed unlined lagoon to receive surface run-off from the facility towards northern end of the facility, between closed cells #4 and #5.
- The facility has constructed a 700-meter trench to receive surface run-off and sub-surface seepage/flow from north-north-east side of the facility which discharges through cascade structure followed by a lined drain, which meets natural nala leading to Pazar Talav, Nimgaon Bhogi. A temporary arrangement was made to collect the water from cascade structure and pumping to unlined pond.
- Facility also constructed encasing trench of length 130mtr towards north-north-west boundary to received surface run-off and seepages, which discharges into a lined pond. The accumulated water from lined pond is pumped back to unlined lagoon.
- There was active seepage from lined lagoon, which is being collected into encasing trench and ultimately pumped back to unlined lagoon.
- During inspection, there was visual evidences of breach of surface run-off from the outlet of lined drain beneath the compound wall and as well as near the North-West boundary of the facility. This lead to flow of contaminated waste into Pazar Talav, Vill. Nimgaon Bhogi.
- The water from unlined lagoon was found contaminated with respect to TDS: 29,544 mg/l; BOD: 521 mg/l; COD: 1,222 mg/l; Sulphide: 3.96; Boron: 9.15 mg/l and Manganese: 4.1mg/l, including ammonical parameter NH3-N: 348 mg/l; TKN: 381 mg/l; respectively. Similar level of contamination was also found in accumulated water at unlined lagoon.
- Water collected in trench was also contaminated with respect to TDS: 27,506 mg/l; BOD: 454 mg/l; COD: 1,318 mg/l; Sulphide: 4.11 mg/l; NH3-N: 362 mg/l; TKN: 478 mg/l; Boron: 9.38 mg/l and Manganese: 3.71 mg/l respectively. Similar level of contamination was found at upstream of the trench.
- As per the interaction with few villagers/farmers of Nimgaon Bhogi Village, it is gathered that during monsoon season frequent overflow of surface run-off has been witnessed from the facility into the Pazar Talav through the natural drain and thereby making the surface water unsuitable for irrigation as well as for cattle consumption.
- Water sample collected from a natural drain, downstream of the facility, is also contaminated in the similar range to that of trench. Water in Pazar Talav and at the out of Talav is also contaminated.
- Groundwater samples collected from the open dug well near Pazar Talav indicate high levels of contamination with BOD: 193 mg/l; COD: 560 mg/l; TDS: 12,944 mg/l; Sulphide: 0.35 mg/l; NH3-N: 25 mg/l; TKN: 30 mg/l; Boron: 3.38 mg/l; Manganese: 4.89 mg/l; and Cyanide: 0.07 mg/l. The ground water is unsafe for human, agriculture or animal consumption.

- Surface and groundwater samples were collected from 8 locations of alleged impact areas outside the facility. Out of which, at 2 locations the water is being used for drinking purposes and for rest of 6 locations the water is being used only for agricultural activities.
- The water quality analysis of Ground water collected from open dug well of Annapur Gram Panchayat, Near Ghahaninath Mandir, Annapur (2.95 km from the facility) reveals that it has elevated levels of TDS, total hardness, fluoride, and sulfide, likely due to its groundwater source and the underlying strata. For Surface water collected from Ghod River i.e. Jack well of Shirur Municipal Council, d/s of Gohd River, Shirur (situated 8.2 km away from the facility), higher concentrations of TDS, total hardness, fluoride, sulfate, and cyanide were noted. Both the locations are separated by hillocks, agricultural fields, and domestic settlements from the facility. However, the water is treated at a local Water Treatment Plant before use for drinking purpose. In both cases, other monitored parameters meet the Indian Standard Drinking Water Specification (IS 10500:2012) acceptable limits.

Annexure

Action taken by MPCB from 2019

S. no.	Type of directions	Nature of non-compliances and action proposed
1.	SCN under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 19/12/2019	• Not provided adequate ETP. • Not provided adequate vehicle washing effluent collection tank & its overflow. • Percolation of effluent outside the facility
2.	Proposed Directions u/s 33A of the Water (P & CP) Act, 1974; u/s 31A of the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 07/07/2021	• Discharge of effluent outside the premises through a storm water drain at Northern direction, which is meeting to a natural drain and Pazar Talav at d/s of the facility. • Seepage of coloured effluent from the existing unlined lagoon within the facility, which is going outside the facility at Northern direction. • Failure to arrest the surface run-off from the facility. • Proposal to terminate the services of handling & management of hazardous waste. • Proposal to forfeit the bank guarantee.
3.	SCN under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 22/12/2021	• Accumulation of coloured effluent at pond at North-West boundary of the facility. • Unlined lagoon was found completely filled with coloured effluent, thereby chances of seepage, outside the facility. • Directed to submit the corrective action plan towards the observed non-compliances.
4.	SCN under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 24/01/2022	• Accumulation of coloured effluent at pond at North-West boundary of the facility. • Unlined lagoon was found completely filled with coloured effluent, thereby chances of seepage, outside the facility. • Not completing the construction of cut of trench, to stop seepage. • Directed to submit the corrective action plan towards the observed non-compliances.
5.	Directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 18/02/2022	• To treat the accumulated water in ETP prior sending to CETP. • To provide 2-way pumping & piping arrangement with flow meter to lift the accumulated water from the facility to CETP and to monitor its quality. • To lift & treat the water accumulated outside the facility near compound wall. • To submit bank guarantee of Rs. 10 lakhs.
6.	Interim directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and	• Not to store effluent in unlined lagoon. • Not to discharge effluent treated/untreated outside the facility.

	HOWMR, 2016, dated 08/08/2022	• To submit data on environmental monitoring & peizometric wells, action plan for disposal of accumulated water, to submit compliance of recommendations of NEERI report and bank guarantee of Rs. 10 lakhs and forfeit of earlier bank guarantee of Rs. 5 lakhs.
7.	Directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 13/12/2023	• To construct trenches of approx. 2 mtr. width to collect water ingress from all the nallah streams across the plant within the premises within 03 months. • To submit time bound action plan within 15 days for control of seepages and disposal of 12,000 m^3 surface runoff water which is stored in kaccha pit. • To treat and dispose the accumulated surface runoff which is stored in the kaccha pit within the premises, before ensuing monsoon season. • To submit geological and geohydrological report for the proposed landfill site at Plot No. H-4 & H-4/1 within a period of 02 months. • To submit the fresh bank guarantee of Rs. 10 lakhs towards compliance of directions and forfeit of existing bank guarantee of Rs. 5 lakhs.
8.	Directions under the Water (P & CP) Act, 1974; the Air (P & CP) Act, 1981 and HOWMR, 2016, dated 26/08/2024	• Violation of earlier directions dated 13/12/2023 for not disposing the accumulated water stored in unlined lagoon; not submitting the geological and geohydrological report for the proposed landfill site at Plot No. H-4 & H-4/1. • Not taking effective steps to prevent the overflow of surface run-off outside the facility, which meets Pazar Talav.

Annexure-R11-IV

Central Pollution Control Board
PARIVESH BHAWAN
East Arjun Nagar, Delhi – 110 032

No. B- 33014/7/IPC-II/2017-18/ July 07, 2017

OFFICE MEMORANDUM

Draft Guidelines for Pre-processing/Co-processing of Hazardous and Other Wastes had been prepared in Feb. 2017 and circulated among the SPCBs / PCCs and other Stake-holders for information/comments. Suggestions were received and have been incorporated wherever feasible. Accordingly, Final Guidelines have been prepared and are enclosed herewith for reference and further necessary action in the matter as deemed fit at the level of industries generating such wastes , SPCBs / PCCs , Pre-processors, Co-processors, TSDF and others concerned.

Reference of the Hazardous and Other Wastes (Management & Trans-boundary Movement) Rules, 2016 shall also be taken wherever necessary.

This is issued with the approval of the Competent Authority, Central Pollution Control Board.

[N.K. Gupta]
Divisional Head – IPC-II

Distribution :

- ✓ All the SPCBs / PCCs
- ✓ Cement Manufacturers Association, Noida [U.P.]
- ✓ Confederation of Indian Industries, New Delhi
- ✓ TSDFs

Guidelines for Pre-Processing and Co-Processing of Hazardous and Other Wastes in Cement Plant as per H&OW(M & TBM) Rules, 2016

July, 2017

Central Pollution Control Board
(Ministry of Environment, Forest & Climate Change, Government of India)
Parivesh Bhawan, East Arjun Nagar,
Shahdara, Delhi – 110032

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1.0 Background:

The rules notified in the year 2016 on management of Hazardous and Other Wastes, outlines the hierarchy of wastes management, wherein, prevention, minimization, reuse, recycling, recovery, utilisation including pre-processing and co-processing was envisaged prior to considering the option of disposal through incineration or secured landfilling.

Substantial factions of the industrial, commercial, domestic and other wastes contain materials that have the potential for use as an alternative raw material or as a supplementary fuel for energy recovery. The current waste generation scenario in India is as follows.

- About 7.4 Million tonnes of hazardous wastes is annually generated in India, out of which around 3.98 Million tonnes is recyclable and can be used for resource or energy recovery.

- About 65 Million TPA of MSW is generated in the country which contains about 15-20 % of non-recyclable Segregated Combustible Fraction (SCF) which can be utilized for energy recovery.

- About 200 million tonnes of non-hazardous wastes of industrial origin also gets generated in the country such as fly-ash, pyro-metallurgical slags, sludge from WTPs, dried sewage sludge, Plastic & other packaging materials, date expired and off-specification FMCGs materials and food & kindred products, used pneumatic tyres, etc. having potential for resource or energy recovery.

- Large quantity of agro-wastes that do not have potential to be used as cattle feed etc.

Environmentally sound utilization of wastes for resource or energy recovery can be practiced in various industrial processes. However, utilization by co-processing in cement Kiln is considered as an effective and sustainable option. There is dual benefit in co-processing of wastes in cement kilns, in terms of utilizing the waste as a supplementary fuel as well as an alternative raw material

The production of cement in India is about 300 Million Tons per annum, for which estimated coal and raw material (Lime stone, Iron ore, Clay, Bauxite etc.) requirement are 50 Million Tons per annum and 450 Million Tons per annum, respectively. The country, therefore, has vast potential to utilize large quantum of wastes such as non-recyclable hazardous & other wastes, segregated combustible fractions from MSW or Municipal Solid Wastes (MSW) based Refuse Derived Fuel (RDF), non-hazardous industrial wastes, plastics wastes, tyre wastes, non-usable bio-mass etc. as an alternative fuel and raw material (AFR) in cement kilns. Such utilization would help in recovering energy and material value present in them thereby reducing the consumption of primary fossil fuels and raw materials. Utilising these materials as AFRs will also reduce large quantity of GHG emissions of the country which is in line with our commitment made in the Paris agreement.

Many trial runs for co-processing of different kind of hazardous and other wastes in cement kiln have been conducted as per the technical support provided by CPCB since the year 2005. These wastes have been permitted by CPCB and then authorized by SPCBs to implement regular co-processing in

various cement kilns under Rule 11 of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008. CPCB has also published guidelines on co-processing of wastes in cement plants in the year 2010.

Subsequently, these rules have been superseded with re-notification vide GSR 395 (E) dated 04.04.2016 as the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 (HOWM Rules 2016).

The Rule 9 of the HOWM Rules 2016 is reproduced below:

> *"**Utilisation of hazardous and other wastes.-**(1) The utilisation of hazardous and other wastes as a resource or after pre-processing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process), shall be carried out only after obtaining authorization from the State Pollution Control Board in respect of waste on the basis of standard operating procedures or guidelines provided by the Central Pollution Control Board.*
>
> *(2) Where standard operating procedures or guidelines are not available for specific utilisation, the approval has to be sought from Central Pollution Control Board which shall be granting approval on the basis of trial runs and thereafter, standard operating procedures or guidelines shall be prepared by Central Pollution Control Board:*
>
> *Provided, if trial run has been conducted for particular waste with respect to particular utilization and compliance to the environmental standards has been demonstrated, authorization may be granted by the State Pollution Control Board with respect to the same waste and utilisation, without need of separate trial run by Central Pollution Control Board and such cases of successful trial run, Central Pollution Control Board shall intimate all the State Pollution Control Board regarding the same.*
>
> *(3) No trial runs shall be required for co-processing of waste in cement plants for which guidelines by the Central Pollution Control Board are already available; however, the actual users shall ensure compliance to the standards notified under the Environment (Protection) Act,1986 (29 of 1986), for cement plant with respect to co-processing of waste:*
>
> *Provided that till the time the standards are notified, the procedure as applicable to other kind of utilisation of hazardous and other waste, as enumerated above shall be followed."*

The above provisions have prompted CPCB to bring out these revised guidelines to facilitate SPCBs/PCCs to grant authorisation for utilization of different kinds of wastes, including Hazardous & other wastes, as AFRs through co-processing in cement kilns in an environmentally sound manner.

2.0 Benefits of Co-processing:

Co-processing in cement kiln is considered as environmentally sustainable option for the management of different kinds of wastes including hazardous and other wastes. In co-processing, these wastes are not only destroyed at a higher temperature of up to 1450^{o}C and long residence time during which its inorganic content gets fixed with the clinker and becomes part of cement apart from using the energy content of the wastes, thus no residues are left. While in case of incineration, the residual ash requires to be land filled as hazardous waste. Further the acidic gases, if any generated during co-processing gets neutralized in the large alkaline environment available within the kiln system. This phenomenon also reduces the non-renewable resources requirement such as coal and lime stone etc. Thus the utilization of wastes in cement kilns through co-processing provides a win–win option of waste disposal.

Co-processing of wastes in the cement plants would require a large scale management of Hazardous and other wastes. This would mean that a large quantum of waste will be received, stored, handled and pre-processed in the cement plants or TSDFs or stand-alone pre-processing facilities so as to make an homogenised mixture of wastes suitable for co-processing in the cement kilns. This waste mix would get prepared from different kinds of wastes such as the ones listed in HOWM Rules, 2016 and also those which are not listed like SCF, RDF, plastic & other packaging wastes, tyre chips, non-hazardous industrial wastes, biomasses, agro-wastes (which are not suitable for use as cattle feed), non recyclable materials from ware houses such as date expired or off-specification FMCG, food & kindred and other products, etc. Further it may require installation of different systems for feeding such homogenised mixtures into cement kilns. Fig 1 given in Annexure 1 provides an overview of the pre-processing of the waste in a facility and co-processing in cement kiln.

Hence, there is a need to define appropriate methodology with which, necessary authorization can be granted by SPCBs to cement plants or pre-processing facilities apart from TSDFs for collection, transportation, receipt, storage, handling & pre-processing of wastes and also for co-processing operation in cement kilns.

3.0 Authorization for pre-processing and/or co-processing:

As per HOWM Rules, 2016, utilisation of hazardous and other wastes for co-processing or for any other use shall be carried out only after obtaining authorization from the State Pollution Control Board in respect of waste on the basis of standard operating procedures or guidelines provided by the Central Pollution Control Board.

Further, no trial runs would be necessary for grant of authorisation for co-processing of wastes in cement kilns since Ministry of Environment, Forests and Climate Change has notified the Emission Standards for co-processing of wastes in cement kiln vide GSR No. 497 (E) dated 10.5.2016 under the Environment (Protection) Rules, 1986. Such co-processing shall be carried out as per the guidelines and SOPs outlined in this document

SPCBs may grant Authorisation to cement plants for co-processing of wastes listed in Schedule I, Schedule II and Schedule III of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Authorisation for co-processing of commonly recyclable hazardous wastes

listed in Schedule-IV may be considered only if there are no recyclers for such wastes at reasonable distance as may be decided by SPCBs.

Further, SPCBs may also grant consent to the cement plants under Air (P&C) Act, 1981 for co-processing of any wastes not listed in HOWM Rules, 2016 like SCF, RDF, plastic & other packaging wastes, tyre chips, non-hazardous industrial wastes, biomasses, agro-wastes (which are not suitable for use as cattle feed) and date expired or off-specification FMCG and food & kindred other products which are not-recyclable. While co-processing all such wastes including hazardous & other wastes, cements plants shall comply with the emission standards prescribed for co-processing of wastes notified by MoEF&CC vide GSR No. 497 (E) dated 10.05.2016.

Use of wastes for co-processing in cement kilns does not warrant the requirement of EC as per MoEF&CC Notification No. S.O.3518 (E) dated 23.11.2016

As per HOWM Rules, 2016, every person who is engaged in generation, collection, transportation, receipt, storage, and handling of hazardous and other wastes for pre-processing and /or co-processing shall obtain an authorization or its renewal by applying in Form 1 from the State Pollution Control Board / Pollution Control Committee.

Accordingly, cement plants may co-process the pre-processed hazardous wastes received from TSDFs or stand-alone pre-processing facilities or their captive pre-processing facilities only after obtaining such authorization.

Every TSDF or standalone pre-processing facility or cement plant who is engaged in pre-processing of wastes for co-processing shall have minimal requisite infrastructure facilities & operational controls as mentioned below;

S.No	Type of operations	Check-list
i.	Type of packaging	May use liners, Bags Small / Jumbo, Drums, Containers, Bulkers, Tankers, etc. suitable for handling of hazardous wastes as per CPCB guidelines
ii.	Reception	Weighing bridge
iii.	Waste characterisation / qualification	Laboratory
iv.	Storage	Shall install covered sheds with Impervious flooring. Waste shall be stored in storage tanks/Containers/bins. Bulky wastes may be handled on impervious lined flooring under shed.
v.	Equipment for Size reduction	Shredder, Grinder, mixers, Cutter, Hammer, Jaw Crusher, Chipper, Hydro-pulper machines, etc.
vi.	Feed material preparation equipment	Impregnation, Drying, Screening, Crushing, Pelletisation, Granulation, Others
vii.	Moving machinery	Shall use machinery like trucks, Bob cat, Forklifts, loaders, dumpers, Arm handlers, Wheal loaders, Crawler loaders, Telescopic etc.
viii.	sorting equipment	Shall use equipment like Metal detectors, Electro-Magnetic separators, etc.
ix.	Screening material	Shall use equipment such as disc screen, Rotary screen, Trommel screen, Oscillating screens etc.

S.No	Type of operations	Check-list
x.	Conveyers to transport the material from one to another place	Shall use belt conveyors, Inclined Belt conveyors, Cleated belt conveyors, chain conveyors, bucket conveyors, closed conveyors, pipe conveyors etc
xi.	Feeding arrangements (applicable to cement plants alone)	Weigh feeders (Volumetric and Gravimetric feeding), Apron and Gottwald feeders etc. for liquid, solid and semi-solid waste feeding, including facilities for impregnation of wastes.
xii.	Safety equipment (applicable to cement plants alone)	Rotary Air Lock, Safety shut off gate, Double slide gates are utilized into the feeding mechanism to avoid any back fire due to any pressure build-up into the kiln.
xiii.	Fugitive Emission Control Systems	Fume extraction systems with vacuum ducts connected to Scrubbers / bag filters VOC emission control systems Biological treatment etc. ID fan and stack.
xiv.	Fire protection	Approved by fire safety auditor / fire department should be provided
xv.	Spillage/leachate collection / containment measures.	Shall install collection pits, impervious liners, segregation of storm water drainage systems
xvi.	Electrical fittings / Equipment	Systems shall be designed to handling flammable / explosive materials (If relevant)
xvii.	Odour control	The facility must have appropriate odor control facility to deal with the odor nuisance.
xviii.	Safety Equipment	There shall be provision of emergency showers and eye wash stations. Use of PPEs, ear-plug etc.
xix.	Facility has implemented a monitoring plan for checking the health of the operating personnel as per the statutory requirement	Medical surveillance of the operating personnel as per HOWM Rules 2016
xx.	Emergency Response Plan	Emergency Response Plan to deal with spills, fires and emergencies as per CPCB guidelines
xxi.	CEMS	Shall install CEMS for PM, NOx & SO_2 and connected to SPCB / CPCB for online data transmission (applicable to cement plants alone)

TSDFs, Stand alone Pre-processing Facilities & Cement plants shall undertake pre-processing of and co-processing of wastes as per the Standard Operating Procedures (SOPs) specified in these guidelines.

SPCBs shall grant authorisation to the waste generators to send their waste for management to any of the suitable pre-processing or co-processing facility that is approved by the SPCBs.

4.0 Trial Runs

Trial runs for co-processing of hazardous wastes would not be necessary except for few specific wastes such as Persistent Organic Compounds (PoPs), PCBs, obsolete and date expired pesticides, Ozone Depleting Substances

etc. listed for restrictions in international conventions, for which trial studies were not yet conducted. Kiln specific trial runs may be required for such wastes to study the destruction and removal efficiencies (as per the requirement of Stockholm convention) in the given kiln, compliance to emission standards, safe transport, storage and handling etc. prior to issuance of authorisation by SPCBs. In such cases, SPCBs may consult CPCB for conducting such kiln specific trial studies.

5.0 Standard Operating Procedures

5.1 Handling of Hazardous & other wastes:

The hazardous wastes need to be handled in an environmentally safe manner avoiding the possibilities of contaminating the environment and eliminate the chances of accidents leading to environmental damage. The requirements of handling, including labelling, packaging, transport and storage applicable to the hazardous & other wastes have been described in following sub-sections.

5.1 Responsibilities of occupier for handling of hazardous & other wastes

"Occupier" in relation to any factory or premises, means a person who has control over the affairs of the factory or the premises and includes in relation to any hazardous waste the person in possession of the hazardous waste.

The occupier shall take all adequate steps while handling hazardous wastes to:

(a) Contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and

(b) Provide persons working on the site with the training, equipment and information necessary to ensure their safety.

5.2 Packaging of Hazardous & other wastes:

The containers utilized for storing and handling Hazardous and other wastes for the purpose of co-processing must be able to withstand normal handling and retain integrity for a minimum period of six months. In general, packaging of hazardous substances must meet the following requirements:

(i) All packaging materials including containers shall be of such strength, construction and type as not to break open or become defective during transportation.

(ii) All packaging materials including containers shall be so packed and sealed that spillages of hazardous wastes / substances are prevented during transportation due to jerks and vibrations caused by uneven road surface.

(iii) Re-packing materials including that used for fastening must not be affected by the contents or form a dangerous combination with them.

(iv) Packaging material should be such that there will be no significant chemical or galvanic action among any of the material in the package.

(v) Bulk transportation of hazardous wastes in trucks without suitable packaging or containers shall not be allowed.

(vi) The containers when used for packaging of the hazardous & other wastes shall meet the following requirements:

Container shall be of mild steel with suitable corrosion-resistant coating and roll-on roll-off cover, which may either be handled by articulated crane or by a hook lift system comfortably for a large variety of wastes. Other modes of packaging, like collection in 22-liter plastic or steel drums, PP and HDPE/LDPE containers, HDPE liner bags etc., also work for variety of waste. However, all such container should be amenable to mechanical handling.

- It should be leak proof.
- In general, the containers for liquid hazardous waste should be completely closed / sealed. There should be no gas generation due to any chemical reaction within the container, and thus should be devoid of air vents.
- Container should be covered with a solid lid or a canvas to avoid emissions of any sort including spillage, dust etc. and to minimize odour generation both at the point of loading as well as during transportation.
- Container used for transportation of waste should be able to withstand the shock loads due to vibration effect/undulations of pavements etc.
- Container should be easy to handle during transportation and emptying.
- As far as possible, manual handling of containers should be minimized. Appropriate material handling equipment is to be used to load, transport and unload the containers. Drums should not be rolled on or off vehicles. Preferably, equipment such as fork lift & pallets shall be used.
- Where a two-tier or three-tier storage is envisaged the frame should have adequate strength to hold the containers. Palletised drums may be stacked not more than 2 layers high in the transport vehicle.
- One-way containers (especially 16-liter drums) are also allowed. The multi-use container should be re-useable provided it should be cleaned and free from deterioration or defects.
- Loads are to be properly placed on vehicles. Hazardous & other waste containers are not to overhang, perch lean or be placed in other unstable base. Load should be secured with straps, clamps, braces or other measures to prevent movement and loss. Design of the container should be such that it can be safely accommodated on the transport vehicle.
- Non-compatible wastes shall not be collected in the same container. These wastes shall be segregated & packed separately. Non - compatible wastes shall not be transported together under any circumstance.

5.3 Labelling of Hazardous & other wastes

There are two types of labeling requirements:

(i) Labelling of individual transport containers (ranging from a pint-size to a tank); and

(ii) Labelling of transport vehicles.

All hazardous & other waste containers must be clearly marked with the contents. The marking must be irremovable, waterproof and firmly attached. Previous content labels shall be obliterated when the contents are different. Proper marking of containers is essential.

Containers that contain hazardous waste shall be labelled with the words "HAZARDOUS WASTE" in Vernacular language, Hindi / English. The information on the label must include the code number of the waste, the waste type, the origin (name, address, telephone number of generator), hazardous property (e.g. flammable), and the symbol for the hazardous property (e.g. the red square with flame symbol).

The label must withstand the effects of rain and sun. Labelling of containers is important for tracking the wastes from the point of generation up to the final point of disposal. The following are the requirements for labeling:

- The label should contain the name and address of the occupier and facility where it is being sent for pre-processing or co-processing i.e. labelling of container shall be provided with a general label as per Form 8 of the HOWM Rules, 2016.

- Emergency contact phone numbers shall be prominently displayed viz; the phone number of concerned officer of the sender and receiver, Regional Officer of the SPCB / PCC, Fire Station, Police Station and other agencies concerned.

Explanation: As a general rule, the label has to state the origin/ generator of the waste. He / she and only he / she – is responsible and shall know, in case of any accident / spillage etc. what kind of wastes it is, what hazard may occur and which measures should be taken. The second in the line is the collector / transporter / disposer /co-processor / pre-processor, who has to know the risk and what to do to minimize risks and hazards.

5.4 Collection and transportation of Hazardous & other wastes

The transportation of the Hazardous wastes has to be undertaken by the transporter who is engaged by either authorised sender or receiver. The responsibility of safe transportation of hazardous & other waste to the site for pre-processing or co-processing shall rest with either waste generator or the occupier of the pre-processing / co-processing facility that engages the transporter for the waste transportation. The detailed guidelines for collection and transportation of hazardous and other wastes have been provided at **Annexure-2**.

5.5 Storage of Hazardous & other wastes

The storage period of hazardous and other wastes shall be in accordance with the Rule 8 of the Hazardous & Other wastes (Management and Transboundary Movement) Rules 2016. The minimal requisite facilities for storage of hazardous and other wastes are given at **Annexure-3**.

5.5 Waste reception

Waste Characterization plays an important part in any treatment process of the waste which may be required before pre-processing and ultimately co-processing into the cement kilns. Upon receipt of the waste, it shall be weighed and property logged. It shall then undergo a visual inspection to confirm the physical appearance. A representative sample of the waste shall be collected and send to the onsite laboratory for finger printing analysis. Finger print analysis is performed to confirm that a particular waste stream belongs to an offsite waste generation source or not, based on its characteristics. The results of the finger printing analysis should be compared with the results of earlier analysis. Upon confirmation, this shall then be sent for pre-processing or co-processing.

The operator of the pre-processing facility of the cement plant shall perform following finger print analysis for each of the consignment of waste received for pre-processing or co-processing from generation site;

- Moisture content,
- Ash content,
- Net Calorific Value (NCV),
- Chloride and Sulphur content.
- Chemical compatibility
- Any other specific parameter, which may be decided on merit of each case keeping the clinker production process in focus.
- In case of liquid samples, viscosity, pH, suspended particle content etc shall also be performed.
- Heavy metal analysis, Reactive Sulphide, Reactive Cyanide or Halide analysis should be performed if sample comes from a sector which is suspected to have these in the waste material.

The results of this finger print analysis confirm that the waste belongs to already tested and verified waste stream which is suitable for co-processing into the kiln and do not have any side effects on clinker and cement quality parameters.

As the main product of the kiln is clinker, there must not be any side effect on its quality while utilizing the waste streams as AFRs. For pre-qualification for co-processing or pre-processing, a representative sample should be collected from the waste generator's site and analysed in a laboratory for above said parameter which shall form basis for comparing the finger print analysis of the waste consignments.

Quality Control - The quality of the pre-processed wastes (AFRs) largely depends on the quality control process followed during the quality assessment stage. Starting from sampling like collection of a representative sample, its storage in suitable container, avoiding any adulteration during transportation to lab, sample preparation in lab, performing test as per BIS standards for different quality parameters and carefully observing, recording and comparing

the results for specific waste streams is the key to define and confirm its suitability for pre-processing / co-processing in to the cement kiln.

Samples of wastes received at the pre-processing facility or the cement plant for pre-qualification must be preserved for one year for traceability considerations.

Samples of waste collected from regular consignments for finger print analysis must be preserved for one month for traceability consideration.

Samples that are beyond times as mentioned above must be sent to the TSDF or standalone pre-processing facility or to the cement plant for ensuring its disposal through co-processing.

5.6 Acceptance process for Hazardous & other wastes

Appropriate knowledge of the hazardous and other wastes is necessary to ensure that it will not adversely affect the process, safety or environment while handling it during pre-processing or co-processing. Hence, appropriate characterization of the waste for its acceptance and safe handling is an essential requirement.

Characterization of Hazardous and other waste for acceptance comprises two stages: pre-acceptance (or screening) and on-site acceptance. Pre-acceptance involves the provision of assessing the representative samples of the waste to allow operators to determine suitability of the infrastructure to handle the waste before receiving the same in the facility. The second stage concerns procedures when the waste arrives at the facility to confirm previously approved characteristics.

Failure to adequately screen waste samples prior to acceptance and a confirmation of its composition on arrival at the installation may lead to subsequent problems, inappropriate storage, mixing of incompatible substances, and accumulation of wastes could occur.

Hence, the pre-processing / co-processing facility must have appropriate laboratory facility for characterizing solid, liquid and sludge wastes with qualified analysts to ensure that proper waste acceptance process is practiced. This laboratory shall be equipped with facilities to test Moisture, Calorific value, Ash, Chorine, Fluorine, Carbon, Hydrogen, Sulphur, Nitrogen, Phosphorous, alkali and heavy metals, flash point, mixing compatibility, reactive sulphide, reactive Cyanide or halides etc.

In case the waste received at cement plant or standalone pre-processing facility does not meet the required criteria, in such case, the receiver should make arrangement for transfer of such waste to TSDF for final disposal by adopting necessary manifest system.

6.0 Pre-processing of wastes for co-processing:

Due to the heterogeneity of wastes, pre-processing is required to produce a relatively uniform waste stream for co-processing in cement kilns. This waste stream should comply with the technical and administrative requirements of cement manufacture and guarantee that emission standards and product quality are met. The proposal in this regard shall be submitted to SPCB by the cement plant or standalone pre-processing facility or TSDF. Waste mix having

uniform characteristics needs to be prepared from different waste streams for trouble free co-processing in a cement kiln.

The characteristics of the waste mix that need to be uniform pertain to particle size, chemical composition and heat content. For optimum operation, kilns require very uniform waste mix flows in terms of quality and quantity. Uniform quality of waste mix can be achieved by pre-processing different types of wastes by different physical processes in a pre-processing facility.

Pre-Processing is defined as pre-treatment of waste streams coming from different sectors and industries to make it suitable/homogenised for feeding into the kiln system to avoid process fluctuations. Pre-processing involves only physical transformations like size reduction (By Shredding and cutting), separation of foreign/undesirable materials (magnetic materials separation by Magnetic separator, use of metal detectors to remove metallic particles), impregnation (introducing and proper mixing of biomass/saw dust in semi solid streams to soak extra flowing liquids & maintaining good flow ability) and desired size selection (Size selection by screening operation, manual size selection by handpicking of large material size on very low speed Belt conveyors).

Pre-processing produces a homogenised Alternative Fuel mix from different incoming waste streams from various industrial sectors and reduces the possibilities of process fluctuations during Co-Processing the pre-processed fuels.

Various types of equipment are utilized during pre-processing operations like Shredder, Grinder, Cutter, Hammer, Jaw Crusher, Chipper and Hydro pulper machines for size reduction. Mixers for homogenizing the waste mix into large vessels/pits. Moving machinery like trucks, Bob cat, Forklifts, loaders, dumpers, Arm handlers, Wheel loaders, Crawler loaders, Telescopic handlers etc for material movement from one to another place and loading unloading of the material. Metal detectors, Electro-Magnetic separators, metal sorting equipments are utilized to remove small metallic traces which may be present into the incoming hazardous and other wastes from various sources. Different type of screens like Disc screen, Rotary screen, Trommel screen, Oscillating/ vibrating screens are used to separate the differently sized portions of the processed waste and choosing the right fraction for feeding into the system. Various types of Belt conveyors like flat belt conveyors, Inclined Belt conveyors, Cleated belt conveyors, chain conveyors, bucket conveyors, closed conveyors, pipe conveyors etc are utilised to transport the material from one to another place, usually pre-processed waste from the processing area to feeding area.

The pre-processing facility must have appropriate design to ensure that the waste homogenization operation is carried out in an environmentally sound manner and has equipment & facilities that are designed to handle the required hazardous wastes.

The rejects produced from the pre-processing facility, if any, may be sent to the TSDF, the authorisation for which may be obtained from concerned SPCB.

The pre-processing area must have impervious concrete floor and should be adequately covered to avoid exposure of rain to the material being stored and handled while pre-processing or co-processing.

Fume extraction systems with vacuum ducts and fume hoods should be installed at receiving pits/tanks, mixing units, blending units, shredders, transfer points, dryers, impregnation units, granulators, pelletizes, crushers, grinders, blenders etc. where there is source of such emissions. Such fume extraction systems should be connected to scrubbers / bag filters / VOC emission control through carbon adsorption, thermal or biological treatment etc. depending on type of emissions. The cleaned gases should be vented through ID fan and stack.

A fire protection system of approved design should be in place in the storage and pre-processing area.

The storage, handling and pre-processing facility should have appropriate spillage / leachate collection and storage system with impervious liners to avoid contamination of the ground water and soil.

The storm water and spillage / leachate drainage systems should be so designed that there should be no contamination of the storm water with the spillage or leachate from the storage, handling and pre-processing area.

The electrical and instrumentation fitting should be conforming to the standards.

The facility must have appropriate odor control facility to deal with the odor nuisance.

Emergency showers and eye wash stations should be provided within the storage, handling and pre-processing work area for immediate emergency use following exposure to the wastes.

Abatement techniques should be in place for control of noise to required levels.

7.0 Co-processing of wastes in Cement kiln:

Co-processing is defined as the use of waste as raw material, or as a source of energy, or both to replace natural mineral resources (material recycling) and fossil fuels such as coal, petroleum and gas (energy recovery) in industrial processes, mainly in energy intensive industries (EII) like cement production. In Co-processing, the combustible waste is utilized as fuel (Alternative Fuels) into the kiln system for maintaining the high temperature during clinker production. Some of the waste streams like biomass, small quantity waste streams, etc which have suitable quality parameters may be directly fed into the kiln system. However, majorly waste streams, especially when volumes are more, are fed after pre-processing which make it homogenized to reduce the process fluctuations.

Various equipment are utilized for feeding the pre-processed AFR into kiln system. Automated mechanical extraction machines such as walking Floor and various belt conveyors as mentioned above are utilized for transporting material from processing area to feeding point. Different kinds of volumetric and gravimetric dosing machinery are utilized for feeding the AFR material into the kiln in a controlled manner. Various safety equipments like Rotary Air Lock, Safety shut off valves & gates & Double slide gates are utilized into the

feeding mechanism to avoid any back fire due to pressure build-up inside the kiln. Bag filters are utilised at transfer points to avoid any dust emission into the atmosphere in case of feeding fine AFRs.

For optimal performance (co-processing without additional emissions), waste materials (pre-processed or as received) should be fed to the cement kiln through appropriate feed points, in adequate proportions and with proper waste quality and emission monitoring systems.

Different feed points can be used to feed the waste materials into the cement kiln for co-processing. The most common ones are:

- Main burner at the rotary kiln outlet end
- Rotary kiln inlet end
- Pre-calciner
- Mid kiln (for long dry and wet kilns)

Appropriate feed points have to be selected according to the physical, chemical and toxicological characteristics of the waste materials. Wastes of high calorific value have to be always fed into the high temperature combustion zones of the kiln system. Wastes containing stable toxic components and also wastes containing more than 1.5% chlorine should be fed to the main burner to ensure complete combustion in the high temperature and long retention time.

Alternative raw materials containing constituents that can be volatilized at operating temperatures in the pre-heater system have to be fed into the high temperature zones of the kiln system.

Coal feeding circuit and raw material feeding circuits of the cement plant must not be utilised to feed any type of wastes for co-processing unless a trial is performed to demonstrate the suitability of the same and specific approval from the SPCB is obtained along with the authorisation. SPCBs may consult CPCB in specific cases in this regard.

Feeding of alternative raw materials containing volatile (organic and inorganic) components to the kiln via the normal raw meal supply should be avoided unless it has been demonstrated by trial runs in the kiln that there is no VOC emission from the stack. Such trial runs should be carried out with permission from SPCBs. SPCB should consult CPCB if they feel that trial is needed in specific difficult cases.

Destruction of waste materials that are covered under the Stockholm convention and Montreal Protocol such as PCBs, Expired or obsolete pesticides, Ozone Depleting Substances etc. must however be undertaken in a given kiln only after obtaining specific approval from SPCB and other concerned organisations. For this, SPCB in consultation with CPCB will provide steps to be followed including implementing a trial as per a defined protocol.

7.1 Suitability of Substances for co-processing:

The decision on what type of substances can be used is based on the clinker production processes, the raw material and fuel compositions , the feeding points, the air pollution control devices and the given waste management

problems. The Accept - Refuse Chart in **Annexure-4** could be used by plant operators to help them in considering, which type of substance is suitable for co processing.

As a basic rule, waste accepted for co-processing must be safe enough to handle in the given facility and shall contribute to recovery of material or energy value present in it or provide its safe disposal.

Sometimes, some waste streams are not suitable in large volumes but can be co-processed in small volumes with controlled feed rate into the system.

The wastes listed below are normally not recommended till otherwise proved / evidenced for and hence need not be considered for pre and co-processing.

- Biomedical waste
- Asbestos containing waste.
- Electronic scrap.
- Entire batteries.
- Explosives.
- Corrosives.
- Mineral acid wastes.
- Radioactive Wastes.
- Unsorted municipal garbage.

7.2 Operating Conditions:

Cement plants shall ensure to prevent waste feed in following conditions;

i. at start up, until the temperature of 850°C in calciner or 1100°C at kiln inlet as the case may be.

ii. Whenever the temperature of 850°C or 1100°C as the case may be is not maintained.

iii. Whenever emission monitoring show that any emission limits value is exceeded due to disturbances or failures of air pollution control devices.

iv. In case of disturbed process condition in the kiln

The management of the pre and co-processing plant shall be in the hands of a skilled person, competent to manage the hazardous waste in an environmentally sound manner.

8.0 Emission standards:

The cement kilns undertaking co-processing of the different wastes as above must comply with the following notified emission standards notified vide GSR 497 (E) dated 10.5.2016;

"S. No.	Industry	Parameter	Standards		
(1)	(2)	(3)	(4)		
"10A.	Cement Plant with co-processing of wastes	A- Emission Standards			
		Rotary Kiln – with co-processing of Wastes			
			Date of Commissioning	Location	Concentration not to exceed, in mg/Nm^3
			(a)	(b)	(c)
		Particulate Matter (PM)*	on or after the date of notification (25.8.2014)	anywhere in the country	30
			before the date of notification (25.8.2014)	critically polluted area or urban centres with population above 1.0 lakh or within its periphery of 5.0 kilometer radius	30
				other than critically polluted area or urban centres	30
		SO_2*	irrespective of date of commissioning	anywhere in the country	100, 700 and 1000 when pyritic sulphur in the limestone is less than 0.25%, 0.25 to 0.5% and more than 0.5% respectively.
		NOx**	After the date of notification (25.8.2014)	anywhere in the country	(1) 600
			Before the date of notification (25.8.2014)	anywhere in the country	(2) 800 for rotary kiln with In Line Calciner (ILC) technology. (3) 1000 for rotary kiln using mixed stream of ILC, Separate Line Calciner (SLC) and suspension pre-heater technology or SLC technology alone or without calciner.
		HCl			10 mg/Nm^3
		HF			1 mg/Nm^3
		TOC			10 mg/Nm^3 **
		Hg and its compounds			0.05 mg/Nm^3
		Cd +Tl and their compounds			0.05 mg/Nm^3
		Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V and their compounds			0.5 mg/Nm^3
		Dioxins and Furans			0.1 ngTEQ/ Nm^3

Continuous Emission Monitoring System (CEMS) should be installed & functioning for the parameters PM, SO_2 and NO_x in the first phase and the data should be uplinked to CPCB and SPCB servers. Additional emission parameters for CEMS may be added in future as per the directions of CPCB or SPCBs form time to time.

Other parameters shall be monitored manually once in a year and data should be submitted to SPCBs/CPCB.

SPCB / PCC shall monitor the emission from the cement plant to verify the compliance of notified emission standards. In case, SPCB/PCC does not have

the emission monitoring facilities, they can engage any EPA recognized / NABL accredited laboratory for the purpose.

9.0 Procedure for obtaining Authorisation

For co-processing of hazardous and other wastes, cement plants shall obtain Consent to Establish (CTE) and Consent to Operate (CTO) prior to obtaining authorisation under HOWM Rules, 2016.

The proposal for co-processing may include any kind of hazardous & other waste (as listed in the Schedules of HOWM rules, 2016) and non-hazardous wastes such as segregated combustible fractions from MSW, Refuse Derived Fuel (RDF) from MSW, Plastic wastes, Tyre chips, biomasses, food and other products, agro-wastes etc. with exceptions as described in section 7.1 of this guidelines.

The cement plants /standalone pre-processing facilities / TSDFs shall have valid authorisation for receiving, transporting, handling, storing, pre-processing or co-processing of hazardous and other wastes, for which they shall apply for authorisation as per Form 1 of HOWM Rules, 2016.

Application for authorisation shall provide details of the infrastructure available at their end to receive, characterize, transport, handle, store, pre-process and co-process wastes with minimum requisite facilities as specified in section 3.0 and 6.0 of these guidelines.

SPCB / PCC shall undertake physical inspection and verify the required equipment for pre-processing and co-processing of hazardous and other wastes. Format for verifying adequacy of the infrastructure for Pre-processing / Co-processing of waste materials is given below;

Format for verifying adequacy of the infrastructure for Pre-processing / Co-processing of waste materials

S.No	Type of operations	Check-list
i	Nature of the waste materials applied for	a. Solid b. Liquid c. Sludge d. Gas e. Hazardous f. Non-Hazardous g. Flammable h. Toxic i. Corrosive j. Explosive
ii	Type of packaging	a. Liners b. Bags Small / Jumbo c. Drums d. Containers

S.No	Type of operations	Check-list
		e. Bulkers f. Tankers g. Other (pl specify)
iii	Type of material handled	a. Solids b. Liquids c. Sludges d. Gases e. Flammable f. Toxic g. Corrosive
iv	Reception	Weighing bridge
v	Type packaging	Loose Bags Drums Containers Bulkers Tankers
vi	Laboratory for Waste characterisation	a. Yes b. No
vii	Storage	Covered sheds Impervious flooring Storage tanks/Containers/bins
viii	Equipment for Size reduction	Shredder, Grinder, mixers, Cutter, Hammer, Jaw Crusher, Chipper, Hydro-pulper machines others (pl. specify)
ix	Feed material preparation equipment	Impregnation Drying, Screening Crushing Pelletisation

S.No	Type of operations	Check-list
		Granulation Others
x	Moving machinery	like trucks, Bob cat, Forklifts, loaders, dumpers, Arm handlers, Wheal loaders, Crawler loaders, Telescopic
xi	sorting equipment	Metal detectors, Electro-Magnetic separators, etc.
xii	Screening material	Disc screen, Rotary screen, Trommel screen, Oscillating screens etc.
xiii	Conveyers to transport the material from one to another place	belt conveyors, Inclined Belt conveyors, Cleated belt conveyors, chain conveyors, bucket conveyors, closed conveyors, pipe conveyors etc
xiv	Feeding arrangements	Weigh feeders (Volumetric and Gravimetric feeding), Apron and Gottwald feeders etc. for liquid, solid and semi-solid waste feeding. Facilities for impregnation of wastes.
xv	Safety equipment	Rotary Air Lock, Safety shut off gate, Double slide gates are utilized into the feeding mechanism to avoid any back fire due to any pressure build-up into the kiln.
xvi	Fugitive Emission Control Systems	Fume extraction systems with vacuum ducts Scrubbers / bag filters / VOC emission control systems Biological treatment etc. ID fan and stack.
xvii	Fire protection Approved design should be provided	Yes No

S.No	Type of operations	Check-list
xviii	Spillage/leachate collection / containment measures. Collection pits, impervious liners, segregation of storm water drainage systems	Yes No
xix	Electrical fittings / Equipment / Systems are designed to handle flammable / explosive materials (If relevant)	Yes No
xx	Odour control The facility must have appropriate odor control facility to deal with the odor nuisance.	Yes No
xxi	Safety Equipment Provision of emergency showers and eye wash stations, PPEs, ear-plug etc.	Yes No Remarks:
xxii.	Facilities implemented at the location have been approved by the office of the Factory Inspector	Yes No
xxiii.	Facility has implemented a monitoring plan for checking the health of the operating personnel as per the statutory requirement	Yes No
xxiv.	Facility has prepared an Emergency Response Plan	Yes No
xxv.	CEMS installed for PM, NOx& SO_2 and connected to SPCB / CPCB for	a. Yes b. No

S.No	Type of operations	Check-list
	online data transmission	

SPCBs shall attach the verified check-list to their inspection report. In case of refusal, SPCB shall communicate the reasons for the same.

SPCBs may also grant authorization for utilization of chemical gypsum, stabilized jarosite, other similar waste material having potential to be used as set retarder and other high volume low-effect wastes as specified under HOWM Rules, 2016 in cement mill, for which cement plant shall apply to SPCB in form 1. Cement plant shall provide details of the infrastructure available at their end to receive, characterize, transport, handle, store, pre-process and utilize wastes and illustrate their suitability to manage these wastes in an environmentally sound and safe manner with requisite facilities given in section 3.0 and 6.0 as applicable.

Waste generator shall also obtain authorisation for sending chemical gypsum, stabilized jarosite, and other high volume low-effect wastes as specified under HOWM Rules, 2016 for utilization in cement mill.

Before undertaking pre-processing or co-processing of a waste stream which were introduced for co-processing or pre-processing, the facility operator shall give intimation to SPCB / PCC as per the format given at Annexure - 5

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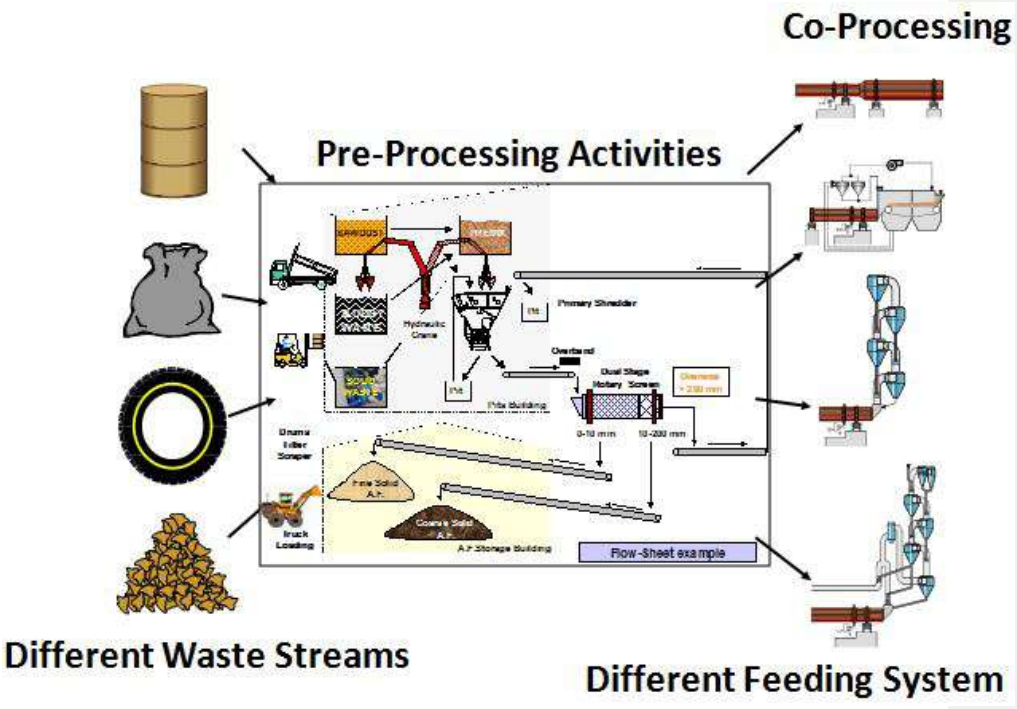
Annexure 1

Schematic Representation of Pre and Co-Processing in Cement Kiln



Annexure-2

Collection & Transportation of Hazardous Wastes

The occupier of the hazardous waste shall ensure that wastes are packaged in a manner suitable for safe handling, storage and transport as specified in section 5.2 of these guidelines. Labeling on packaging is readily visible and material used for packaging shall withstand physical conditions and climatic factors as specified in Section 5.3.

In case of transportation of hazardous and other waste, the responsibility of the safe transport shall be either of the sender or the receiver whosoever arranges the transport and has the necessary authorization for the transport from the concerned State Pollution Control Board. The authorization for the transport shall be obtained either by the sender or the receiver on whose behalf the transport is being arranged.This responsibility should be clearly indicated in the manifest. Thus the occupier involved in transportation of hazardous wastes for co-processing or pre-processing shall comply with the following requirements;

(a) Ensure that information regarding characteristics of wastes particularly in terms of being corrosive, reactive, Ignitable or toxic is provided on the label.

(b) The transport of hazardous waste containers shall be in accordance with the provisions of the Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016, (herein after referred as HW (M & TBM) Rules) and the rules made by the Central Government under the Motor Vehicle Act, 1988 and other guidelines issued from time to time.

(c) Provide the relevant information in Form 9 to the transporter, regarding the hazardous nature of the waste and measures to be taken in case of an emergency and shall mark the hazardous wastes containers as per Form 8.

(d) All hazardous waste containers shall be provided with a general label as given in Form 8 of the HW (M& TBM) Rules.

(e) Intimate both the State Pollution Control Boards before handing over the waste to the transporter.In case of transportation of hazardous through a State other than the State of origin and destination, the sender shall give prior intimation to the concerned State Pollution Control Boardof the States of transit before handing over the hazardous wastes to the transporter.

(g) Manifest System shall be applicable for movement of wastes within the country only

h) The sender of the waste shall prepare seven copies of the Manifest in Form 10comprising of colour code indicated below and all seven copies shall be signed by the sender:

Copy number with colour code	Purpose
Copy 1 (White)	To be forwarded by the sender to the State Pollution Control Board or Committee after signing all the seven

	copies.
Copy 2 (Yellow)	To be retained by the sender after taking signature on it form the transporter and the rest of the five copies to be carried by the transporter.
Copy 3 (Pink)	To be retained by the receiver (actual user or treatment storage and disposal facility operator) after receiving the waste and the remaining four copies are to be duly signed by the receiver.
Copy 4 (Orange)	To be handed over to the transporter by the receiver after accepting waste.
Copy 5 (Green)	To be sent by the receiver to the State Pollution Control board/Committee.
Copy 6 (Blue)	To be sent by the receiver to the sender.
Copt 7 (Grey)	To be sent by the receiver to the State Pollution Control Board of the sender in case the sender is in another State.

Note:

i. The sender shall forward copy 1 (white) to the State Pollution Control Board, and in case of hazardous waste is likely to be transported through any transit State, the sender shall intimate State Pollution Control Boards of the transit States about the movement of the waste.

ii. No transporter shall accept waste from the sender for transport unless it is accompanied by signed copies 3 to 7 of the manifest.

iii. The transporter shall submit copies 3 to 7 of the manifest duly signed with date to the receiver along with the waste consignment.

iv. The receiver after acceptance of the waste shall hand over copy 4 (orange) to the transporter and send copy 5 (green) to his State Pollution Control Board and send copy 6 (blue) to the sender and the copy 3 (pink) shall be retained by the receiver.

v. The copy 7 (grey) shall only be sent to the State Pollution Control Board of the sender, if the sender in another State.

i) The transporter engaged for transportation of hazardous wastes for co-processing meets the following requirements;

i) Vehicle used for transportation shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made thereunder.

ii) Transporter shall possess requisite copies of the certificate (valid authorization obtained from the concerned SPCB/PCC for transportation of waste by the waste generator and operator of a facility) for transportation of hazardous waste.

iii) Transporter should have valid “Pollution under Control Certificate” (PUCC) during the transportation of hazardous waste and shall be properly displayed.

iv) Vehicle shall be painted preferably in blue colour with white strip of 15 to 30 cm width running centrally all over the body. This is to facilitate easy identification.

v) Vehicle should be fitted with mechanical handling equipment as may be required for safe handling and transportation of the wastes.

vi) The words "HAZARDOUS WASTE" shall be displayed on all sides of the vehicle in Vernacular Language, Hindiand English.

vii) Name of the facility operator or the transporter, as the case may be, shall be displayed.

viii) Emergency phone numbers and TREM Card in Form 9 of HW (M& TM) Rules,2016.

ix) Vehicle shall be fitted with roll-on /roll-off covers if the individual containers do not possess the same.

x) Carrying of passengers is strictly prohibited and those associated with the waste haulers shall be permitted only in the cabin.

xi) Transporter shall carry documents of manifest for the wastes during transportation as required under Rule 19 of the HW (M & TBM) Rules.

xii) The trucks shall be dedicated for transportation of hazardous wastes and they shall not be used for any other purpose.

xiii) Each vehicle shall carry first-aid kit, spill control equipment and fire extinguisher.

xiv) Hazardous Waste 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.

xv) Educational qualification for the driver shall be minimum of 10^{th} pass (SSC). The driver of the transport vehicle shall have valid driving license of heavy vehicles from the State Road Transport Authority and shall have experience in transporting the chemicals.

xvi) Driver (s) shall be properly trained for handling the emergency situations and safety aspects involved in the transportation of hazardous wastes. He should aware of procedures outlined in Emergency Response Plan and trained on emergency spill control procedures.

xvii) The design of the trucks shall be such that there is no spillage during transportation.

Responsibilities of the hazardous waste Transporter

The sender or receiver whoever is involved in transportation of hazardous wastes shall be responsible for:

i) Obtaining requisite authorization from SPCB/PCC for transport of hazardous waste (in addition to any other permission that may be required under the Motor Vehicle (Amendment) Act of 1981).

ii) The transport vehicles shall be designed suitably to handle and transport the hazardous wastes of various characteristics.

iii) The transporting should follow all the Rules pertaining to transportation of hazardous waste as stipulated under HW (M& TM) Rules,2016.

iv) Transporting the wastes in closed container at all time.

v) Delivering the wastes at designated points only.

vi) Informing SPCB/PCC in Form 11 of the HW (M & TBM) Rules, or local authority, occupier / operator of a facility, and others concerned immediately in case of spillage, leakage or other accidents during transportation.

vii) The transporter shall train the driver with regard to the emergency response measures to be taken during the transportation of waste.

viii) Cleaning of vehicles shall be carried out at designated places as authorized by SPCB/PCC.

ix) Clean-up in case of contamination - Liable for taking up immediate emergency response measures in the event of spillage, improper disposal, fire or mishandling of hazardous waste. The main objective of the emergency response measures is to secure immediate human & environmental safety and contain/control further spillage or release of hazardous waste or release of fumes/gases. Each occupier, transporter, operator or cement plant responsible for transportation of hazardous waste shall develop Emergency Response Plan (ERP) as stipulated in "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" published by CPCB.

Letter of Intimation

The letter of intimation to SPCBs in case of sending wastes for co-processing from one State to another State is given below:

Date : __ ____ 201_

To,

State Pollution Control Board / Pollution Control Committee
(Belonging to State in which waste generator is located)
_____
_____

Subject : Letter of intimation for sending our wastes for co-processing located in another state.

This is to inform you that we have finalized arrangement with _____ (Name of the cement plant) to send our following hazardous & other wastes to them for undertaking co-processing. This cement plant is located in the State of _____.

1. _____ HW Category no. _____.
2. _____ HW Category no. _____.
3. _____ HW Category no. _____.

The route of the vehicle transporting these wastes will be passing through following states.

1.
2.
3.

We agree to maintain appropriate date wise & waste wise records of transport and receipt of the same at the receiving cement plant for your kind review as per the need.

Further, as mandated by the rules, we agree to file returns to you towards the co-processing of all the Hazardous Wastes carried out in our facility on an yearly basis.

Yours faithfully,
(Authorised Signatory)
Copy to SPCB / PCC (Receiving state)
Copy to SPCB / PCC (in between states)

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¶
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Annexure - 3

Storage And Handling Requirements For Hazardous And Other Wastes

The minimum requirements for ensuring safe storage of hazardous and other wastes at TSDFs / Cement Plants / Standalone Pre-processing facilities shall be as below.

Storage Sheds

i. Flammable, ignitable, reactive and non-compatible wastes should be stored separately and never should be stored in the same storage shed.

ii. Storage area may consist of different sheds for storing different kinds of hazardous wastes and these sheds should be provided with suitable openings.

iii. Adequate storage capacity (i.e. 25% of the annual capacity of the hazardous waste utilization as a supplementary resource or for energy recovery, or after processing) should be provided in the premises.

iv. Storage area should be designed to withstand the load of material stocked and any damage from the material spillage.

v. Storage area should be provided with the flameproof electrical fittings and it should be strictly adhered to.

vi. Automatic smoke, heat detection system should be provided in the sheds. Adequate fire fighting systems should be provided for the storage area, along with the areas in the facility.

vii. There should be at least 15 m distance between the storage sheds.

viii. Loading and unloading of wastes in storage sheds should only be done under the supervision of the well trained and experienced staff.

ix. Fire break of at least 04 meter between two blocks of stacked drums should be provided in the storage shed. One block of drum should not exceed 300 MT of waste.

x. Minimum of 1 meter clear space should be left between two adjacent rows of pallets in pair for inspection.

xi. The storage and handling should have at least two routes to escape in the event of any fire in the area.

xii. Doors and approaches of the storage area should be of suitable sizes for entry of fork lift and fire fighting equipment;

xiii. The exhaust of the vehicles used for the purpose of handling, lifting and transportation within the facility such as forklifts or trucks should be fitted with the approved type of spark arrester.

xiv. In order to have appropriate measures to prevent percolation of spills, leaks etc. to the soil and ground water, the storage area should be provided with concrete floor or steel sheet depending on the

characteristics of waste handled and the floor must be structurally sound and chemically compatible with wastes.

xv. Measures should be taken to prevent entry of runoff into the storage area. The Storage area shall be designed in such a way that the floor level is at least 150 mm above the maximum flood level.

xvi. The storage area floor should be provided with secondary containment such as proper slopes as well as collection pit so as to collect wash water and the leakages/spills etc.

xvii. All the storage yards should be provided with proper peripheral drainage system connected with the sump so as to collect any accidental spills in roads or within the storage yards as well as accidental flow due to fire fighting.

Storage in Drums / Containers

i. The container shall be made or lined with the suitable material, which will not react with, or in other words compatible with the hazardous wastes proposed to be stored.

ii. The stacking of drums in the storage area should be restricted to three meters high on pallets (wooden frames). Necessary precautionary measures should be taken so as to avoid stack collapse. However, for waste having flash point less than 65.5˚C, the drums should not be stacked more than one height.

iii. Stacking of drums may be done on specially rakes designed for holding pallets up to three rows, with height not exceeding 4.5 meters.

iv. No drums should be opened in the storage sheds for sampling etc. and such activity should be done in designated places outside the storage areas;

v. Drums containing wastes stored in the storage area should be labeled properly indicating mainly type, quantity, characteristics, source and date of storing etc.

Measures for Spillage/leakage control

i. The storage areas should be inspected daily for detecting any signs of leaks or deterioration if any. Leaking or deteriorated containers should be removed and ensured that such contents are transferred to a sound container.

ii. Incase of spills / leaks/dry adsorbents/cotton should be used for cleaning instead of water.

iii. Proper slope with collection pits be provided in the storage area so as to collect the spills/leakages.

iv. Storage areas should be provided with adequate number of spill kits at suitable locations. The spill kits should be provided with compatible sorbent material in adequate quantity.

Record Keeping and Maintenance:

Proper records with regard to the industry –wise type of waste received, characteristics as well as the location of the wastes that have been stored in the facility need to be maintained.

Miscellaneous

i) Smoking shall be prohibited in and around the storage areas;

ii) Good house-keeping need to be maintained around the storage areas.

iii) Signboards showing precautionary measures to be taken, in case of normal and emergency situations should be displayed at appropriate locations.

iv) To the extent possible, manual operations with in storage area should be avoided. In case of manual operation, proper precautions need to be taken, particularly during loading / unloading of liquid hazardous waste in drums.

v) A system for inspection of storage area to check the conditions of the containers, spillages, leakages etc. should be established and proper records should be maintained.

vi) The wastes containing volatile solvents or other low vapor pressure chemicals should be adequately protected from direct exposure to sunlight and adequate ventilation should be provided.

vii) Tanks for storage of liquids waste should be properly dyked and should be provided with adequate transfer systems.

viii) Storage sites should have adequate & prompt emergency response equipment systems for the hazardous waste stored on-site. This should include fire fighting arrangement based on the risk assessment, spill management, evacuation and first aid. For this purpose, on-site and off-site accident/emergency plan should be in place.

ix) Immediately on receipt of the hazardous waste, it should be analyzed and depending upon its characteristics its storage should be finalized.

x) Only persons authorized to enter and trained in hazardous waste handling procedures should have access to the storage site.

xi) Mock drill for onsite emergency should be conducted regularly and records maintained.

StorageTime

Normal storage of incinerable hazardous wastes at TSDFs / Cement Plants / Standalone Pre-processing facilitiesshould be restricted to maximum of 3 months. However State Pollution Control Board/Pollution Control Committee may extend the period upto 6 months in accordance with the Hazardous and other wastes (M & TM) Rules, 2016.

Hazard Analysis and Safety Audit:

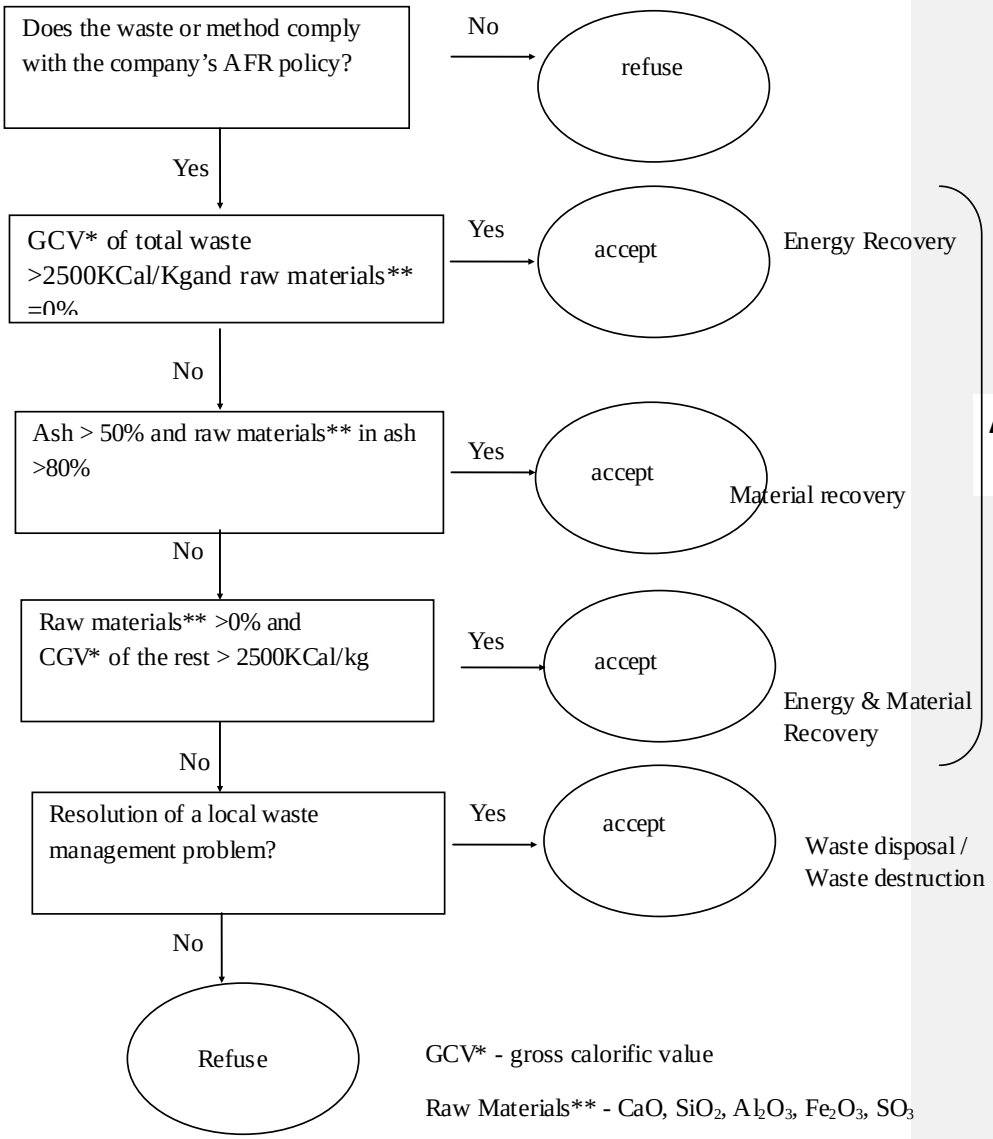
For every pre-processing and co-processing facility, a preliminary hazard analysis should be conducted. Safety Audit internally by the Operator every year & externally once in two years by a reputed expert agency should be carried out and same should be submitted to the SPCB/PCC. The code of practice and reporting shall comply to IS 14489.

Such conditions should be stipulated by SPCBs while granting authorization under the HW (M & TBM) Rules to the operators / pre-processing / co-processing facility.

***

Annexure -4

Acceptance / Refuse chart



GCV* - gross calorific value

Raw Materials** - CaO, SiO_2, Al_2O_3, Fe_2O_3, SO_3

Annexure-5

THE 'LETTER OF INTIMATION' TO SPCBs FOR UNDERTAKING CO-PROCESSING / PRE-PROCESSING OF WASTES

(to be applied when new wastes are introduced for co-processing, which were not entioned in while seeking authorization)

Date : __ ____ 20_ _

To,

State Pollution Control Board / Pollution Control Committee

_____
_____
_____

Subject : Letter of intimation for undertaking pre-processing / co-processing of _____ from _____ in our pre-processing / co-processing facility

This is to inform you that we have finalized arrangement with _____ (Name of the industry / municipality / pre-processing agency) to undertake pre-processing / co-processing of following hazardous / non-hazardous waste being generated by them for pre-processing / co-processing in our facility.

1.
2.
3.
4.

We agree to maintain appropriate date wise & waste wise records of receipt, pre-processing, co-processing and stock of these wastes and agree to submit the same for scrutiny on demand.

Further, as mandated by the rules, we agree to file returns to you towards the co-processing of all the Hazardous Wastes carried out in our facility on an yearly basis.

Yours faithfully,

(Authorised Signatory)

Annexure-R11-V

CPCB

LiFE Lifestyle For Environment

G20 भारत 2023 INDIA

SPEED POST

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT FOREST & CLIMATE CHANGE GOVT OF INDIA

F. No. CP-21/3/2022-WM-II-HO-CPCB-HO

May 2nd, 2023

To,

Member Secretary,
Maharashtra Pollution Control Board,
Kalpataru Point, 2nd -4th Floor, Sion Matunga Scheme Rd No. 08,
Near Sion Circle, Sion (East), Mumbai-400022.

Sub: Guidance in respect of Pre-processing/Co-Processing of Hazardous Waste in State of Maharashtra.

Ref: MPCB letter No. MPCB/RO(BMW)/B-230119FTS0129 dated 19/01/2023

Sir,

This has reference to above referred letter dated 19/01/2023 seeking guidance on laying down the condition on hazardous Waste generating industries for sending their hazardous waste through Pre-processing facility at CHWTSDF prior to Co-processing in Cement Plant.

The HOWM Rules, 2016, stipulates adoption of waste management hierarchy wherein Co-processing has been specified as preferred option over disposal. In this regard, CPCB has issued Revised Guidelines for Pre-Processing and Co-Processing of Hazardous and Other Wastes in Cement Plants and same is available at https://cpcb.nic.in/uploads/hwmd/GUIDELINES-ON_CO-ProcessinginCement.pdf .

In view of above, MPCB may authorize the industries intending to send their hazardous waste for Co-processing in Cement plants with condition that the waste shall be pre-processed at any facility including Common TSDF having adequate infrastructure as outlined in the above guidelines after verification of the same.

Yours faithfully,

(B. Vinod Babu)
Scientist 'F' & Head
Waste Management-II Division

'परिवेश भवन' पर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032
दूरभाष/Tel : 43102030, 22305792, वेबसाईट/Website : www.cpcb.nic.in

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

July 2019

Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change, Government of India)

Parivesh Bhawan, East Arjun Nagar,

Shahdara, Delhi – 110032

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1. Background

The Govt. of India has notified Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended thereof, (herein after called as HOWM Rules, 2016) for the safe and environmentally sound management of hazardous and other wastes. The Rules lay down provisions for storage, packaging, transportation, recycling, utilization, pre-processing, co-processing, treatment, import, export, offering for sale, transfer or disposal, etc. of the hazardous and other wastes ("hazardous waste" and "other wastes" have been defined under the said Rules).

Enforcement of the HOWM Rules, 2016, would ensure safe and environmentally sound handling and management of hazardous and other wastes. The State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) have been entrusted with duty to ensure compliance of the various provisions stipulated under the Rules through monitoring and taking of actions against defaulters as per Rule 21 of the Rules.

In order to remove ambiguity in regulatory actions as well as bring transparency, predictability and consistency in enforcement for actions, it is felt to develop an enforcement framework for effective implementation of these Rules based on principle of proportionality and precautionary principle. These guidelines have, therefore, been prepared with the said objectives.

This framework includes various enforcement tools, tracking of Non-compliances, categorization of non-compliances and approach for application of the said enforcement tools in cases of non-compliances of the HOWM Rules, 2016.

2. Salient Features of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 Pertaining to Occupiers

Occupier of any factory or premises as defined under Rule 3(1)(21) of the Rules, *means a person who has, control over the affairs of the factory or the premises and includes in relation to any hazardous and other wastes, the person in possession of the hazardous or other waste."* It is responsibility of the occupier for safe and environmentally sound management of hazardous and other wastes as stipulated under Rule 4 of the HOWM Rules, 2016.

The occupier is required to obtain authorisation from the concerned SPCB/PCC for handling, generation, collection, storage, packaging, transportation, use, treatment, processing, recycling, recovery, pre-processing, co-processing, utilisation, offering for sale, transfer or disposal of the hazardous and other wastes and shall carry out the same as per the authorisation granted and provisions stipulated under the HOWM Rules, 2016. The occupier is also required to maintain records and manifests and submit annual returns as stipulated under the Rules. The Rules also lays down provisions for import and export of hazardous and other wastes for the purpose of recycling/recovery/reuse/utilisation.

3. Enforcement tools

(a) Issuance of directions for closure or stoppage of electricity or water supply or any other services

HOWM Rules, 2016, have been notified under the Environment (Protection) Act, 1986, and section 5 of the Act empowers Central Government to issue directions to any person, officer or any authority for closure, prohibition or regulation of any industry, operation or process; or stoppage or regulation of the supply of electricity or water or any other service and such person, officer or authority shall be bound to comply with such directions.

The Central Government in exercise of powers conferred under section 23 of the Environment (Protection) Act, 1986, has delegated the above powers under section 5 of the said Act to the Chairmen of SPCBs/PCCs and CPCB, vide various notifications by. Copies of such notifications of delegation of powers to Chairman of SPCBs/PCCs is given at **Annexure I** for ready reference. Therefore, SPCBs/PCCs and CPCB too have the powers conferred under the aforesaid section 5 of the Act.

Procedures of issuing the aforesaid directions under section 5 of the Environment (Protection) Act, 1986, including opportunity or no opportunity of being heard, have been laid down under Rule 4 of the Environment (Protection) Rules, 1986, notified by the Central Government under the Environment (Protection) Act, 1986.

(b) Imposition of liability for damages caused to the environment or third party including financial penalty for violation of provisions under HOWM Rules, 2016

The HOWM Rules, 2016, lays down provisions with regard to liability for damages caused to the environment or third party including financial penalty for violation of provisions of the Rules under Rule 23 of the said Rules.

CPCB has issued "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" for implementing the aforesaid provisions of Rule 23. The guidelines include description of liabilities, approach for valuation of the same, methodology for levying financial penalty, role of SPCB/PCC and other stakeholders etc. SPCBs/PCCs are required to follow procedures laid down under these guidelines while enforcing the aforesaid provisions of Rule 23. Copy of the said guidelines is available at CPCB website i.e https://cpcb.nic.in/uploads/hwmd/Guidelines_Environmenal_Damages_Costs_200116.pdf.

(c) Imposition of Environmental Compensation

The Hon'ble National Green Tribunal, Principal Bench, New Delhi through its various orders has directed the regulatory authorities (i.e CPCB/SPCBs/PCCs) to assess and recover the environmental compensation for the damages caused

to the environment apart from prohibiting the polluting activities or prosecution so as to render polluting activities to be unprofitable.

Relevant text of various orders of the Hon'ble National Green Tribunal in this regard is given at **Annexure II** for ready references.

CPCB in compliance with orders dated 12/4/2019 of the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in the matter of Original Application No. 804/2017 (Earlier O.A. No. 36/2012) With M.A. No. 1302/2018 in Interlocutory Application No. 63 in W. P. (C) No. 657/199 (Rajiv Narayan & Anr Versus Union of India & Ors. With The Research Foundation for Science, Technology and Natural Resource Policy Versus Union of India & Ors.), has prepared and submitted document on "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016". Copy of the same is available at https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf

(d) Prosecution for imprisonment with fine

Section 15 of the Environment (Protection) Act, 1986, lays provisions of punishment with imprisonment including fine in case of failure to comply with or contravenes any of the provisions of the Act, or the rules made or orders or directions issued thereunder.

Section 19 of the Environment (Protection) Act, 1986, stipulates about cognizance of the offence to be taken by the Hon'ble Court on complaint made by Central Government or any authority or officer authorised in this behalf by that Government. The said section 19 is reproduced as below:

The Central Government has authorised various authorities and officers for the purpose along with the jurisdiction vide notifications under the said Act and compiled copy of the same is given at **Annexure III**. The authorised authorities and officers require to file complaint for the said offence in the District Court.

Relevant abstract of the Environment (Protection) Act, 1986; Environment (Protection) Rules, 1986 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 is given at ***Annexure-IV*** *for ready reference.*

4. <u>Monitoring/Tracking of Non-compliances</u>

(a) Through technology interventions:

Most of the provisions stipulated under the HOWM Rules 2016 applicable to hazardous and other wastes handlers (such as quantity of wastes generation, day wise record maintenance of waste generation & its storage, wastes sent to authorised recyclers/utilizers/pre-processors/co-processors/disposal facility operators, waste movement manifest documents & their reconciliation, etc.) can be tracked with application of information technology.

A suitable software with features of entering the data by waste handlers w.r.t. day wise record maintenance, manifest document, etc. as stipulated under the

HOWM Rules 2016, may be developed which can easily trace non-compliances so as to enable SPCBs/PCCs in identifying/tracking and acting upon the same. Further, camera at the facility and GPS based movement of hazardous or other wastes linked to the said software may also be very helpful in identifying violations.

Central Pollution Control Board is in process of developing such software. However, till such software is developed, SPCBs/PCCs may develop their own system with suitable information technology based application for identifying non-compliances and enforcing provisions stipulated under the regulations.

(b) Through Filed Investigation

Inspection of hazardous and other waste handling units is important tool to verify if such units are practicing environmentally safe waste management practices, complying with various conditions laid down under the authorization granted by SPCBs/PCCs and the HOWM Rules 2016, etc. Verification of various documents like manifest documents, annual returns, etc. submitted by the units shall also be taken into account while enforcing HOWM Rules. Following may be adopted for monitoring the compliances of HOWM Rules, 2016, in case of hazardous and other waste handling units:

(i) Periodic inspections

The hazardous and other waste generating units shall be inspected periodically and actions shall immediately be taken for violations, if any.

Selection of hazardous and other waste handling units for the aforesaid inspection may be carried out with the help of technology for fair selection. In this regard, a simple software may be developed featuring list of all the waste generators.

(ii) Frequent monitoring of units engaged in waste collection/ recycling/ utilization/ pre-processing/ co-processing/ disposal and import of wastes

Units engaged in recycling/utilization/pre-processing/ co-processing/disposal, are involved in handling of wide range of wastes from different industries and therefore needs to be closely monitored through frequent inspection of such units.

Such waste collection/recycling/utilization/pre-processing/ co-processing/ and importer of hazardous and other wastes may require inspection/ monitoring by SPCBs/PCCs preferably once in 03 months, whereas, common TSDFs may be inspected once in a month.

(iii) Random verification in case of interstate movement of hazardous and other wastes

Hazardous and other wastes are often transported to other State/UT for recycling/ utilization/ pre-processing/ co-processing/disposal. Random verification of waste reaching to such facilities in other State/UT shall be

carried out by both the SPCBs/PCCs (sender and receiver State/UT). Further, SPCB/PCC (of receiving waste) shall also check accounting of wastes received by such facilities and also ensure they do not exceed their authorised waste handling capacity.

(iv) Investigation of Complaints

Any complaint related to hazardous and other waste shall be examined properly and depending upon nature of complaint a thorough investigation shall be done so as to identify non-compliances, if any.

(v) Sampling & Monitoring in case of accidental or illegal discharge/disposal or fire of hazardous and other wastes for fixing liability and financial penalty

Accidental or illegal discharge/disposal or fire of hazardous and other wastes may often lead to air/water (surface or ground water)/soil contamination. In such incidences, proper sampling & analysis are required to be carried out by SPCBs/PCCs, as outlined in the aforesaid "Guidelines for Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" published by CPCB, which would be helpful in imposing appropriate liability and financial penalty, as applicable.

5. Categorization of Violations

For the purpose of imposing financial penalty and environmental compensation, various violations of HOWM Rules, 2016, can be broadly classified into the following two categories:

A. Category A: Only procedural violations of HOWM Rules, 2016, which has not caused damage to environment or third party

Certain violations of HOWM Rules, 2016, are procedural violations in nature and do not cause any damage to environmental or third party.

For instance, non-submission of annual return within the stipulated time period to SPCB/PCC (as required under Rule 20(2) of the Rules), non-maintenance of records (as required under Rule 20 (1) of the Rules) no prior intimation to SPCB of the States of transit in case of inter-state movement (as required under Rule 18(5) of the Rules, 2016), etc. by the authorised occupier. In such cases, though there have been violations of provisions of the Rules which are procedural requirements in nature but has not caused damaged to the environment. However, financial penalty would be applicable in such cases for violations of each and every relevant provision of the HOWM Rules, 2016, as outlined under section 7 of this document.

B. **Category B: Violations causing environmental damage including procedural violations**

These are violations of the HOWM Rules, 2016, causing environmental damages including procedural violations of the Rules. The same may further be classified into two categories as below:

(i) Category B1: Cases where mismanagement of hazardous or other waste has resulted or resulting into environmental damage and such damages liability including assessment of remediation required can be assessed in terms of cost also by applying provisions laid down under CPCB's "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty".

For example, disposal of hazardous or other waste on land or surface/ground water by an occupier, operator, transporter, importer, exporter, etc. as the case may be, has been identified by SPCB/PCC and damages to the environment and remediation work as well as cost thereof can also be assessed by SPCB/PCC in accordance with the said guidelines.

In such cases, liability of the responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) can be fixed in terms of various required activities and amount of money required in such activities (i.e. taking up immediate Emergency Response Plan Measures such as containment of hazardous or other waste; assessment of contamination and required remediation work, and; execution of selected remediation plan) in accordance with provisions laid down under the said CPCB's "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty[1]". The responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) is required to pay bank guarantee to SPCB/PCC and compensation liability (loss of property, loss of crop, loss of life, treatment cost towards human health impacts, etc.) as suggested in the guidelines.

Besides above liability, financial penalty would also be imposed as given under section 7 of this document.

[1] https://cpcb.nic.in/uploads/hwmd/Guidelines_Environmenal_Damages_Costs_200116.pdf

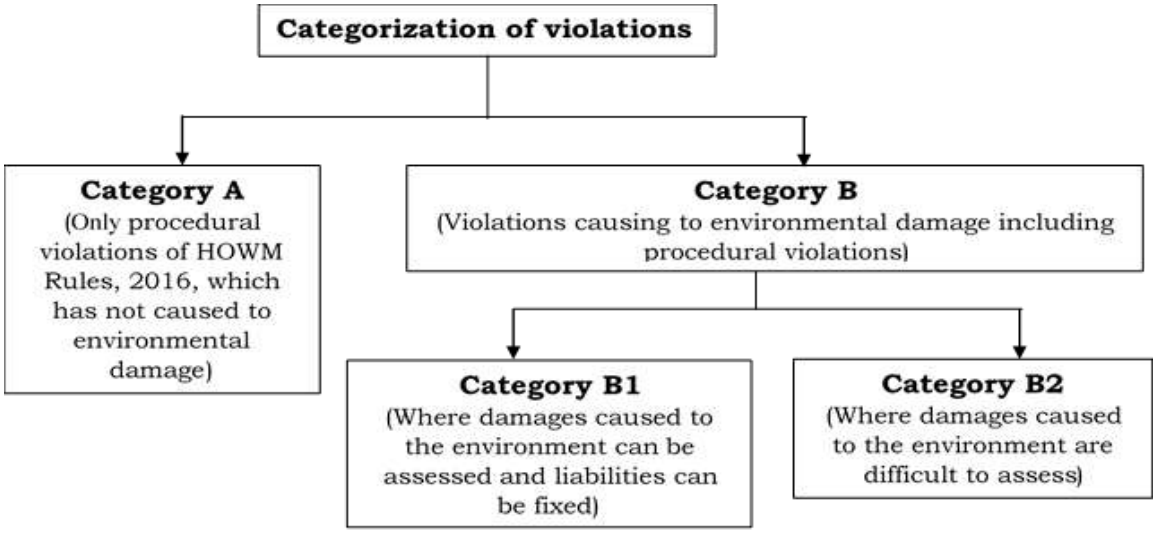

Figure1: Categorization of violations

(ii) **Category B2**: Cases where mismanagement of hazardous or other waste may have caused environmental damage and such damages & remediation required including cost thereof are difficult to assess.

For example, an authorised occupier, operator, transporter, importer, exporter, etc., as the case may be, of hazardous or other wastes has illegally disposed hazardous or other waste on place which is unidentifiable or even if identified, damages to the environment and remediation work as well as cost thereof is difficult to be assessed by SPCB/PCC. Such difficulty may arise due to very small quantity of wastes involved in such acts, wastes disposed along with municipal solid waste, wastes may have been washed off with runoff water, etc. In such cases, it may be difficult to assess damages caused to the environment and liability of the responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) as well as cost thereof.

Under such circumstances, methodology for imposing financial penalty and environmental compensation may be followed as outlined in section 7 of this document.

6. Approach for Application of Enforcement Tools

Approach for application of enforcement tool among the available tools (as outlined in section 3 of this document) may be linked to nature of violations. Accordingly, the following approach for application of enforcement tools may be used:

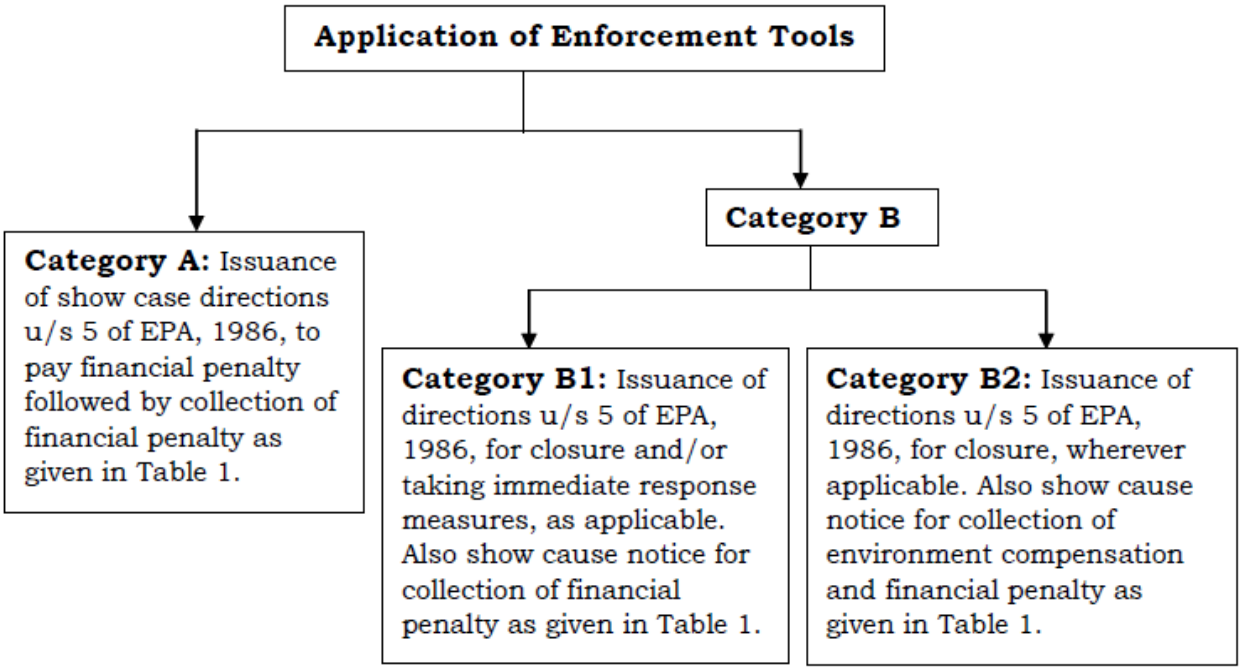

Figure 2: Approach for application of enforcement tools in brief

Detailed approach for application of various enforcement tools (as given in section 3 of this document) vis-à-vis category of violations has been given in Table 1 below:

Table 1: Category of violations and Enforcement Tools

Sl. No.	Category of Violations	Enforcement Tools
1.	**Category A** (as described in section 5 of this document)- Only procedural violations of HOWM Rules, 2016, which has not caused to environmental damage or third party.	Directions to show-cause u/s 5 of the EPA, 1986, about why financial penalty be not levied outlining various procedural violations observed by SPCB/PCC/CPCB. This shall be followed by directions to pay financial penalty on each of such violations after considering objections, if any, in response of such notice. The penalty amount be derived as outlined in the guidelines[2] prepared by CPCB in this regard. In case of non-submission of financial penalty within stipulated

[2] "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" which has been circulated to all SPCBs/PCCs and copy is also available at CPCB website https://cpcb.nic.in/uploads/hwmd/Guidelines_Environmenal_Damages_Costs_200116.pdf

Sl. No.	Category of Violations		Enforcement Tools
			time period, deterrent amount to be imposed and action be initiated as per the CPCB document[3].
2.	**Category B** (as described in section 5 of this document) - Violations causing to environmental damage including procedural violations	**Category B1**: Cases where mismanagement of hazardous or other waste has resulted or resulting into environmental damage and such damages including assessment of remediation required can be assessed.	The unit may be directed u/s 5 of the EPA, 1986, without any opportunity of being heard to: (i) take up immediate Emergency Response Plan Measures such as containment of hazardous or other waste, assess damages and execute remediation plan along with submission of bank guarantee, as outlined in CPCB guidelines[1], as the case may be, and; (ii) close industrial or other activities, in cases where there is likelihood of a grave injury to the environment due to continued industrial or other activities. Besides above, collection and imposition of financial penalty for violation of various provisions of the HOWM Rules, 2016, as outlined above for Category A violation shall be followed including imposition of deterrent amount in case of non-timely submission of financial penalty. In case unit fails to comply with the directions, the unit shall be closed and cases be filed u/s 15 of the EPA, 1986, wherever applicable.
		Category B2: Cases where mismanagement of hazardous or other	In cases where there is likelihood of a grave injury to the environment due to continued industrial or other activities, the unit may be directed

[3] "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", and copy of the same is available at https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf

Sl. No.	Category of Violations		Enforcement Tools
		waste may have caused or causing environmental damage and such damages & remediation required is difficult to assess	u/s 5 of the EPA, 1986, to close such industrial or other activities without any opportunity of being heard. For imposing and collecting financial penalty for violation of various provisions of the HOWM Rules, 2016, similar procedure as outlined above for Category A violation shall be followed. In addition to the above financial penalty, Environment Compensation (EC) towards the damages caused to the environment shall also be imposed as per the CPCB document[3] including deterrent amount for non-timely submission of the EC as per the said document. In case unit fails to comply with the directions, the unit shall be closed.
3.	Repeated Violations despite imposing liability/environmental compensation and financial penalty or directions or both		Authorisation of the habitual and repeated violators of Category A be cancelled and the unit be closed u/s 5 of the EPA. Whereas in addition to the said actions, case be filed u/s 15 of the EPA, 1986, in case of habitual and repeated Category B violators. Further, the deterrent amount of EC and financial penalty be imposed in case of such repeated violators as per the CPCB document[3]

[3] "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", and copy of the same is available at https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf

[3] "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", and copy of the same is available at https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf

Apart from above category of violations vis-à-vis enforcement tools, following scenarios may also be considered alongwith enforcement tools to be adopted:

- The occupiers not displaying relevant information about hazardous waste outside their factory gate (as directed by the Hon'ble Supreme Court vide orders dated 14/10/2003 in the matter of WP NO. 657/1995; Research Foundation for Science Technology and National Resource Policy Versus Union of India & Anr) - Issue show cause or be close down under section 5 of the Environment (Protection) Act, 1986,

- The occupier handling significant quantity of hazardous waste and has not applied for authorization for such wastes- Issue closure directions along with environmental compensation for damages caused to the environment. In case such unit does not close its unit or does not deposit the environmental compensation, as directed, proceedings under section 15 of the Environment (Protection) Act, 1986, be initiated.

7. Assessment of Financial Penalty and Environmental Compensation

In compliance with orders dared 12/4/2019 of the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in the matter of Original Application No. 804/2017 (Earlier O.A. No. 36/2012) With M.A. No. 1302/2018 in Interlocutory Application No. 63 in W. P. (C) No. 657/199 (Rajiv Narayan & Anr Versus Union of India & Ors. With The Research Foundation for Science, Technology And Natural Resource Policy Versus Union of India & Ors.), CPCB has prepared and submitted document on "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", Copy of the same is available at https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf

For calculating environmental compensation pertaining to Category B2 violations (as described in section 5 of this document), methodology as outlined in aforesaid CPCB document shall be followed. Further, the financial penalty as outlined in the aforesaid document may be followed including the imposition of deterrent amount for non-timely submission of Environmental Compensation and Financial Penalty.

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ANNEXURE-I

DELEGATION OF POWERS TO THE STATE POLLUTION CONTROL BOARDS/POLLUTION CONTROL COMMITTEES

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 8th January, 1997

S.O. 23(E).- In exercise of the powers conferred by Section 23 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby delegates the powers vested in it under Section 5 of the said Act to the Chairman, State Pollution Control Boards/Committees as given in the Table below, to issue directions to any industry or any local or other authority for the violations of the standards and rules relating to hazardous wastes notified under the Environment (Protection) Act, 1986, subject to the conditions that the Central Government may revoke such delegation of powers or may itself invoke the provisions of Section 5 of the said Act, if in the opinion of the Central Government such a course of action is necessary in the public interest:-

TABLE

Sl. No.	Name of Board/Committee	Jurisdiction
1	2	3
1.	Andhra Pradesh State Pollution Control Board	Whole of State
2.	Arunanchal Pradesh State Pollution Control Board	Whole of State
3.	Assam State Pollution Control Board	Whole of State
4.	Bihar State Pollution Control Board	Whole of State
5.	Goa State Pollution Control Board	Whole of State
6.	Gujarat State Pollution Control Board	Whole of State
7.	Haryana State Pollution Control Board	Whole of State
8.	Himachal Pradesh State Pollution Control Board	Whole of State
9.	Jammu & Kashmir State Pollution Control Board	Whole of State
10.	Karnataka State Pollution Control Board	Whole of State
11.	Kerala State Pollution Control Board	Whole of State
12.	Maharashtra State Pollution Control Board	Whole of State

13.	Madhya Pradesh State Pollution Control Board	Whole of State
14.	Manipur State Pollution Control Board	Whole of State
15.	Meghalaya State Pollution Control Board	Whole of State
16.	Mizoram State Pollution Control Board	Whole of State
17.	Nagaland State Pollution Control Board	Whole of State
18.	Orissa State Pollution Control Board	Whole of State
19.	Punjab State Pollution Control Board	Whole of State
20.	Rajasthan State Pollution Control Board	Whole of State
21.	Sikkim State Pollution Control Board	Whole of State
22.	Tamil Nadu State Pollution Control Board	Whole of State
23.	Tripura State Pollution Control Board	Whole of State
24.	Uttar Pradesh State Pollution Control Board	Whole of State
25.	West Bengal State Pollution Control Board	Whole of State
26.	Committee, Andaman & Nicobar Union Territory	Whole of U.T.
27.	Committee, Chandigarh Union Territory	Whole of U.T.
28.	Committee, Dadra & Nagar Haveli Union Territory	Whole of U.T.
29.	Committee, Daman & Diu Union Territory	Whole of U.T.
30.	Committee, National Capital Territory of Delhi	Whole of N.C.T.
31.	Committee, Lakshadweep Union Territory	Whole of U.T.
32.	Committee, Pondicherry Union Territory	Whole of U.T.

[No.1(35)/96-PI.]
VIJAY SHARMA, Jt. Secy.

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99

सत्यमेव जयते

भारत का राजपत्र
The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

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पर्यावरण और वन मंत्रालय

अधिसूचना

नई दिल्ली, 2 नवम्बर, 2004

का.आ. 1211(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 23 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, उक्त अधिनियम की धारा 5 के अधीन उसमें निहित शक्तियों को पर्यावरण (संरक्षण) अधिनियम, 1986 के अधीन अधिसूचित परिसंकटमय अपशिष्टि से संबंधित मानकों और नियमों के अतिक्रमण के लिए किसी उद्योग या किसी स्थानीय या अन्य प्राधिकरण को निदेश जारी करने की शक्ति, इन शर्तों के अधीन रहते हुए नीचे सारणी में दिए गए अनुसार अध्यक्ष, राज्य प्रदूषण नियंत्रण बोर्डों को, प्रत्यायोजित करती है कि यदि केन्द्रीय सरकार की यह राय है कि इस प्रकार की कार्यवाही करना लोकहित में आवश्यक है, केन्द्रीय सरकार शक्तियों के ऐसे प्रत्यायोजन को प्रतिसंहृत कर सकेगी या वह स्वयं उक्त अधिनियम की धारा 5 के उपबंधों का अवलंब ले सकेगी :—

सारणी

क्रम सं.	बोर्डों के नाम	अधिकारिता
1	2	3
1.	छत्तीसगढ़ पर्यावरण संरक्षण बोर्ड	सम्पूर्ण राज्य
2.	झारखंड प्रदूषण नियंत्रण बोर्ड	सम्पूर्ण राज्य
3.	उत्तरांचल पर्यावरण संरक्षण और प्रदूषण नियंत्रण बोर्ड	सम्पूर्ण राज्य

[सं. 1(35)/96-पी.एल.]

सुधीर मित्तल, संयुक्त सचिव

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 2nd November, 2004

S.O. 1211(E).—In exercise of the powers conferred by Section 23 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby delegates the powers vested in it under Section 5 of the said Act to the Chairman,

State Pollution Control Boards, as given in the Table below, to issue directions to any industry or any local or other authorities for the violations of the standards and rules relating to hazardous wastes notified under the Environment (Protection) Act, 1986, subject to the conditions that the Central Government may revoke such delegation of powers or may itself invoke the provisions of Section 5 of the said Act, if in the opinion of the Central Government, such a course of action is necessary in the public interest :—

TABLE

S.No.	Name of the Boards	Jurisdiction
1	2	3
1.	Chhattisgarh Environment Conservation Board	Whole of State
2.	Jharkhand Pollution Control Board	Whole of State
3.	Uttaranchal Environment Protection and Pollution Control Board	Whole of State

[No. 1(35)/96-PL]

SUDHIR MITAL, Jt. Secy.

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Annexure II

Various orders of the Hon'ble National Green Tribunal to the regulatory authorities (i.e CPCB/SPCBs/PCCs) to assess and recover the environmental compensation for the damages caused to the environment

(i) In the matter of OA No. 95/2018 (M.A. Vo. 1029/2018): Aryavart Foundation Vs. M/s Vapi Green Enviro Ltd. & Ors, vide orders dated 11/01/2019 has passed the following orders:

"... (25) This was considered in the recent order of the Tribunal (by four Member Bench) in Paryavaran Suraksha Samiti and Anr. Vs. Union of India & Ors.[4], Parveen Kakar & Ors. Vs. Ministry of Environment & Forests & Ors.[5] and in News Item published in "The Asian Age" Authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution levels"[6] wherein this Tribunal held that:

"11. Needless to say that it will be open to the SPCBs/Committees and CPCB to take coercive measures including recovery of compensation for the damage to the environment on 'Polluter Pays' principle as well as also to direct taking of such precautionary measures as may be necessary on the basis of 'Precautionary principle'.""

(ii) In the matter of OA No. 593/2017 (WP (Civil) No. 375/2012): Parayavaran Suraksha Samiti & Anr. Vs. Union of India & Ors., vide orders dated 03/08/2018 has passed the following orders:

"... (vi) The Central Pollution Control Board may take penel action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs Central Pollution Control Board may also assess and recover compensation for damage to the environment and the said fund be kept in a separate account and utilized in terms of an action plan for protection of the environment. Such action plan may be prepared by the Central Pollution Control Board within three months from today…"

(iii) In the matter of OA No. 807/2018 and OA No. 996/2018: News item published in "The Times of India" Authored by Paras Singh Titled "Ignoring NGT orders, Mayapuri 'graveyard' spews toxic fumes" and News item published in "The Times of India" Authored by Paras Singh Titled "In factory setting, Mayapuri's scraping through" vide orders dated 29/01/2019 has passed the following orders:

"…Thus, strong precautionary and remedial measures are required, as earlier observed by this Tribunal in some cases[7]. Heavy amounts of damages must be recovered for any illegal polluting activities found. In the present case, despite severely polluting activities, the statutory authorities are consistently failing to perform their duties of recovering damages caused to the public health and to environment and have chosen to shut their eyes in breach of trust reposed by law..."

(iv) In the matter of OA No 739/2018: Residents of Gram Panchayat Varahiya versus State of M.P, the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in its order dated 21.02.2019

[4] O.A. No. 593/2017 Order dated 03.08.2018: The Tribunal directed CPCB to take penal action against those accountable for failure in setting up CETPs/ETPs/STPs and to recover compensation for damage to the environment.

[5] O.A. No. 661/2018, Order dated 08.01.2019: The Tribunal stated that the Pollution Control Board had failed to perform its duties in taking statutorily mandated coercive measures under Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 and 33B of the Water (Prevention and Control of Pollution) Act, 1974 or initiating prosecution. This Tribunal directed CPCB to exercise its statutory powers to determine and recover damages for violation of environmental norms by the respondent therein.

[6] O.A. No. 1038/2018, Order dated 13.12.2018.

[7] O.A. No. 681/2018, O.A.No. 400/2017, order dated 02.11.2018: wherein the Tribunal directed the authorities to take immediate steps to stop activities that are contributing to the pollution and prepare action plan.

has referred to the various orders of the Hon'ble Tribunal pertaining to recover compensation for the damages caused to the environment. The same is reproduced as below:

"…7) Form the above, it is clear that inspite of fact that the stone crushers have been found to be operating illegally, no compensation has been assessed and recovered for causing damage to the environment by illegally activities. As laid down by this Tribunal repeatedly[8], the Regulatory Authorities are not only required to prohibit illegal polluting activities but they are also required to recover compensation for the damage caused apart from prosecution or other steps so as to render polluting activities to be unprofitable. Failure to do so many call for action against the regulatory authorities themselves…"

"…7) the Regulatory Authorities are not only required to prohibit illegal polluting activities but they are also required to recover compensation for the damage caused apart from prosecution or other steps so as to render polluting activities to be unprofitable. Failure to do so many call for action against the regulatory authorities themselves…".

[8] Order dated 04.01.2019 in Threat to life arising out of coal mining in south garo hills district v. State of Meghalaya & Ors., OA No. 110(THC)/2012, Order dated 11.01.2019 in Aryavrat Foundation Vs M/s Vapi Green Enviro Ltd. & Ors., O.A. No. 95/2018, Order dated 16.01.2019 in Compliance of Municipal Solid Waste Management Rules, 2016, OA No. 606/2018, Order dated 24.01.2019 in Mayank Manohar & Paras Singh, Reporter Times of India v. Govt. of NCT of Delhi & Ors., OA No. 601/2018.

Annexure-III

OFFICERS AUTHORISED FOR TAKING COGNIZANCE OF OFFENCES NOTIFICATION

S.O. 394(E).-In exercise of the powers conferred under clause (a) of section 19 of the Environment (Protection)Act, 1986 (29 of 1986), the Central Government hereby authorises the officers and authorities listed in column (2) of the Table hereto for the purpose of the said section with the jurisdiction mentioned against each of them in column (3) of that Table:

TABLE

Serial No	Officer	Jurisdiction
(1)	(2)	(3)
1.	Any Director, Joint Secretary, Adviser or Additional Secretary to the Government of India in the Department of Environment, Forests and Wildlife,	Whole of India
2.	The Chairman or Member-Secretary of the Central Pollution Control Board constituted under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974).	Whole of India
3	The Government of the State (represented by the Secretary to the State Government incharge) of environment.	Whole of State
4	The Chairman or Member-Secretary of the State Pollution Control Board constituted under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or a State Pollution Control Board constituted under section 5 of the Air (Prevention and Control of Pollution) Act, 1981(14 of 1981).	Whole of State
5.	Collector.	Whole of Revenue District
6.	Zonal Officers of the Central Pollution Control Board who have been delegated powers under sections 20,21,23 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and section 24 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981).	Area as laid down by the Central Board

7.	Regional Officers of the State Pollution Control Board who have been delegated powers under section 20, 21 and 23 of the Water (Prevention and Control of Pollution) Act, 1974.	Area as laid down by the State Board
8.	Regional Officers of the State Pollution Control Board who have been delegated powers under section 24 of the Air (Prevention and Control of Pollution) Act, 1981.	Area as laid down by the State Board
[1][9.	Any Regional/Zonal Officers or a Director in charge of a Region/Zone of the Ganga Project Directorate.	Zonal/Regional area as laid down by the Ganga Project Directorate
10	Any Deputy Secretary, Director, Joint Secretary or Additional Secretary to the Government of India in the Ganga Project Directorate.	Whole of the State in which the Ganga Action Plan is under implementation]
[2][11.	Joint Secretary (:Legal) in the Department of Environment., Forests and Wildlife, Ministry of Environment & Forests, New Delhi – 110003.	Whole of India]
[3][12	Chairman or Member Secretary of the Committee notified under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 in respect of Union Territories.	Whole of Union Territory]
[4][13	Seed Inspector(s)	Area(s) as laid down by the respective State Govts. in the Notification issued under Clause 12 of the Seeds Controller Order, 1983]

Note : Principal Notification No. S.O. 394(E), published in Gazette No. 185, dt.16.4.1987. Nos. 9 and 10 and entries relating thereto inserted vide S.O.237(E), dt.29.3.89 published in the Gazette No. 171, dt.29.3.89. S.N. 11 and entries relating thereto inserted vide S.O.656(E), dt.24.8.1989 published in the Gazette No.519, dt. 21.8.1989

1 Inserted by S.O.237(E), dated 29.3.1989.
2 Inserted by S.O.656(E), dated 21.8.1989.
3 Inserted by Notification S.O.624(E), dated 3.9.1996.
4 Inserted by Notification G.S.R.587(E), dated 1.9.2006

Annexure-IV

Relevant Abstract of Environment (Protection) Act, 1986; Environment (Protection) Rules, 1986 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

- ***Environment (Protection) Act, 1986 –***

"Section 5. POWER TO GIVE DIRECTIONS

Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer *or any authority and such person, officer or authority shall be bound to comply with such directions.*[3]

Explanation--For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct--

(a) the closure, prohibition or regulation of any industry, operation or process; or

(b) stoppage or regulation of the supply of electricity or water or any other service".

"15. PENALTY FOR CONTRAVENTION OF THE PROVISIONS OF THE ACT AND THE RULES, ORDERS AND DIRECTIONS

(1) Whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued thereunder, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention.

(2) If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to seven years."

"19. COGNIZANCE OF OFFENCES

No court shall take cognizance of any offence under this Act except on a complaint made by:

(a) the Central Government or any authority or officer authorised in this behalf by that Government,[20] *or*

(b) any person who has given notice of not less than sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint, to the Central Government or the authority or officer authorised as aforesaid."

- ***Environment (Protection) Rules, 1986***

"4. Directions

(1) Any direction issued under section 5 shall be in writing.

(2) The direction shall specify the nature of action to be taken and the time within which it shall be complied with by the person, officer or the authority to whom such direction is given.

(3) (a) The person, officer or authority to whom any direction is sought to be issued shall be served with a copy of the proposed direction and shall be given an opportunity of not less than fifteen days from the date of service of a notice to file with an officer designated in this behalf the objections, if any, to the issue of the proposed direction.

(b) Where the proposed direction is for the stoppage or regulation of electricity or water or any other service affecting the carrying on any industry, operation or process and is sought to be issued to an officer or an authority, a copy of the proposed direction shall also be endorsed to the occupier of the industry, operation or process, as the case may be and objections, if any, filed by the occupier with an officer designated in this behalf shall be dealt with in accordance with the procedures under sub-rules (3a) and (4) of this rule:

Provided that no opportunity of being heard shall be given to the occupier if he had already been heard earlier and the proposed direction referred to in sub-rule (3b) above for the stoppage or regulation of electricity or water or any other service was the resultant decision of the Central Government after such earlier hearing.[9]

(4) The Central Government shall within a period of 45 days from the date of receipt of the objections, if any or from the date up to which an opportunity is given to the person, officer or authority to file objections whichever is earlier, after considering the objections, if any, received from the person, officer or authority sought to be directed and for reasons to be recorded in writing, confirm, modify or decide not to issue the proposed direction.

(5) In case where the Central Government is of the opinion that in view of the likelihood of a grave injury to the environment it is not expedient to provide an opportunity to file objections against the proposed direction, it may, for reasons to be recorded in writing, issue directions without providing such an opportunity.

(6) Every notice or direction required to be issued under this rule shall be deemed to be duly served

(a) where the person to be served is a company, if the document is addressed in the name of the company at its registered office or at its principal office or place of business and is either-

(i) sent by registered post, or

(ii) delivered at its registered office or at the principal office or place of business;

(b) where the person to be served is an officer serving Government, if the document is addressed to the person and a copy thereof is endorsed to this Head of the Department and also to the Secretary to the Government, as the case may be, in-charge of the Department in which for the time being the business relating to the Department in which the officer is employed is transacted and is either-

(i) sent by registered post, or

(ii) given or tendered to him;

(c) in any other case, if the document is addressed to the person to be served and-

(i) is given or tendered to him, or

(ii) if such person cannot be found, is affixed on some conspicuous part of his last known place of residence or business or is given or tendered to some adult

member of his family or is affixed on some conspicuous part of the land or building, if any, to which it relates, or

(iii) is sent by registered post to that person;

Explanation.-For the purpose of this sub-rule,-

(a) "company" means any body corporate and includes a firm or other association of individuals;

(b) "a servant" is not a member of the family.

- ***Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016***

*"**23.** Liability of occupier, importer or exporter and operator of a disposal facility.-*

(1) The occupier, importer or exporter and operator of the disposal facility shall be liable for all damages caused to the environment or third party due to improper handling and management of the hazardous and other waste.

(2) The occupier and the operator of the disposal facility shall be liable to pay financial penalties as levied for any violation of the provisions under these rules by the State Pollution Control Board with the prior approval of the Central Pollution Control Board."