

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI**
Original Application No. 781 of 2024

In the matter of:

ManishJain

...Applicant

VERSUS

Union of India & Ors.

...Respondent(s)

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Srinivas Vishven

Filed by: Adv. Srinivas Vishven

On behalf of Central Pollution Control Board

Place: Delhi

Date: 05.03.2025

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PRINCIPAL BENCH, NEW DELHI
Original Application No. 781 of 2024

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**REPLY ON BEHALF OF RESPONDENT NO. 5, CENTRAL POLLUTION
CONTROL BOARD (CPCB)**

1. That the Hon'ble NGT vide Order dated 02.08.2024 has issued notice to the Central Pollution Control Board (CPCB) in the instant matter. That in compliance of the said order the reply by CPCB is being made in the succeeding paragraphs.
2. That, CPCB is constituted under Section 3 of The Water (Prevention and Control of Pollution) Act, 1974. It performs the functions under The Water (Prevention and Control of Pollution) Act, 1974, The Air (Prevention and Control of Pollution) Act, 1981, and The Environment (Protection) Act, 1986.
3. That at the outset, the answering respondent denies all claims, contentions, allegations, and averments against answering respondent CPCB in the above Original Application contrary to anything stated or submitted in this reply. Nothing in the Original Application may be deemed to have been accepted or admitted by the answering Respondent for want of a specific denial, save any averment which has been expressly admitted hereinafter.

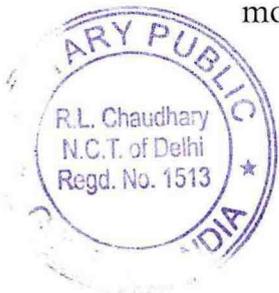


PRELIMINARY SUBMISSIONS

4. That the present Original Application filed by the Applicant alleges dumping of domestic & commercial waste as well as construction debris on the bank of river Yamuna at Pusta Road and its Ghats near Wazirabad and Jagatpur village in Delhi.
5. That the Solid Waste Management Rules, 2016 as notified by MoEF&CC under Environment (Protection) Act, 1986, are applicable across the country. The role and responsibilities of various State and Central Government agencies have been stipulated under the said Rules.
6. That Rule 15 of Solid Waste Management Rules, 2016 stipulates duties and responsibilities of local authorities and village Panchayats of census towns and urban agglomerations. A copy of the Solid Waste Management (SWM) Rules 2016 is annexed herewith and marked as **Annexure-I**.

BRIEF REPLY

7. The State Pollution Control Boards (**SPCB**) /Pollution Control Committee (**PCC**) have been created in States/UTs under Water (Prevention & Control of Pollution), Act 1974 and the Air (Prevention & Control of Pollution), Act 1981. SPCBs & PCCs are empowered to implement the provisions of these Acts in respect of territories in their territorial Jurisdiction.
8. That it is humbly submitted that CPCB had identified polluted river stretches in the country during the years 2018 and 2022 based on water quality monitoring carried out in the years 2016 & 2017 and 2019 & 2021



respectively. A total 351 polluted river stretches were identified during the year 2018 and 311 polluted river stretches were identified during the year 2022, based on parameter Biochemical Oxygen Demand (BOD). The details are provided in table below:

STATE/ UT	YEAR	IDENTIFIED STRETCH	MAX. BOD VALUE (mg/l)	PRIORITY CLASS
DELHI	2018	Wazirabad to Asgarpur	80	I
	2022	Palla to Okhla D/s	83	I
HARYANA	2018	Panipat to Sonapat	55	I
	2022	Hathnikund to Palla and Palwal to Hasanpur	43	I
UTTAR PRADESH	2018	Asgarpur to Etawah and Shahpur to Allahabad (Balua Ghat)	55	I
	2022	Along Asgarpur, NOIDA and Vrindavan to Hamirpur	127	I



Action plans for rejuvenation of rivers have been prepared by four-member Committee called “River Rejuvenation Committee” (RRC) constituted by the respective State Government/UT Administration, under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.

As per the Hon’ble NGT directions in the matter of OA No. 673/2018, the State Government Departments/ UT Administration Departments are responsible for implementation of time-bound action plans for rejuvenation of polluted river stretches identified in the respective State/UT. Monitoring of the progress of action plan at state level is done under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.

Progress of implementation of action plans is also reviewed at central level by the Central Monitoring Committee (CMC) constituted under the Chairmanship of the Secretary, Ministry of Jal Shakti at Central Level.

9. That with regard to alleged disposal of construction debris on the bank of river of Yamuna bank with further allegation of not removing encroachment by the concerned departments, it is humbly submitted that;the Construction and Demolition (C&D) Waste Management Rules,2016 has been notified on 29th March, 2016 by the Central Government (**Annexure II**) . As per the relevant provisions under the Construction and Demolition Waste Management Rules 2016 (hereinafter referred to as “C&D WM Rules, 2016”), the waste generators are entrusted with the primary responsibility of collection, segregation and storage of C&D waste generated. Further, it is submitted that, in the said Rules, duties of the various Stakeholders are



prescribed for effective implementation of the Rules. The relevant portion of the Rules with regard to management of C&D waste are given below:

- a. As per Rule 4 (3), “Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks & mortar and shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodelling work and keep the concerned authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.”
- b. As per Rule 4 (4), “Every waste generator shall keep the construction and demolition waste within the premise or get the waste deposited at collection centre so made by the local body or handover it to the authorised processing facilities of construction and demolition waste; and ensure that there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or the public or drains.”
- c. As per Rule 5(2), the service providers shall remove all construction and demolition waste and clean the area every day, if possible, or depending upon the duration of the work, the quantity and type of waste generated, appropriate storage and collection, a reasonable timeframe shall be worked out in consultation with the concerned local authority. Further, as per Rule 3(i), “service provider’ means authorities who provide services like water, sewerage, electricity, telephone, roads, drainage etc. often generate construction and demolition waste during their activities, which includes excavation, demolition and civil work.



- d. As per Rule 6 (4), the local authority shall make arrangements and place appropriate containers for collection of waste and shall remove at regular intervals or when they are filled, either through own resources or by appointing private operators. As per Rule 6(5), the local authority shall get the collected waste transported to appropriate sites for processing and disposal either through own resources or by appointing private operators.
- e. As per Rule 8 (1), State Pollution Control Board or Pollution Control Committee shall monitor the implementation of these rules by the concerned local bodies and the competent authorities”
- f. As per Rule 9 (2), the concerned department in the State Government dealing with land shall be responsible for providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition waste.”
- g. That, pursuant to the sub-rule 1(a) of Rule 10 of the C&D W M Rules, 2016, the guideline titled “ENVIRONMENTAL MANAGEMENT OF C&D WASTES” had been prepared by CPCB in March, 2017. Copy of the same has been uploaded on the Website of CPCB (Available at: <https://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvNTUyXzE1MTEy>)
- h. With respect to the allegation regarding dumping of biomedical waste in riverbed of Yamuna river, it is humbly submitted that biomedical waste generated from Health Care Facilities should be collected, treated and disposed through Common Biomedical Waste Treatment Facilities (hereafter will be referred as CBWTF) as per Biomedical Waste Management Rules, 2016 (hereafter will be referred as



BMWM Rules, 2016). The said Rules had been notified under Environment (Protection) Act, 1986 by Ministry of Environment Forest & Climate Change for treatment and disposal of biomedical waste in environmentally sound manner. The said Rules stipulates that biomedical waste generated from healthcare facility needs to be segregated as per the colour coded system and shall be treated and disposed off through CBWTF as prescribed under Schedule -I of said Rules and in compliance with the standards prescribed under Schedule-II of the Rules. Further, Schedule-III of the said Rules stipulates the list of Prescribed Authorities and the Corresponding Duties. The prescribed authority for implementation of the provisions of the BMWM Rules, 2016 is State Pollution Control Boards in respect of States and Pollution Control Committees in respect of Union territories. Copy of BMWM Rules, 2016 is annexed herewith as **Annexure –III**.

- That with regard to the alleged accumulation of garbage & frequent burning in the vicinity of river Yamuna near Waziarabad (Pushta Road) affecting the people living nearby. The answering respondent herein humbly submits the following:

As per rule 4 (2) of the SWM Rules, 2016, no waste generator shall throw burn or burry, the solid waste generated by him on streets, open public spaces, outside his premises or in the drain or water bodies.

As per Rule 15 (b) of SWM Rules, 2016 local authorities to arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises.



As per Rule 15 (m), Local authorities to collect waste from vegetable, fruit, meat, poultry and fish market on day to day basis and promote setting up of decentralized compost plant or bio- methanation plant at suitable locations in the market or in the vicinity of markets ensuring hygienic conditions.

Rule 16 of the Solid Waste Management Rules, 2016 stipulates the duties of State Pollution Control Board or Pollution Control Committee for enforcement of Rules in their State through local bodies in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-Charge of State Urban Development Department.

10. That DPCC has submitted the Annual Report on implementation of solid waste management for F.Y. 2023-2024 (**Annexure IV**) in compliance to rule 24(3) of SWM Rules, 2016. As per the annual report, the National Capital Territory (NCT) of Delhi generates 11,342 tons per day (TPD) of solid waste. Of this, 100% (11,342 TPD) is collected, 66.5% (7,542 TPD) is processed/treated, while 33.5% (3,800 TPD) is dumped at existing dumpsites in Bhalswa, Ghazipur, and Okhla. Additionally, about 336 TPD of rejects are landfilled at the engineered sanitary landfill (SLF) in Bawana. The details of operational and proposed solid waste management facilities are given below:

A. Total operational Solid waste processing facilities with capacity (**7851.5 TPD**)



- 309 Composting units & Organic Waste Converters with capacity: 1294.5 TPD
- 05 Bio Gas /Biomethanation plants with capacity: 07 TPD
- 04 RDF /Pelletisation units integrated with WTE plants with capacity: 6550 TPD

(B) Proposed processing capacity: (7770 TPD)

(i) Composting & Biomethanation (expected timeline March 2025-December, 2026)

- Sorter-cum-composter at Kirby Place (20 TPD)
- Bio-CNG plant at Okhla (300 TPD) , CBG at Ghazipur (350 TPD) & Ghogha Dairy ((100 TPD)

(ii) Proposed New Waste to Energy (WtE) Plants

- Narela-Bawana (3,000 TPD) , expected timeline - June, 2027
- Ghazipur (2,000 TPD), expected timeline - Dec, 2027

(iii) Expansion of existing WTE Plants

- Okhla WtE (1,950 to 2,950 TPD) , expected timeline March , 2026
- Tehkhand WtE (2,000 to 3,000 TPD), expected timeline Dec, 2026

11. That, CPCB sent a letter dated 23.12.2024 to Delhi Pollution Control Committee (DPCC) requesting to coordinate with concerned authorities and furnish status cum action taken report latest by 03/01/2025 regarding the issues raised in the matter. Further, a reminder letter was also issued on dated 07/01/2025 seeking status cum action taken report at the earliest.



(Annexure V). However, response from DPCC has not been received till date.

12. That, the averments made in Paragraph No D (I to xi) are about various grounds raised by the Appellant for filing this application. In this regard, it is humbly submitted that the submissions made in preceding paras stand re- iterated and are not repeated herein for the sake of brevity.
13. That, no comments are offered by the answering respondent herein over the averments made in Paragraph No E dealing with Limitation & Prayer made by the applicant before Hon'ble NGT.
14. That, in the light of the above submissions, it is respectfully submitted that DPCC is required to take necessary action and submit the Action taken report on the matter. The answering respondent CPCB shall abide by the orders (s) and/or direction(s) passed by this Hon'ble Tribunal in the instant case.

Dy.

(Divya Sinha)

Scientist 'F'

Central Pollution Control Board



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AFFIDAVIT

I , **Divya Sinha** working as Scientist 'F' in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi, do hereby solemnly affirm, declare on oath and state as under:

1. That I, the deponent herein, am 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.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof 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.

Dy

DEPONENT

दिव्या सिन्हा / Divya Sinha
वैज्ञानिक 'एफ' / Scientist 'F'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
(पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, भारत सरकार)
(Mo Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अजुन नगर, दिल्ली-110032
Parvesh Bhawan, East Ajun Nagar, Delhi-110032

VERIFICATION

05 MAR 2025

Verified at Delhi on this day of _____ 2025 that the contents of the above reply are correct and true on the basis of the records of the case as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

Dy

DEPONENT

दिव्या सिन्हा / Divya Sinha
वैज्ञानिक 'एफ' / Scientist 'F'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
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ATTESTED
[Signature]
NOTARY PUBLIC
GOVT. OF INDIA

05 MAR 2025



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

PUBLISHED BY AUTHORITY

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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय**अधिसूचना**

नई दिल्ली, 8 अप्रैल, 2016

का.आ. 1357(अ).—ठोस अपशिष्ट प्रबंधन नियम, 2015 का प्ररूप भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सं. सा.का.नि.451 (अ) तारीख 3 जून, 2015 को भारत के राजपत्र भाग II, खंड-3, उप खंड (i) में उसी तारीख को प्रकाशित किए गए थे, जिसमें उनसे प्रभावित होने वाले संभावित व्यक्तियों से नगरीय ठोस अपशिष्ट (प्रबंधन और हथालन) नियम 2000 को अधिक्रांत करते हुए उक्त अधिसूचना के द्वारा ठोस अपशिष्ट प्रबंधन नियम, 2015 के प्रकाशन की तारीख से साठ दिनों की अवधि की समाप्ति से पूर्व आक्षेप और सुझाव आमंत्रित किए थे।

उक्त राजपत्र की प्रतियां जनता को तारीख 3 जून, 2015 को उपलब्ध कराई गई थीं;

निर्धारित अवधि के भीतर उक्त प्रारूप नियमों पर प्राप्त आपत्तियों तथा टिप्पणियों पर केन्द्र सरकार द्वारा सम्यक रूप से विचार किया गया था;

पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, 6 और 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए और नगरीय ठोस अपशिष्ट (प्रबंधन और हथालन) नियम, 2000, उन बातों के सिवाय अधिक्रांत करते हुए जिन्हें ऐसे अधिक्रमणों से पहले किया गया है या किए जाने का लोप किया गया है, केन्द्रीय सरकार ठोस अपशिष्टों का प्रबंधन करने के लिए निम्नलिखित नियम बनाती है अर्थात् :

1. संक्षिप्त नाम और प्रारंभ.-

(1) इन नियमों का संक्षिप्त नाम ठोस अपशिष्ट प्रबंधन नियम, 2016 है।

(2) ये राजपत्र में इनके प्रकाशन की तारीख से प्रवृत्त होंगे।

2. लागू होना- ये नियम प्रत्येक शहरी स्थानीय निकाय, शहरी क्षेत्रों के विस्तार, भारत के महारजिस्ट्रार और जनगणना आयुक्त द्वारा यथा घोषित जनगणना नगरों, अधिसूचित क्षेत्रों, अधिसूचित औद्योगिक नगरी, भारतीय रेल के अधीन क्षेत्रों, विमानपत्तनों, वायुयान बेस, बंदरगाह और हारबर, रक्षा स्थापनाओं, विशेष आर्थिक जोन, राज्य और केन्द्रीय सरकारों के संगठनों, समय-समय पर क्रमशः राज्य सरकार द्वारा यथा अधिसूचित तीर्थ, धार्मिक तथा ऐतिहासिक महत्व के स्थानों और जिसमें औद्योगिक अपशिष्ट, परिसंकटमय अपशिष्ट, परिसंकटमय रसायन, जैव चिकित्सा अपशिष्ट, ई-अपशिष्ट, सीस-अम्ल बैटरियां और रेडियो सक्रिय अपशिष्ट पर्यावरण (संरक्षण) अधिनियम, 1986 के अधीन अलग से बनाए गए नियमों के अधीन आते हैं, के सिवाय प्रत्येक घरेलू, सांस्थानिक, वाणिज्यिक और किसी भी अन्य गैर-आवासीय ठोस अपशिष्ट जनितों पर लागू होंगे:-

3. परिभाषाएं- (1) इन नियमों में, जब तक कि संदर्भ से अन्यथा अपेक्षित न हो,- (1) **"वातजीवी कम्पोस्टीकरण"** से ऑक्सीजन की विद्यमानता में जैविक पदार्थ का सूक्ष्म जैवकीय विघटन अंतर्वलित कोई नियंत्रित प्रक्रिया अभिप्रेत है;

2. **"अवायुजीवी उपचारण"** से ऑक्सीजन के अभाव में जैविक पदार्थ का सूक्ष्म जैवकीय विघटन अंतर्वलित कोई नियंत्रित प्रक्रिया अभिप्रेत है;
3. **"प्राधिकार"** से यथास्थिति, राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा किसी प्रसुविधा के प्रचालक या शहरी स्थानीय प्राधिकरण या ठोस अपशिष्ट के प्रसंस्करण और निपटान के उत्तरदायी किसी अन्य अभिकरण को दी गई अनुज्ञा अभिप्रेत है;
4. **"जैविक रूप से अपघटित अपशिष्ट"** से कोई ऐसी कार्बनिक सामग्री अभिप्रेत है जिसे सूक्ष्म जीव द्वारा सरलतर टिकाऊ सम्मिश्रण में निम्नीकृत किया जा सकता है;
5. **"जैविक मिथेनीकरण"** से ऐसी प्रक्रिया अभिप्रेत है जिसमें मिथेन से भरपूर जैव गैस का उत्पादन करने के लिए सूक्ष्मजीवी क्रिया द्वारा कार्बनिक पदार्थ का इंजाइमी अपघटन को अपरिहार्य बनाता है;
6. **"ब्रांडस्वामी"** से कोई व्यक्ति या कंपनी अभिप्रेत है जो किसी रजिस्ट्रीकृत ब्रांड लेवल के अधीन कोई वाणिज्यिक विक्रय करता है;
7. **"मध्यवर्ती परिक्षेत्र"** से ऐसा विकास रहित परिक्षेत्र अभिप्रेत है जिसमें 5 टीपीडी से अधिक की संस्थापित क्षमता वाली ठोस अपशिष्ट प्रसंस्करण तथा निपटान सुविधा के चारों ओर अनुरक्षित किया जाएगा। इसे ठोस अपशिष्ट के प्रसंस्करण तथा निपटान संबंधी सुविधा के लिए आवंटित कुल क्षेत्र के भीतर अनुरक्षित किया जाएगा;
8. **"भारी मात्रा में अपशिष्ट उत्पादक"** से अभिप्रेत है और इसके अंतर्गत औसतन 100 कि.ग्रा. प्रतिदिन की दर से अधिक अपशिष्ट उत्पादित करते हैं तथा इनसे केन्द्रीय सरकार के विभागों अथवा उपक्रमों, राज्य सरकार के विभागों या उपक्रमों, स्थानीय निकायों, सार्वजनिक या प्राइवेट सेक्टर की कंपनियों, अस्पतालों, नर्सिंग होम, स्कूलों, कॉलेजों, विश्वविद्यालयों, अन्य शैक्षिक संस्थाओं, छात्रावासों, होटलों, वाणिज्यिक स्थापनाओं, बाजारों, पूजा स्थलों, स्टेडियमों और खेल परिसरों द्वारा अधिकृत भवन भी है;
9. **"उप-विधि"** से स्थानीय निकाय, जनगणना शहर और अधिसूचित क्षेत्र टाउनशिप द्वारा, अपने अधिकारिता वाले क्षेत्र में इन नियमों को प्रभावी ढंग से कार्यान्वित करने को सुविधाजनक बनाने के लिए, अधिसूचित नियामक ढांचा अभिप्रेत है;
10. **"जनगणना नगर"** से भारत के महारजिस्ट्रार और जनगणना आयुक्त द्वारा यथा परिभाषित शहरी क्षेत्र अभिप्रेत है;

11. "ज्वलनशील अपशिष्ट" से प्लास्टिक, काष्ठ लुगदी आदि जैसी क्लोरोनीकृत सामग्री को छोड़कर गैर-जैवअवक्रमणीय, गैर-पुनर्चक्रणीय, गैर-पुनःउपभोज्य, गैर-परिसंकटमय ठोस अपशिष्ट अभिप्रेत है जिनका 1500 किलो कैलोरी प्रति कि.ग्रा. से न्यूनतम कैलोरिफिक मान हो;
12. "कम्पोस्टीकरण" से जैविक पदार्थ का सूक्ष्मजीवी अपघटन अंतर्वलित की एक ऐसी नियंत्रित प्रक्रिया अभिप्रेत है;
13. "ठिकेदार" से ऐसा व्यक्ति या फर्म अभिप्रेत है जो कोई सेवा करने के लिए या सेवा प्रदाता प्राधिकारी के लिए कार्य करने के लिए सामग्री या श्रम प्रदान करने की संविदा करता है या करती है;
14. "सह प्रसंस्करण" से प्राकृतिक खनिज संसाधनों और औद्योगिक प्रक्रियाओं में जीवाश्म ईंधनों को प्रतिस्थापित करने या उन्हें अनुपूरित, दोनों को करने के लिए कच्ची सामग्री के रूप में या ऊर्जा के स्रोत के रूप में 1500 किलो कैलोरी से अधिक कैलोरिफिक मूल्य वाले गैर-जैव अवक्रमणीय और गैर-पुनर्चक्रणीय ठोस अपशिष्ट का उपयोग अभिप्रेत है;
15. "विकेंद्रित प्रसंस्करण" से जैव अवक्रमणीय अपशिष्ट के प्रसंस्करण को अधिकतम करने के लिए विखरी हुई सुविधाओं की स्थापना और उत्पादन के स्रोत से निकटतम पुनर्चक्रण योग्य सामग्रियों की प्रतिप्राप्ति करना अभिप्रेत है ताकि प्रसंस्करण या निपटान के लिए अपशिष्ट का न्यूनतम परिवहन करना पड़े;
16. "निपटान" से भूजल, सतही जल, परिवेशी वायु के संदूषण तथा पशुओं या पक्षियों के आकर्षण को रोकने के लिए अनुसूची 1 में यथा विनिर्दिष्ट भूमि पर प्रसंस्करण के उपरांत अवशिष्ट ठोस अपशिष्ट और निष्क्रिय गली का कूड़ा, करकट और सतही नाले की गाद का अंतिम तथा सुरक्षित निपटान अभिप्रेत है;
17. "घरेलू परिसंकटमय अपशिष्ट" से घरेलू स्तर पर उत्पन्न संक्रामक अपशिष्टों जैसे फेंके हुए पेंट के ड्रम, कीटनाशी के डिब्बे, सीएफएल बल्ब, ट्यूब लाइटें, अवधि समाप्त औषधियां, टूटे हुई पारा वाले थर्मामीटर, प्रयुक्त बैटरियां, प्रयुक्त सूइयां, तथा सिरिंज और संदूषित पट्टियां आदि अभिप्रेत हैं;
18. "द्वार-द्वार संग्रहण" से घरों, दुकानों, वाणिज्यिक प्रतिष्ठानों, कार्यालयों, संस्थागत या किसी अन्य गैर आवासीय परिसरों से द्वार तक जाकर ठोस अपशिष्ट का संग्रहण करना और जिसके अंतर्गत किसी आवासीय सोसायटी, बहुमंजिले भवन या अपार्टमेंट, बड़े आवासीय, वाणिज्यिक या संस्थागत कॉम्प्लेक्स या परिसरों में भूतल पर प्रवेश द्वार या किसी अभिहित स्थल से ठोस अपशिष्ट का संग्रहण करना भी अभिप्रेत है;
19. "शुष्क अपशिष्ट" से जैव-निम्नीकरण अपशिष्ट और निष्क्रिय गली का कूड़ा-करकट से भिन्न अपशिष्ट अभिप्रेत है और जिसके अंतर्गत पुनर्चक्रणीय अपशिष्ट, गैर पुनर्चक्रणीय अपशिष्ट, दाह्य अपशिष्ट और स्वास्थ्यकर नैपकिन और डायपर आदि अपशिष्ट भी है;
20. "क्षेपण स्थल" से जिसका स्वास्थ्यकर भूमिभरण के लिए सिद्धांतों को पालन किए बिना ठोस अपशिष्ट के निपटान के लिए शहरी स्थानीय निकाय द्वारा उपयोग की गई कोई भूमि अभिप्रेत है;
21. "विस्तारित उत्पादक दायित्व" से पैकेजिंग उत्पादों के जीवन काल के अंत तक पर्यावरण की दृष्टि से अनुकूल प्रबंधन के लिए, पैकेजिंग उत्पादों जैसे प्लास्टिक, टिन, कांच और कॉरुगेटेड बक्सों इत्यादि के किसी उत्पादक के उत्तरदायित्व अभिप्रेत है;
22. "सुविधा" से ऐसा कोई स्थापन अभिप्रेत है जिसमें ठोस अपशिष्ट प्रबंध प्रक्रियाएं अर्थात् पृथक्करण पुनःप्राप्ति, भंडारण, संग्रहण, पुनर्चक्रण, प्रसंस्करण, उपचार या सुरक्षित निपटान किया जाता है;

23. "जुर्माना" से इन नियमों तथा/अथवा उप-विधियों के निदेशों के अनुपालन के लिए उपविधियों के अधीन अपशिष्ट जनित्रों या अपशिष्ट प्रसंस्करण के प्रचालकों और निपटान सुविधाओं पर लगाए गए जुर्माना अभिप्रेत है;
24. "प्ररूप" से इन नियमों से उपाबद्ध प्ररूप अभिप्रेत है;
25. "प्रहस्तन" के अंतर्गत ठोस अपशिष्टों की छंटाई, पृथक्करण, सामग्री की पुनःप्राप्ति, संग्रहण, गौण भंडारण, काटना, गट्टा बनाना, दलन, लदाई, उतराई, परिवहन, प्रसंस्करण तथा निपटान से संबंधित सभी क्रियाकलाप भी हैं;
26. "निष्क्रिय" से ऐसा अपशिष्ट अभिप्रेत है जो जैव अपघटनीय, पुनःचक्रणीय या दाह्य नहीं है, गली की सफाई तथा सतही नालियों से निकाली गई धूल तथा गाद भी हैं;
27. "भस्मीकरण" से उच्च तापमान पर अपशिष्ट सामग्रियों को तापीय रूप से निम्नीकृत करने के लिए ठोस अपशिष्ट का जलाना या दहन अंतर्वलित इंजीनियरीकृत प्रक्रिया अभिप्रेत है;
28. "अनौपचारिक अपशिष्ट संग्राहक" के अंतर्गत व्यक्ति, संगम ऐसे या अपशिष्ट व्यापारी सम्मिलित है जो पुनर्चक्रणीय सामग्रियों की छंटाई, विक्रय और खरीद से अंतर्वलित है;
29. "निक्षालितक" से ऐसा द्रव अभिप्रेत है जो ठोस अपशिष्ट के माध्यम से या अन्य माध्यम से रिसता है जिसमें उसमें घुली हुई या निलंबित सामग्री का सत्व है;
30. "स्थानीय निकाय" से अभिप्रेत इन नियमों के प्रयोजन के लिए और जिसके अंतर्गत म्युनिसिपल कॉरपोरेशन, नगर निगम, म्युनिसिपल कौंसिल, नगरपालिका, नगरपालिका परिषद, म्युनिसिपल बोर्ड, नगर पंचायत, और टाउन पंचायत, जनगणना नगर, अधिसूचित क्षेत्र और भारत के विभिन्न राज्यों और संघ राज्य क्षेत्रों में औद्योगिक नगरी चाहे उसका कोई भी नाम से पुकारा जाए, भी है;
31. "सामग्री पुनर्प्राप्ति सुविधा (एमआरएफ)" से ऐसी सुविधा अभिप्रेत है जहां गैर कंपोस्टीय ठोस अपशिष्ट को स्थानीय निकाय या नियम 2 में वर्णित कोई अन्य अस्तित्व या इसमें से किसी के द्वारा प्राधिकृत कोई व्यक्ति या अभिकरण जो अपशिष्ट को प्रसंस्करण या निपटान के लिए उसे परिदान या देने के पूर्व इस प्रयोजन के लिए स्थानीय निकाय या नियम 2 में वर्णित अस्तित्व द्वारा नियोजित अपशिष्ट चुनने वाले, अनौपचारिक पुनर्चक्रणकर्ता या कोई अन्य नियोजित कार्यबल को प्राधिकृत अनौपचारिक सेक्टर द्वारा अपशिष्ट के विभिन्न संघटकों से पृथक्करण, छंटाई या पुनर्चक्रण योग्य की पुनर्प्राप्ति की प्रसुविधा है;
32. "अजैविक निम्नीकरण योग्य अपशिष्ट" से कोई ऐसा अपशिष्ट अभिप्रेत है जिसका सूक्ष्म जीव द्वारा सरलतर स्थायी यौगिक में निम्नीकरण नहीं किया जा सकता है;
33. "सुविधा का प्रचालक" से ऐसा व्यक्ति या अस्तित्व अभिप्रेत है जो ऐसे ठोस अपशिष्ट के प्रहस्तन के लिए सुविधा का स्वामी है या प्रचालित करता है जिसके अंतर्गत स्थानीय निकाय और स्थानीय निकाय द्वारा नियुक्त कोई अन्य अस्तित्व या अभिकरण भी है;
34. "प्राथमिक संग्रहण" से पृथक्कृत ठोस अपशिष्ट को उसके उत्पादन के स्रोत जिसके अंतर्गत घर, दुकानें, कार्यालय और कोई अन्य गैर आवासीय परिसर भी हैं से या किसी संग्रहण बिंदु या शहरी स्थानीय निकाय द्वारा विनिर्दिष्ट किसी अन्य अवस्थान से संगृहीत करना, उठाना या हटाना अभिप्रेत है;
35. "प्रसंस्करण" से कोई वैज्ञानिक प्रक्रिया जिसके द्वारा ठोस अपशिष्ट को पुनः उपयोग, पुनः चक्रित या नए उत्पादों में परिवर्तित करने के प्रयोजन के लिए हथालित करना अभिप्रेत है;

36. "पुनर्चक्रण" से पृथक्कृत ठोस अपशिष्ट को अजैव निम्नीकृत नए पदार्थ या उत्पाद या नए उत्पादों का उत्पादन करने के लिए कच्ची सामग्री के रूप में परिवर्तित करने की प्रक्रिया अभिप्रेत है, जिसमें मूल उत्पादों को समरूप किया जा सकेगा या नहीं किया जा सकेगा;
37. "पुनर्विकास" से जहां विद्यमान भवन और अन्य अवसंरचनाएं जीर्णशीर्ण हो गई हैं वहां उसी स्थल पर पुरानी आवासीय या वाणिज्यिक भवनों का पुनर्निर्माण अभिप्रेत है;
38. "कचरा व्युत्पन्न ईंधन (आरडीएफ)" से ठोस अपशिष्ट, जैसे प्लास्टिक, काष्ठ, लुगदी या कार्बनिक अपशिष्ट, क्लोरीनीकृत पदार्थों से भिन्न ठोस अपशिष्ट को सुखाकर कतरन, निर्जलीकरण और संहनन द्वारा गुटिका या रोएं के कप में उत्पादित बाह्य अपशिष्ट प्रभाजी से व्युत्पन्न ईंधन अभिप्रेत है;
39. "अवशिष्ट ठोस अपशिष्ट" से और उसके अंतर्गत ऐसी ठोस अपशिष्ट प्रसंस्करण सुविधाओं, जो पुनर्चक्रण या अतिरिक्त प्रसंस्करण के लिए उपयुक्त नहीं हैं, से प्राप्त अपशिष्ट और अस्वीकृत भी अभिप्रेत है;
40. "स्वास्थ्यकर भूमिभरण" से अवशिष्ट ठोस अपशिष्ट के अंतिम और सुरक्षित निपटान और भूजल, सतही जल या क्षणभंगुर वायु धूल, हवा से उड़ा हुआ कूड़ाकरकट, दुर्गंध, अग्नि परिसंकट, पशुओं का खतरा, पक्षियों का खतरा, नाशकजीव, कृतकनाशी, ग्रीनहाउस गैस उत्सर्जन, सतत जैव प्रदूषणकारी तत्व प्रावण्य अस्थिरता तथा अपरदन के प्रदूषण के प्रति संरक्षात्मक उपायों सहित प्रकल्पित सुविधा में भूमि पर निष्क्रिय अपशिष्ट अभिप्रेत है;
41. "स्वास्थ्यकर अपशिष्ट" से प्रयोग किए गए डायपर, स्वास्थ्यकार तौलिए या नैपकिन, टैम्पोन, कन्डोम, इनकंटीनेंस शीट और कोई अन्य समरूप अपशिष्ट से मिलकर बना अपशिष्ट अभिप्रेत है;
42. "अनुसूची" से इन नियमों से उपाबद्ध अनुसूची अभिप्रेत है;
43. "गौण भंडारण" से प्रसंस्करण या निपटान सुविधा को अपशिष्ट के आगे परिवहन के लिए गौण भंडारण डिपो या एमआरएफ या आधानों पर संग्रहण के पश्चात ठोस अपशिष्ट का अस्थायी संदूषक अभिप्रेत है;
44. "पृथक्करण" से ठोस अपशिष्ट के विभिन्न संघटकों अर्थात् जैविक निम्नीकरण अपशिष्ट जिसके अंतर्गत कृषि और दुग्धपालन अपशिष्ट अजैविक निम्नीकरण अपशिष्ट जिसके अंतर्गत पुनःचक्रणयोग्य अपशिष्ट, गैर पुनःचक्रणयोग्य दाह्य योग्य अपशिष्ट, स्वास्थ्यकर अपशिष्ट और गैर चक्रण योग्य कूड़ाकरकट अपशिष्ट, घरेलू परिसंकटमय अपशिष्ट तथा सन्निर्माण और विध्वंस अपशिष्ट भी है, की छंटाई और पृथक् भंडारण अभिप्रेत है;
45. "सेवा प्रदाता" से जल, मलवहन, विद्युत, टेलीफोन, सड़क, जल निकास आदि अभिप्रेत हैं;
46. "ठोस अपशिष्ट" से ठोस या अर्द्धठोस घरेलू अपशिष्ट अभिप्रेत है और इसके अंतर्गत स्थानीय प्राधिकरण और नियम 2 में वर्णित अन्य अस्तित्व के अधीन क्षेत्र में उत्पन्न स्वास्थ्यकर अपशिष्ट, वाणिज्यिक अपशिष्ट, सांस्थानिक अपशिष्ट, खानपान और बाजार अपशिष्ट तथा अन्य गैर-आवासीय अपशिष्ट, गली की सफाई, सतह नालियों से हटाई गई या एकत्रित गाद, उद्यान कृषि अपशिष्ट, कृषि और डेयरी अपशिष्ट, औद्योगिक अपशिष्ट को छोड़कर उपचारित जैव चिकित्सक अपशिष्ट और ई-अपशिष्ट, बैटरी अपशिष्ट, रेडियो सक्रिय अपशिष्ट भी अभिप्रेत है;
47. "छंटाई करना" से मिश्रित अपशिष्ट से पुनःचक्रणयोग्य विभिन्न संघटकों और प्रवर्गों जैसे कागज, प्लास्टिक, गत्ता, धातु, कांच आदि को समुचित पुनःचक्रण सुविधा में पृथक् करना अभिप्रेत है;
48. "स्थिरीकरण" से जैव निम्नीकरण अपशिष्ट को जैवीय अपघटन को स्थायी अवस्था में परिवर्तित करना अभिप्रेत है जहां वह निक्षालन या अरुचिकर सुगंध उत्पन्न नहीं करता है और कृषि भूमि, भू-कटाव नियंत्रण तथा भूमि उपचार के लिए उपयुक्त है;

49. **"मार्गविक्रेता"** से किसी गली, लेन, पार्श्व पथ, पैदल पथ, खडंजा, सार्वजनिक उद्यान या किसी अन्य सावर्जनिक स्थान या प्राइवेट क्षेत्र, अस्थायी रूप से निर्मित संरचना या स्थान से स्थान घूमकर साधारण जनता को दैनिक उपयोग के वस्तु, माल, सौदा, खाद्य मद या वाणिज्यिक वस्तु के विक्रय करने या उन्हें एक स्थान से दूसरे स्थान तक स्थानांतरित करने में लगे व्यक्ति अभिप्रेत हैं जिसके अंतर्गत फेरीवाला, पैकार, आबादकर तथा ऐसी सभी अन्य समानार्थी पद जो स्थानीय या विनिर्दिष्ट क्षेत्र में हो सकते हैं, भी है और "मार्ग विक्रय" शब्दों को उनके व्याकरणिक रूप भेदों और सजातीय पदों का अर्थ तदनुकूल किया जाएगा;
50. **"बख्शीश फीस"** से स्थानीय प्राधिकरण या राज्य सरकार द्वारा प्राधिकृत कोई राज्य अभिकरण द्वारा कोई फीस या समर्थन मूल्य अभिप्रेत है जो ठोस अपशिष्ट प्रसंस्करण सुविधा के ग्राही या प्रचालक या भूमिभरण पर ठोस अपशिष्ट के निपटान के लिए अवधारित संदात्त है;
51. **"अंतरण स्थल"** से संग्रह क्षेत्रों से ठोस अपशिष्ट प्राप्त करने को सृजित सुविधा और अपशिष्ट प्रसंस्करण और, या निपटान सुविधा को आच्छादित यानों या आधानों में बड़ी मात्रा में परिवहन अभिप्रेत है;
52. **"परिवहन"** से ठोस अपशिष्ट चाहे वह या तो उपचारित आंशिक उपचारित या अनुपचारित को एक स्थान से दूसरे स्थान पर किसी पर्यावरणीय रूप से युक्ति युक्त रीति में विशिष्ट रूप से अभिहित और आच्छादित परिवहन प्रणाली जैसे दुर्गंध, कूड़ा कचरा और घृणित दशा को रोकने के लिए प्रवहन अभिप्रेत है;
53. **"उपचार"** से किसी अपशिष्ट के भौतिक, रसायनिक या जैविक लक्षणों या संघटन में रूपांतरण की अभिहित पद्धति, तकनीक या प्रक्रिया अभिप्रेत है जिससे उसके आयतन और क्षितिकारक क्षमता को कम करता है;
54. **"उपयोक्ता फीस"** से ठोस अपशिष्ट संग्रहण, परिवहन प्रसंस्करण और निपटान सेवाओं को उपलब्ध कराने की कुल या आंशिक लागत को प्राप्त करने में अपशिष्ट जनित पर स्थानीय निकाय और नियम 2 में वर्णित किसी अस्तित्व द्वारा अधिरोपित फीस अभिप्रेत है;
55. **"कृमि कम्पोस्ट बनाना"** से केचुओं का प्रयोग करते हुए कम्पोस्ट में संपरिवर्तित करने की जैव निम्नीकरण प्रक्रिया अभिप्रेत है;
56. **"अपशिष्ट जनित्र"** से और इसके अंतर्गत सम्मिलित से, रेल तथा रक्षा स्थापनाओं सहित प्रत्येक व्यक्ति या व्यक्तियों का समूह या प्रत्येक आवासीय परिसर तथा गैर आवासीय स्थापनाएं भी है, जो ठोस अपशिष्ट उत्पन्न करते हैं, अभिप्रेत है;
57. **"अपशिष्ट की क्रमबद्धता"** से ऐसा प्राथमिकता क्रम अभिप्रेत है जिसके अनुसार ठोस अपशिष्ट का प्रबंधन निवारण, कटौती, पुनःउपयोग, पुनर्चक्रण, पुनः प्राप्ति और निपटान पर बल देकर किया जाना चाहिए जिसमें निवारण को सर्वाधिक प्राथमिकता और भू-भरण में निपटान को न्यूनतम वरीयता का विकल्प होगा;
58. **"अपशिष्ट चुनने वाला"** से ऐसा व्यक्ति या व्यक्तियों का समूह अभिप्रेत है जो अपशिष्ट उत्पादन के स्रोत से पुनः उपयोजनीय तथा पुनर्चक्रण योग्य ठोस अपशिष्ट के संग्रहण और साथ ही पुनर्चक्रकों को उनकी आजीविका अर्जित करने के लिए सीधे या उनके मध्यवर्तियों के माध्यम से विक्रय के लिए गलियों, डिब्बों, प्रसंस्करण तथा अपशिष्ट निपटान सुविधाओं से अपशिष्ट को उठाने में औपचारिक रूप से लगे हुए हैं;
- (2) इसमें प्रयुक्त जिन शब्दों और पदों का अर्थ परिभाषित नहीं किया गया है, परंतु जो पर्यावरण (संरक्षण) अधिनियम 1986, जल (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1974 जल (प्रदूषण निवारण और नियंत्रण) उपकर अधिनियम 1977 तथा वायु (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1981 में परिभाषित है, के अर्थ होंगे जो संबंधित अधिनियमों में हैं।

4. अपशिष्ट उत्पन्नकर्ताओं के कर्तव्य, प्रत्येक अपशिष्ट उत्पन्नकर्ता,-

(क) उनके द्वारा उत्पन्न किए गए अपशिष्ट को पृथक्कृत और तीन पृथक शाखाओं अर्थात जैव निम्नीकरणयोग्य, गैर निम्नीकरणयोग्य और घरेलू परिसंकटमय अपशिष्ट के तीन अलग-अलग डिब्बों में भंडारित करेगा और समय-समय पर स्थानीय प्राधिकरणों द्वारा निदेश या अधिसूचना के अनुसार पृथक किए गए अपशिष्टों को प्राधिकृत अपशिष्ट चुनने वालों या अपशिष्ट संग्रहकर्ताओं को सौंपेगा;

(ख) प्रयोग किए गए स्वास्थ्यकर अपशिष्ट जैसे डायपरो और स्वास्थ्यकर पैडों आदि इन उत्पादों के निर्माताओं या ब्रांड स्वामियों द्वारा उपलब्ध कराई गई थैली में या स्थानीय प्राधिकारियों द्वारा यथा निर्देशित उपयुक्त लपेटन सामग्री में शुष्क अपशिष्ट या अजैविक निम्नीकरण अपशिष्ट के लिए बनाए गए डिब्बे में उसे डालेगा;

(ग) संनिर्माण और विध्वंस अपशिष्ट को पृथक रूप से अपने ही परिसर में भंडारित करेगा, जब कभी वह उत्पन्न होता हो, और उसे संनिर्माण और विध्वंस अपशिष्ट नियम, 2016 के अनुसार निपटान करेगा; और

(घ) अपने परिसर से उत्पन्न कृषि उद्यान अपशिष्ट और उद्यान अपशिष्ट को अपने ही परिसर में पृथक रूप से भंडारित करेगा और समय-समय पर स्थानीय निकाय द्वारा निदेशानुसार इसका निपटान करेगा;

(2) कोई अपशिष्ट जनित्र उसके द्वारा उत्पन्न अपशिष्ट को गली, खुले सार्वजनिक स्थानों, नाली या जलाशयों में न फेंकेगा, न जलाएगा और न गाड़ेगा;

(3) सभी अपशिष्ट उत्पन्नकर्ता ऐसी उपयोक्ता फीस का संदाय करेंगे जो ठोस अपशिष्ट प्रबंधन के लिए स्थानीय निकायों की उपविधियों में विनिर्दिष्ट किया जाए;

(4) कोई व्यक्ति अग्रिम रूप से कम से कम तीन कार्य दिवस पूर्व स्थानीय निकाय को सूचित किए बिना किसी गैर अनुज्ञप्ति वाले स्थान पर एक सौ व्यक्तियों से अधिक का ऐसा कोई आयोजन या समारोह आयोजित नहीं करेगा। ऐसा व्यक्ति या ऐसे आयोजन का आयोजक स्रोत पर अपशिष्ट के पृथक्करण की व्यवस्था करेगा और पृथक्कृत अपशिष्ट को स्थानीय निकाय द्वारा अभिहित अपशिष्ट चुनने वाले को या अपशिष्ट संग्रहण अभिकरण को सौंपेगा;

(5) प्रत्येक मार्ग विक्रेता अपने कार्यकलाप के दौरान उत्पन्न अपशिष्ट जैसेकि खाद्य अपशिष्ट प्रयोज्य (डिस्पोजेबल) प्लेटों, कपों, डिब्बों, रैपरों, नारियल के छिलकों, शेष बचे भोजन, सब्जियों, फलों आदि के लिए उपयुक्त पात्र रखेगा और ऐसे अपशिष्ट को स्थानीय प्राधिकरण द्वारा यथा अधिसूचित अपशिष्ट भंडारण डिपो या पात्र या वाहन में डालेगा;

(6) इन नियमों के अधिसूचित होने की तारीख से एक वर्ष से अंदर सभी आवास कल्याण और बाजार संघ स्थानीय प्राधिकरण की भागीदारी में इन नियमों में यथा विहित जनित्रों द्वारा अपशिष्ट को स्रोत पर पृथक करने, पृथक किए गए अपशिष्ट को अलग-अलग पात्रों में संग्रहण करने में सहायता और पुनर्चक्रणीय सामग्री को प्राधिकृत अपशिष्ट उठाने वालों अथवा प्राधिकृत पुनर्चक्रकों को सौंपना सुनिश्चित करेंगे। जैव-अवक्रमणीय अपशिष्ट का जहां तक संभव होगा परिसर के अंदर संसाधित, उपचारित और कंपोस्ट करके अथवा बायोमिथानेशन के जरिए निपटान किया जाएगा। शेष अपशिष्ट स्थानीय प्राधिकरण द्वारा यथा निर्देशित अपशिष्ट संग्रहकर्ताओं या अभिकरण को दिया जाएगा;

(7) इन नियमों के अधिसूचित होने की तारीख से एक वर्ष के अंदर 5,000 वर्ग मीटर से अधिक क्षेत्रफल वाले सभी गेट लगे समुदाय और संस्थान स्थानीय प्राधिकरण की भागीदारी में इन नियमों में यथा विहित जनित्रों द्वारा अपशिष्ट को स्रोत पर ही पृथक करना, पृथक किए गए अपशिष्ट को अलग-अलग पात्रों में संग्रहण करने में सहायता करना तथा पुनर्चक्रकों को सौंपना सुनिश्चित करेंगे। जैव अवक्रमणीय अपशिष्ट का जहां तक संभव होगा परिसर के अंदर संसाधित, उपचारित और कंपोस्ट करके अथवा बायोमिथानेशन के जरिए निपटान किया जाएगा। शेष अपशिष्ट स्थानीय प्राधिकरण द्वारा यथा निर्देशित अपशिष्ट संग्रहकर्ताओं या अभिकरण को सौंप दिया जाएगा;

(8) इन नियमों के अधिसूचित होने की तारीख से एक वर्ष के अंदर सभी होटल और रेस्टोरेंट स्थानीय प्राधिकरण की भागीदारी में इन नियमों में यथा विहित जनित्रों द्वारा अपशिष्ट को स्रोत पर पृथक करना, पृथक किए गए अपशिष्ट को अलग-अलग पात्रों में संग्रह करने में सहायता करना तथा पुनर्चक्रणीय सामग्री को प्राधिकृत अपशिष्ट उठाने वालों अथवा प्राधिकृत

पुनर्चक्रकों को सौंपना सुनिश्चित करेंगे। जैव-अवक्रमणीय अपशिष्ट का जहां तक संभव होगा परिसर के अंदर संसाधित उपचारित और कंपोस्ट करके अथवा बायोमिथानेशन के जरिए निपटान किया जाएगा। शेष अपशिष्ट स्थानीय प्राधिकरण द्वारा यथा निर्देशित अपशिष्ट संग्रहकर्ताओं या अभिकरण को दिया जाएगा।

5. पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के कर्तव्य.- (1) पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय देश में इन नियमों के अनुपालन की मॉनीटरी के लिए उत्तरदायी होगा। यह सचिव, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अध्यक्षता के अधीन केन्द्रीय मॉनीटरी समिति का गठन करेगा, जिसमें निम्नलिखित अधिकारी शामिल होंगे जो संयुक्त सचिव या सलाहकार की पंक्ति से निम्न के नहीं होंगे अर्थात् :

- (1) शहरी विकास मंत्रालय
- (2) ग्रामीण विकास मंत्रालय
- (3) रसायन एवं उर्वरक मंत्रालय
- (4) कृषि मंत्रालय
- (5) केन्द्रीय प्रदूषण नियंत्रण बोर्ड
- (6) तीन राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति, चक्राणुक्रम द्वारा
- (7) तीन राज्य सरकारों के शहरी विकास विभाग, चक्राणुक्रम द्वारा
- (8) दो राज्य सरकारों के ग्रामीण विकास विभाग, चक्राणुक्रम द्वारा
- (9) तीन शहरी स्थानीय निकाय, चक्राणुक्रम द्वारा
- (10) दो जनगणना (सेंसस) शहर, चक्राणुक्रम द्वारा
- (11) एफआईसीसीआई, सीआईआई
- (12) दो विषय विशेषज्ञ

2. इस केन्द्रीय मानीटरी समिति की बैठक इन नियमों के अनुपालन का मॉनीटर करने और पुनर्विलोकन करने के लिए एक वर्ष में कम से कम एक बार होगी। पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय दो विशेषज्ञों को, यदि आवश्यक हो, सहयोजित कर सकेगा। समिति का प्रत्येक तीन वर्ष में नवीकरण किया जाएगा।

6. शहरी विकास मंत्रालय के कर्तव्य.- (1) शहरी विकास मंत्रालय राज्य सरकारों तथा संघ राज्य क्षेत्र के प्रशासनों के साथ निम्नलिखित के लिए समन्वय करेगा, -

(क) ठोस अपशिष्ट प्रबंधन व्यवहारों को सुधारने के लिए राज्यों तथा स्थानीय निकायों द्वारा किए गए उपायों तथा मंत्रालय और बाह्य अभिकरणों द्वारा वित्त पोषित ठोस अपशिष्ट प्रबंधन परियोजनाओं के निष्पादन का वर्ष में कम से कम एक बार आवधिक पुनर्विलोकन करेगा तथा सुधारात्मक उपाय करने पर सलाह देगा;

(ख) इन नियमों की अधिसूचना की तारीख से छह मास के भीतर पणधारियों के साथ परामर्श से ठोस अपशिष्ट प्रबंधन पर राष्ट्रीय नीति तथा रणनीति तैयार करना, जिसके अंतर्गत अपशिष्ट से ऊर्जा की नीति भी है;

(ग) राष्ट्रीय ठोस अपशिष्ट प्रबंधन नीति और राष्ट्रीय शहरी स्वच्छता नीति पर आधारित ठोस प्रबंध के संबंध में राज्य नीति और रणनीति को तैयार करने में राज्यों तथा संघ राज्य क्षेत्रों का मार्गदर्शन करना और उन्हें सुकर बनाना;

(घ) ठोस अपशिष्ट प्रबंध सेक्टर में अनुसंधान और विकास को प्रोत्साहन देना तथा राज्यों और स्थानीय निकायों के लिए सूचना का प्रसार करना;

(ङ) स्थानीय निकायों और अन्य पणधारियों को प्रशिक्षण देना और उनका क्षमता निर्माण करना; और

(च) समय सीमाओं और मानकों को सुकर बनाने के लिए ठोस अपशिष्ट प्रबंधन पर राज्यों, संघ राज्य क्षेत्रों और स्थानीय निकायों को तकनीकी मार्गदर्शी सिद्धांत तथा परियोजना वित्त प्रदान करना;

7. उर्वरक विभाग, रसायन और उर्वरक मंत्रालय के कर्तव्य.- (1) उर्वरक विभाग समुचित क्रियाविधि के माध्यम से, -

(क) नगर कम्पोस्ट के बाजार विकास में सहायता उपलब्ध कराएगा; और

(ख) कंपनियों को विपणन के लिए इस सीमा तक उपलब्ध कराना कि उर्वरक कंपनियों द्वारा 3 से 4 थैले: 6 से 7 थैले के अनुपात में रासायनिक उर्वरकों के साथ कम्पोस्ट के सह विपणन का संवर्धन सुनिश्चित हो।

8. कृषि मंत्रालय, भारत सरकार के कर्तव्य :- कृषि मंत्रालय समुचित तंत्र के माध्यम से:-

(क) कंपोस्ट के विनिर्माण एवं बिक्री के लिए उर्वरक नियंत्रण आदेश को लचीलापन प्रदान करेगा;

(ख) कृषि भूमि पर कंपोस्ट के उपयोग को बढ़ावा देगा;

(ग) स्थानीय प्राधिकारियों या उनकी प्राधिकृत एजेंसियों द्वारा उत्पादित कंपोस्ट की गुणता जांच के लिए प्रयोगशालाएं स्थापित करेगा;

(घ) कंपोस्ट की गुणता बनाए रखने और कृषि भूमि पर कंपोस्ट का उपयोग करते समय कंपोस्ट की तुलना में रासायनिक उर्वरकों के उपयोग के अनुपात के लिए समुचित मार्गदर्शक सिद्धांत जारी करेगा।

9. विद्युत मंत्रालय के कर्तव्य.- विद्युत मंत्रालय समुचित तंत्र के माध्यम से :- (क) ठोस अपशिष्ट पर आधारित अपशिष्ट से ऊर्जा पैदा करने वाले संयंत्रों से उत्पादित विद्युत के लिए टैरिफ या प्रभार निर्धारित करेगा;

(ख) ऐसे अपशिष्ट से उत्पन्न विद्युत की खरीद को वितरण कंपनियों द्वारा ऊर्जा संयंत्रों के लिए अनिवार्य बनाएगा।

10. नवीन और नवीकरणीय ऊर्जा स्रोत मंत्रालय के कर्तव्य.- नवीन और नवीकरणीय ऊर्जा स्रोत मंत्रालय समुचित तंत्र के माध्यम से :-

(क) अपशिष्ट से ऊर्जा पैदा करने वाले संयंत्रों के लिए अवसंरचना सृजन को सुविधाजनक बनाएगा; और

(ख) ऐसे अपशिष्ट से ऊर्जा पैदा करने वाले संयंत्रों के लिए समुचित सब्सिडी या प्रोत्साहन प्रदान करेगा।

11. राज्यों और संघ राज्य क्षेत्रों में शहरी विकास के प्रभारी सचिव के कर्तव्य.-

(1) राज्य या संघ राज्य क्षेत्र में सचिव, राज्य शहरी विकास विभाग म्युनिसिपल प्रशासन के आयुक्त या निदेशक या स्थानीय निकायों के निदेशक के माध्यम से निम्नलिखित सुनिश्चित करेगा :

(क) इन नियमों से सुसंगत अपशिष्ट प्रबंधन के क्षेत्र में अपशिष्ट चुनने वालों के प्रतिनिधियों, स्वयं सहायता समूह और समान समूहों सहित पणधारियों के परामर्श से राज्य या संघ राज्य क्षेत्र के लिए राज्य नीति और ठोस अपशिष्ट प्रबंधन रणनीति तैयार करना जो इन नियमों की अधिसूचना की तारीख से एक वर्ष की अवधि के भीतर शहरी विकास मंत्रालय को राष्ट्रीय ठोस अपशिष्ट प्रबंधन नीति और राष्ट्रीय शहरी स्वच्छता नीति से समरूप होगी;

(ख) ठोस अपशिष्ट प्रबंधन के संबंध में राज्य नीति और रणनीति तैयार करते समय भूमिभरण में जाने वाले अपशिष्ट का न्यूनीकरण को सुनिश्चित करने तथा राज्य नीति और ठोस अपशिष्ट प्रबंधन रणनीति में मानव स्वास्थ्य और पर्यावरण पर ठोस अपशिष्ट के प्रभाव को न्यूनीकृत करने के लिए ठोस अपशिष्ट के विभिन्न संघटकों के अपशिष्ट में कमी, पुनःउपयोग, पुनर्चक्रण, वसूली और अनुकूलतम उपयोग पर बल देगा;

(ग) राज्य नीतियों और रणनीतियों में कूड़ा चुनने वालों एवं अपशिष्ट संग्रहकर्ताओं और पुनर्चक्रण उद्योग के अनौपचारिक सेक्टर द्वारा अपशिष्ट को कम करने में निभाई गई महत्वपूर्ण भूमिका को स्वीकार किया जाना और अपशिष्ट प्रबंधन प्रणाली में अपशिष्ट चुनने वालों या अनौपचारिक अपशिष्ट संग्रहकर्ताओं के एकीकरण के बारे में विस्तृत मार्गदर्शक सिद्धांत उपलब्ध कराना;

(घ) सभी स्थानीय प्राधिकरणों द्वारा इन नियमों के उपबंधों के क्रियान्वयन को सुनिश्चित करना;

(ड.) राज्य के शहरी योजना विभाग को यह सुनिश्चित करने के लिए निदेश देना कि उन शहरों को छोड़कर जो साझा अपशिष्ट प्रसंस्करण सुविधा या शहरों के एक समूह के लिए क्षेत्रीय स्वच्छता भूमिभरण के सदस्य हैं, राज्य या संघ राज्य क्षेत्र में प्रत्येक शहर की मास्टर प्लान में ठोस अपशिष्ट प्रसंस्करण और निपटान सुविधाएं स्थापित करने के लिए प्रावधान हैं;

(च) ठोस अपशिष्ट के लिए प्रसंस्करण और निपटान सुविधाएं स्थापित करने के लिए एक वर्ष के अंदर स्थानीय निकायों के वास्ते उपयुक्त भूमि की पहचान और आवंटन सुनिश्चित करना और उन्हें महानगर एवं जिला योजना समितियों या नगर एवं ग्राम योजना विभाग के माध्यम से राज्य/शहरों की मास्टर योजना (भूमि उपयोग की योजना) में शामिल करना;

(छ) राज्य और स्थानीय निकायों के शहरी योजना विभाग को यह सुनिश्चित करने के लिए निदेश देना कि 200 से अधिक आवास वाले या 5,000 वर्ग मीटर से अधिक क्षेत्रफल के प्लॉट वाली गुप हाउसिंग या वाणिज्यिक, सांस्थानिक या अन्य गैर-आवासीय परिसर के लिए विकास योजना में ठोस अपशिष्ट के पृथक्करण, भंडारण, विकेंद्रित प्रसंस्करण के लिए एक अलग स्थल चिन्हित किया जाता है;

(ज) विशेष आर्थिक जोन, औद्योगिक संपदा, औद्योगिक पार्क के विकासकों को निदेश देना कि प्लॉट के कुल क्षेत्रफल का कम से कम 5 प्रतिशत प्लॉट या शैड वसूली या पुनर्चक्रण सुविधा के लिए आरक्षित करें;

(झ) लागत भागीदारी आधार पर क्षेत्रीय सुविधा से 50 कि. मी. (या अधिक) की दूरी के अन्तर्गत आने वाले शहरों और नगरों के समूह के साझा क्षेत्रीय स्वास्थ्यकर भूमिभरण की स्थापना को सुकर बनाना और ऐसे स्वास्थ्यकर भूमिकरणों के वृत्तिक प्रबंधन को सुनिश्चित करना;

(ञ) ठोस अपशिष्ट के प्रबंधन में शहरी स्थानीय निकायों के क्षमता निर्माण तथा स्रोत पर अपशिष्ट के पृथक्करण एवं परिवहन या प्रसंस्करण की व्यवस्था करना;

(ट) राज्य प्रदूषण नियंत्रण बोर्ड के साथ परामर्श करके 5 टन प्रतिदिन से अधिक के ठोस अपशिष्ट प्रसंस्करण और निपटान सुविधाओं के लिए बफर जोन अधिसूचित करना; और

(ठ) अपशिष्ट चुनने वालों और अपशिष्ट के व्यापारियों के पंजीकरण के संबंध में एक योजना शुरू करना ।

12. जिला मजिस्ट्रेट या जिला कलक्टर या उपायुक्त के कर्तव्य.- यथा स्थिति, जिला मजिस्ट्रेट या जिला कलक्टर या उपायुक्त,

(क) इन नियमों की अधिसूचना की तारीख से एक वर्ष के भीतर राज्य शहरी विकास विभाग के प्रभारी सचिव के निकट समन्वय से अपने जिले में स्थानीय निकायों को ठोस अपशिष्ट प्रसंस्करण तथा निपटान सुविधाओं की स्थापना करने के लिए नियम 11 के खंड (च) के अनुसार उपयुक्त भूमि की पहचान तथा आवंटन को सुकर बनाएगा;

(ख) अपशिष्ट के पृथक्करण, प्रसंस्करण, उपचार और निपटान पर एक तिमाही में कम से कम तीन मास में एक बार स्थानीय निकायों के अनुपालन का पुनर्विलोकन करेगा और निदेशक या नगरपालिका प्रशासन के आयुक्त या स्थानीय निकायों के निदेशक और राज्य शहरी विकास के प्रभारी सचिव के साथ परामर्श करके उपचारात्मक उपाय करेगा ।

13. राज्य और संघ राज्य क्षेत्र में ग्राम पंचायत या ग्रामीण विकास विभाग के प्रभारी सचिव के कर्तव्य.- (1) उन क्षेत्रों के लिए जो इन नियमों के अधीन आते हैं और उनके अधिकार क्षेत्र में हैं, राज्य और संघ राज्य क्षेत्र में ग्राम पंचायत या शहरी विकास विभाग के प्रभारी सचिव के कर्तव्य वहीं होंगे जो राज्य या संघ राज्य क्षेत्र में शहरी विकास के प्रभारी सचिव के हैं ।

14. केन्द्रीय प्रदूषण नियंत्रण बोर्ड के कर्तव्य.- केन्द्रीय प्रदूषण नियंत्रण बोर्ड -

(क) इन नियमों के कार्यान्वयन के लिए राज्य प्रदूषण नियंत्रण बोर्डों और प्रदूषण नियंत्रण समितियों के साथ समन्वय करेगा और स्थानीय निकायों द्वारा विहित मानकों का पालन करेगा;

(ख) सभी ठोस अपशिष्ट प्रसंस्करण और निपटान सुविधाओं की बाबत भूजल, परिवेशी वायु, ध्वनि प्रदूषण, निक्षालन के लिए मानक निश्चित करेगा;

- (ग) ठोस अपशिष्ट प्रसंस्करण सुविधाओं या उपचार प्रौद्योगिकियों के लिए विहित पर्यावरणीय मानकों और सन्नियमों का पुनर्विलोकन करना और जब कभी भी अपेक्षित हो, उनको अद्यतन करना;
- (घ) ठोस अपशिष्ट प्रसंस्करण सुविधाओं या उपचार प्रौद्योगिकियों के लिए विहित पर्यावरणीय मानकों के कार्यान्वयन को वर्ष में कम से कम एक बार राज्य प्रदूषण नियंत्रण बोर्डों/प्रदूषण नियंत्रण समितियों के माध्यम से पुनर्विलोकन और उनके द्वारा मॉनीटर किए गए आंकड़ों का संकलन करना;
- (ङ.) ठोस अपशिष्ट के प्रसंस्करण, पुनर्चक्रण और उपचार के लिए किसी नई प्रौद्योगिकी के प्रयोग पर राज्य प्रदूषण नियंत्रण बोर्डों या प्रदूषण नियंत्रण समितियों के प्रस्तावों का पुनर्विलोकन करना और छः माह के अंदर उनके लिए निष्पादन मानक, उत्सर्जन मानदंड विहित करना;
- (च) स्थानीय निकायों द्वारा इन नियमों के कार्यान्वयन को राज्य प्रदूषण नियंत्रण बोर्डों या प्रदूषण नियंत्रण समितियों के माध्यम से मॉनीटर करना;
- (छ) राज्य प्रदूषण नियंत्रण बोर्डों और समितियों से प्राप्त रिपोर्टों के आधार पर इन नियमों के कार्यान्वयन पर वार्षिक रिपोर्ट तैयार करना और उसे पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को प्रस्तुत करना तथा यह रिपोर्ट लोक अधिकार क्षेत्र में भी रखी जाएंगी;
- (ज) प्रतिदिन 5 टन से अधिक ठोस अपशिष्ट का प्रबंधन करने वाली सुविधाओं के विभिन्न आकारों के लिए अपशिष्ट प्रसंस्करण और निपटान सुविधाओं की बाहरी सीमाओं से किसी आवासीय, वाणिज्यिक या किसी अन्य संनिर्माण संबंधी क्रियाकलाप को प्रतिबंधित करने वाले बफर जोन को बनाए रखने के लिए मार्गदर्शक सिद्धांतों को प्रकाशित करना;
- (झ) इन नियमों के प्रावधानों का अनुपालन करने के लिए ठोस अपशिष्ट के शहरी स्थानीय निकायों के समर्थ बनाने के लिए प्रसंस्करण और निपटान के पर्यावरणीय पहलुओं पर समय-समय पर मार्गदर्शक सिद्धांत प्रकाशित करना; और
- (ञ) अपशिष्ट के अंतरराज्यीय संचलन पर राज्यों या संघ राज्य क्षेत्रों को मार्गदर्शन प्रदान करना ।

15. स्थानीय निकायों, और जनगणना नगरों की ग्राम पंचायतों तथा शहरी समूहों के कर्तव्य और उत्तरदायित्व.- (1)
स्थानीय निकाय और पंचायतें :-

- (क) राज्य नीति और रणनीति की अधिसूचना की तारीख से छह मास के भीतर ठोस अपशिष्ट प्रबंधन पर राज्य नीति और रणनीति के अनुसार ठोस अपशिष्ट प्रबंध योजना तैयार करना और उसकी एक प्रति राज्य सरकार या संघ राज्य प्रशासन द्वारा राज्य सरकार या संघ राज्य प्रशासन द्वारा प्राधिकृत अभिकरण से उसे अनुमोदित कराना;
- (ख) मलिन बस्तियों तथा अनौपचारिक बसावटों, वाणिज्यिक, संस्थागत और अन्य गैर आवासीय परिसरों सहित सभी घरों से पृथक्कृत ठोस अपशिष्ट का द्वार-द्वार के संग्रहण की व्यवस्था करना। बहु मंजिलों भवनों, बड़े वाणिज्यिक परिसरों, मॉलों, आवासीय परिसरों इत्यादि से अपशिष्ट का संग्रहण प्रवेश द्वार या किसी अन्य अभिहित स्थान किया जा सकता है;
- (ग) कूड़ा चुनने वालों/अनौपचारिक अपशिष्ट संग्रहकर्ताओं के संगठनों को मान्यता प्रदान करने की प्रणाली स्थापित करना और द्वार-द्वार जाकर अपशिष्ट संग्रह करने सहित ठोस अपशिष्ट के प्रबंधन में इनकी भागीदारी को सुकर बनाने के लिए इन प्राधिकृत चुनने वालों और अपशिष्ट संग्रहकर्ताओं के एकीकरण के लिए एक प्रणाली स्थापित करना;
- (घ) स्वयं सहायता समूह बनाने को सुकर बनाना, पहचान पत्र उपलब्ध कराना और तदुपरांत घर-घर जाकर अपशिष्ट संग्रह करने सहित ठोस अपशिष्ट प्रबंधन में एकीकरण को प्रोत्साहन देना;
- (ङ.) इन नियमों की अधिसूचना की तारीख से एक वर्ष के भीतर इन नियमों के उपबंधों को समाविष्ट करते हुए उपविधियां बनाना और समय पर कार्यान्वयन सुनिश्चित करना;

- (च) उपयोक्ता फीस, जो समुचित समझी जाए, समय-समय पर विहित करना और स्वयं या प्राधिकृत अभिकरण के माध्यम से ठोस अपशिष्ट उत्पन्नकर्ताओं से फीस का संग्रह करना;
- (छ) अपशिष्ट उत्पन्नकर्ताओं को निदेश देना कि कूड़ा करकट न फैलाएं अथवा कागज, पानी की बोतलें, पेय पदार्थों के केनों, टेट्रा पैक्स, फलों के छिलके, रैपर आदि या सड़क खुले सार्वजनिक स्थान, नालों अपशिष्ट निकायों पर न जलाए या कुंड में न फेंके या उनका निपटान न करें तथा इन नियमों के अधीन विहित किए गए अनुसार स्रोत अपशिष्ट को अलग-अलग करें और पृथक किए गए अपशिष्ट को स्थानीय निकाय द्वारा प्राधिकृत अपशिष्ट चुनने वालों या प्राधिकृत अपशिष्ट संग्रहकर्ता को सौंप दें;
- (ज) पुनर्चक्रणीय सामग्रियों छंटाई करने के लिए पर्याप्त स्थान के साथ सामग्री वसूली सुविधाएं या गौण भंडारण सुविधाएं स्थापित करना ताकि अनौपचारिक या प्राधिकृत अपशिष्ट चुनने वाले और अपशिष्ट संग्रह करने वाले अपशिष्ट में से पुनर्चक्रणीय सामग्रियों को अलग कर सकें या उत्पादन के स्रोत से या सामग्री वसूली सुविधाओं से कागज, प्लास्टिक, धातु, शीशा, कपड़ा आदि जैसे पृथक किए गए पुनर्चक्रणीय अपशिष्ट को संग्रह करने के लिए अपशिष्ट चुनने वालों और पुनर्चक्रकों को सुलभ मार्ग उपलब्ध कराना; जैव निम्नीकरण अपशिष्ट के भंडारण के लिए डिब्बे हरे रंग से मुद्रित होंगे, जो पुनर्चक्रण के अपशिष्ट के भंडारण के लिए सफेद रंग से मुद्रित होंगे और अन्य अपशिष्ट के भंडारण के लिए काले रंग से मुद्रित होंगे;
- (झ) घरेलू परिसंकटमय अपशिष्ट के लिए अपशिष्ट निक्षेपण केंद्रों की स्थापना करना और अपशिष्ट उत्पन्नकर्ताओं को निदेश देना कि घरेलू परिसंकटमय अपशिष्टों निक्षेपण परिसंकटमय अपशिष्ट निपटान सुविधा में उसके सुरक्षित निपटान के लिए इस केंद्र में करें। ऐसी सुविधा की स्थापना किसी शहर या नगर में इस ढंग से की जाएगी कि एक केंद्र की स्थापना बीस किलोमीटर क्षेत्रफल या उसके भाग के लिए हो जाए और इन केंद्रों में घरेलू परिसंकटमय अपशिष्ट प्राप्त करने के समय अधिसूचित होगा;
- (ञ) परिसंकटमय अपशिष्ट निपटान सुविधा तक घरेलू परिसंकटमय अपशिष्ट का सुरक्षित भंडारण और परिवहन सुनिश्चित करना या जो राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति द्वारा निर्देश किया जाए;
- (ट) गली के सफाई कर्मचारियों को निदेश देना कि गली की सफाई से संग्रहीत पेड़ के पत्तों को न जलाएं तथा उन्हें अलग से भंडारण करे और स्थानीय निकाय द्वारा प्राधिकृत अपशिष्ट संग्रहकर्ता या अभिकरण को सौंपे;
- (ठ) अपशिष्ट चुनने वालों और अपशिष्ट संग्रहकर्ताओं को ठोस अपशिष्ट प्रबंधन का प्रशिक्षण देना;
- (ड) दिन-प्रतिदिन आधार पर बाजारों से सब्जियों, फलों, फूलों, मांस, कुक्कुट पालन और मछली बाजार से अपशिष्ट संग्रह करना और स्वास्थ्यकर स्थिति सुनिश्चित करने के लिए बाजारों में उचित स्थानों पर या बाजारों के आस-पास विकेन्द्रीकृत कंपोस्ट प्लांट या जैव मिथेनीकरण प्लांट की स्थापना को प्रोत्साहन देना;
- (ढ) जनसंख्या के घनत्व, वाणिज्यिक क्रियाकलाप और स्थानीय स्थिति पर निर्भर करते हुए दैनिक या वैकल्पिक दिवसों या सप्ताह में दो बार सड़कों, मार्गों, गलियों और उप-गलियों की सफाई के अपशिष्ट को पृथक रूप से संग्रह करना;
- (ण) सड़क की सफाई के कूड़े और सतही नालियों से निकाली गई गाद को जिन मामलों में इन अपशिष्टों का सीधा संग्रह करने के लिए परिवहन वाहन सुविधाजनक व्यवहार्य नहीं है, अस्थाई रूप से भंडारण करने के लिए आच्छादित गौण भंडारण सुविधा स्थापित करना। इस प्रकार संग्रह किए गए अपशिष्ट का संग्रह और निपटान स्थानीय निकाय द्वारा यथा निर्धारित नियमित अंतराल पर किया जाएगा;
- (त) बागवानी, उद्यानों और बगीचों के अपशिष्ट को पृथक रूप से संग्रह करना और जहां तक संभव हो उसका प्रसंस्करण पार्कों और बगीचों में करना;
- (थ) पृथक किए गए जैव निम्नीकरणीय अपशिष्ट का परिवहन प्रसंस्करण सुविधाओं जैसे कंपोस्ट प्लांट, जैव मिथेनीकरण संयंत्र या ऐसी कोई सुविधा तक करना। ऐसे अपशिष्ट के स्थल पर प्रसंस्करण को अधिमान्यता दी जानी चाहिए;

(द) क्रमवर्ती प्रसंस्करण सुविधा या सामग्री पुनःप्राप्ति सुविधाओं या द्वितीयक भंडारण सुविधा को गैर जैव निम्नीकरणीय अपशिष्ट को परिवहन करना;

(ध) निर्माण और विध्वंस अपशिष्ट का परिवहन समय-समय पर यथासंशोधित निर्माण और विध्वंस अपशिष्ट प्रबंधन नियम, 2016 के उपबंधों के अनुसार करना;

(न) समुदाय सुविधा के आस-पास दुर्गंध के नियंत्रण और स्वास्थ्य रक्षक स्थितियों के अनुरक्षण के अध्यक्षीन समुदाय स्तर पर घरेलू कंपोस्टिंग, बायोगैस उत्पादन, अपशिष्ट के विकेंद्रित प्रसंस्करण में समुदायों को अंतर्वलित करना;

(प) दो वर्षों के भीतर रासायनिक खाद के उपयोग को चरणबद्ध रूप से समाप्त करना और स्थानीय निकायों द्वारा अनुरक्षित सभी उद्यानों, बगीचों में कंपोस्ट का प्रयोग करना और जहां कहीं संभव हो इसके अधिकारिता के अधीन अन्य स्थानों पर भी ऐसा करना अनौपचारिक अपशिष्ट पुनर्चक्रण क्षेत्र द्वारा की जाने वाली पुनर्चक्रण पहलों को प्रोत्साहन उपलब्ध कराए जा सकते हैं;

(फ) उपयुक्त प्रौद्योगिकी जिसके अंतर्गत निम्नलिखित प्रौद्योगिकियां भी हैं, को अंगीकृत करते हुए और समय-समय पर शहरी विकास मंत्रालय द्वारा समय-समय पर जारी मार्गदर्शी सिद्धांतों और केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जारी दिशानिर्देशों का पालन करते हुए ठोस अपशिष्ट के विभिन्न अवयवों के उचित उपयोग के लिए स्वयं या निजी क्षेत्र के सहभागी या किसी अभिकरण के माध्यम से ठोस अपशिष्ट प्रसंस्करण सुविधाओं और संबंधित अवसंरचना के संनिर्माण, प्रचालन और अनुरक्षण को सुकर बनाना: परिवहन लागत और पर्यावरणीय आघात को न्यूनतम करने के लिए विकेन्द्रीयकृत प्रसंस्करण को अधिमान्यता देना जैसे-.

(क) जैव-मिथैनिकरण, सूक्ष्म जैविक कंपोस्टिंग, वर्मी कंपोस्टिंग, अनारोबिक डार्जेशन या जैव निम्नीकरणीय-अपशिष्टों के जैव स्थिरीकरण के लिए कोई अन्य समुचित प्रसंस्करण;

(ख) अपशिष्ट के दहनशील भाग के लिए अवशिष्ट जनित ईंधन सहित अपशिष्ट से ऊर्जा प्रक्रियाएं या अपशिष्ट आधारित विद्युत प्लांटों या सीमेंट भट्टियों को फीड स्टॉक के रूप में आपूर्ति;

(ब) इन नियमों के अधीन विहित रीति से अवशेष अपशिष्टों के निपटान के लिए अनुसूची-1 के अनुसार स्वास्थ्यकर भरण स्थलों और आनुषंगिक अवसंरचना का निर्माण, प्रचालन और अनुरक्षण स्वयं या किसी अन्य अभिकरण के माध्यम से करना;

(भ) वार्षिक बजट में पूंजी निवेश के साथ-साथ ठोस अपशिष्ट प्रबंधन सेवाओं के प्रचालन और अनुरक्षण के लिए निधियों का पर्याप्त उपबंध करना और यह सुनिश्चित करना कि स्थानीय निकाय के वैवेकिक कृत्यों के लिए निधियां ठोस अपशिष्ट प्रबंधन तथा इन नियमों के अनुसार स्थानीय निकाय के अन्य बाध्यकारी कृत्यों के लिए आवश्यक निधियों की अपेक्षा पूर्ण करने के पश्चात् की आबंटित की जाएं;

(म) प्ररूप-1 में अपशिष्ट प्रसंस्करण, शोधन या निस्तारण सुविधा स्थापित करने के लिए प्राधिकार अनुदत्त करने के लिए आवेदन करना जिसके अंतर्गत यथास्थिति राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति से स्वास्थ्यकर भरण स्थल सहित प्रतिदिन 5 मीट्रिक टन से अधिक अपशिष्ट हो;

(य) प्राधिकार की विधिमान्यता समाप्त होने से कम से कम साठ दिन पूर्व प्राधिकार के नवीकरण के लिए आवेदन करना;

(यक) उत्तरवर्ती वर्ष के 30 अप्रैल या उसके पूर्व आयुक्त या निदेशक, नगरपालिका प्रशासन को या प्राधिकृत अधिकारी को प्ररूप-4 में वार्षिक रिपोर्ट तैयार और प्रस्तुत करना;

(यख) वार्षिक रिपोर्ट प्रत्येक वर्ष के 31 मई तक शहरी विकास विभाग के प्रभारी सचिव या ग्राम पंचायत या ग्रामीण विकास विभाग और संबंधित राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति को भेजी जाएगी;

(यग) कार्मिकों जिसके अंतर्गत संविदा कार्मिकों और पर्यवेक्षकों भी हैं, को पृथक किए गए अपशिष्ट के द्वार-द्वार से संग्रहण के लिए और प्रसंस्करण या निपटान सुविधा को प्राथमिक और द्वितीयक परिवहन के दौरान अमिश्रित अपशिष्ट के संबंध में प्रशिक्षण;

(यघ) यह सुनिश्चित करना कि प्रसुविधा का प्रचालक व्यक्तिगत सुरक्षा उपकरण अर्थात् वर्दी, प्रदीप्त जैकेट, हाथ के दस्ताने, बरसाती, समुचित जूते और मास्क ठोस अपशिष्ट के प्रहस्तन में लगे सभी कार्मिकों को उपलब्ध कराए और कार्यबल द्वारा इनका उपयोग सुनिश्चित किया जाए;

(यड.) किसी ग्रुप हाउसिंग सोसाइटी या मार्केट काम्प्लैक्स की निर्माण योजना के अनुमोदन से पूर्व सुनिश्चित करने की भवन योजना में पृथक किए गए अपशिष्टों के संग्रहण, पृथक्करण और भंडारण के लिए अपशिष्ट संग्रहण केन्द्र स्थापित किया जाना सुनिश्चित किया जाए;

(यच) कचरा फैलाने वाले या इन नियमों के उपबंधों का अनुपालन करने में असफल रहने वाले व्यक्तियों के लिए स्थल ही जुर्माना लगाने के लिए उपविधि बनाना और मापदंड विहित करना तथा बनाई गई उपविधियों के अनुसार स्थल पर ही जुर्माना लगाने की शक्तियां उचित अधिकारियों या स्थानीय निकायों को प्रत्यायोजित करना; और

(यछ) सूचना, शिक्षण और संचार अभियान के माध्यम से लोक जागरूकता का सृजन करना और निम्नलिखित के संबंध में अपशिष्ट उत्पन्न करने वालों को जानकारी देना;

- i. कचरा न फैलाना;
- ii. कम अपशिष्ट उत्पन्न करना;
- iii. संभव सीमा तक अपशिष्ट का पुनःउपयोग;
- iv. अपशिष्ट का जैव निम्नीकरणीय, गैर-जैव निम्नीकरणीय (पुनर्चक्रण योग्य तथा दहनयोग्य), स्वास्थ्यकर अपशिष्ट और घरेलू परिसंकटमय अपशिष्ट के रूप में स्रोत पर पृथक्करण;
- v. घरेलू कंपोस्टिंग, वर्मिन कंपोस्टिंग, बायोगैस उत्पादन या समुदाय स्तरीय कंपोस्टिंग/बायोगैस उत्पादन का व्यवहार करना;
- vi. उपयोग हुए प्रसाधन अपशिष्ट को ब्रांड स्वामियों द्वारा उपलब्ध कराए गए पाउचों या स्थानीय निकाय द्वारा विहित उपयुक्त लपेटने वाली सामग्री में लपेटना और इसे गैर जैव निम्नीकरणीय अपशिष्ट के लिए रखे गए डिब्बों में डालना;
- vii. स्रोत पर पृथक्कृत अपशिष्टों का अलग-अलग डिब्बों में भंडारण करना;
- viii. अपशिष्ट चुनने वालों, अपशिष्ट संग्राहकों, पुनःचक्रणकर्ताओं या अपशिष्ट संग्रहण अभिकरणों को पृथक्कृत अपशिष्ट सौंपना; और
- ix. अपशिष्ट एकत्र करने वालों या स्थानीय निकायों या स्थानीय निकाय द्वारा प्राधिकृत किसी अन्य व्यक्ति को ठोस अपशिष्ट प्रबंधन के लिए मासिक उपयोक्ता फीस या प्रभार का संदाय करना।

(यज) स्वास्थ्यकर स्थल की स्थापना और प्रचालन के लिए नियम 23 में यथाविनिर्दिष्ट समय सीमा के समाप्त होने के तुरंत पश्चात् मिश्रित अपशिष्ट से भरण स्थल को भरना या एकत्र करना बंद किया जाए;

(यझ) अपशिष्ट प्रसंस्करण सुविधाओं से केवल अप्रयोजनीय, गैर-पुनर्चक्रणयोग्य, गैर-जैवनिम्नीकरणीय, गैर-दहनशील और गैर-सक्रिय अपशिष्ट और पूर्व प्रसंस्करण अपशिष्टों तथा अवशिष्टों को ही स्वास्थ्यकर भरण स्थल पर जाने देने की अनुमति दी जाए और स्वास्थ्यकर भरण स्थलों द्वारा अनुसूची 1 में दी गई विशिष्टियों का अनुपालन किया जाएगा। तथापि, अवशिष्टों का यथासंभव पुनर्चक्रण या पुनःप्रयोग किए जाने के प्रयास किए जाने चाहिए ताकि भरण स्थल तक शून्य अपशिष्ट जाने के अपेक्षित लक्ष्य की प्राप्ति हो सके;

(यञ) सभी पुराने खुले मलबा स्थलों तथा विद्यमान प्रचालनरत मलबा स्थलों के जैव-खनन तथा जैव-उपचार की संभाव्यता के लिए जांच और विश्लेषण करना और जहां कहीं व्यवहार्य हो स्थलों के जैव-खनन या जैव-उपचार हेतु आवश्यक कार्रवाई करना;

(यट) मलबा स्थल के जैव-खनन और जैव-उपचार की संभाव्यता न होने की स्थिति में पर्यावरण को होने वाली क्षति को रोकने के लिए इसे भरण स्थल कैपिंग मानकों के अनुसार वैज्ञानिक रूप से आच्छादित जाएगा।

16. राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति के कर्तव्य.- (1) राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा -

(क) अपनी-अपनी अधिकारिता में स्थानीय निकायों के माध्यम से राज्य में इन नियमों का प्रवर्तन किया जाएगा तथा संबंधित नगरपालिका प्रशासन निदेशालय या राज्य शहरी विकास विभाग के प्रभारी सचिव के निकट समन्वय से वर्ष में कम से कम दो बार इन नियमों के क्रियान्वयन की समीक्षा की जाएगी;

(ख) अपशिष्ट प्रसंस्करण और निस्तारण स्थलों के लिए अनुसूची I और अनुसूची II के अधीन यथा विनिर्दिष्ट पर्यावरणीय मानकों को मॉनीटर करना तथा शर्तों का पालन करना;

(ग) स्थानीय निकाय या स्थानीय निकाय द्वारा प्राधिकृत किसी अन्य अभिकरण से प्ररूप 1 में आवेदन की प्राप्ति के पश्चात् प्रस्ताव का परीक्षण करना और ऐसी जांच करना जो उचित समझा जाए;

(घ) प्राधिकार के प्रस्ताव की जांच करते समय, संबंधित अधिनियमितियों के अधीन सहमति की अपेक्षा और अन्य अभिकरणों जैसे राज्य शहरी विकास विभाग, नगर और ग्राम योजना विभाग, जिला योजना समिति या महानगरीय क्षेत्र योजना समिति, जैसा लागू हो, विमानपत्तन या एयरवेस प्राधिकरण, भू-जल बोर्ड, रेलवे, विद्युत वितरण कंपनियां, राजमार्ग विभाग और अन्य संबंधित अभिकरणों के विचारों को ध्यान में रखा जाएगा और उन्हें अपने विचार, यदि कोई हों, देने के लिए चार सप्ताह का समय दिया जाएगा;

(ङ.) स्थानीय निकाय या किसी सुविधा प्रचालक या स्थानीय प्राधिकरण द्वारा प्राधिकृत किसी अन्य अभिकरण को प्ररूप 2 में साठ दिन की अवधि के भीतर प्राधिकार जारी करना जिसमें यथाआवश्यक अन्य शर्तों सहित अनुसूची 1 और 2 में यथाविनिर्दिष्ट अनुपालन मापदंड और पर्यावरण मानक अधिकथित हों;

(च) ऐसे प्राधिकार की विधिमान्यता सहमतियों की विधिमान्यता के साथ समकालिक होगी;

(छ) यदि स्थानीय प्राधिकरण या सुविधा प्रचालक सुविधा का प्रचालन विहित शर्तों के अनुसार करने में असफल रहता है तो राज्य प्रदूषण नियंत्रण बोर्ड द्वारा खंड (क) के अधीन जारी उक्त प्राधिकार को निलंबित या रद्द किया जा सकेगा;

परंतु यथास्थिति, स्थानीय निकाय या प्रचालक को सूचना दिए बिना ऐसा कोई प्राधिकार निलंबित या रद्द नहीं किया जाएगा; और

(ज) नवीकरण के लिए आवेदन की प्राप्ति पर, प्रत्येक आवेदन को गुणागुण के आधार पर परीक्षा करने के पश्चात् और इस शर्त के अधीन रहते हुए कि सुविधा के प्रचालन में नियमों के सभी उपबंधों, प्राधिकार, सहमति या पर्यावरण अनापत्ति में विनिर्दिष्ट मानकों या शर्तों को पूर्ण कर दिया है, अगले पांच वर्षों के लिए प्राधिकार का नवीकरण करेगा;

(2) राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति आवेदक को सुने जाने का युक्तियुक्त अवसर देने के पश्चात् और लिखित में कारणों को लेखबद्ध करने के पश्चात् प्राधिकार अनुदत्त करने या नवीकरण करने से इंकार कर सकेगा।

(3) नई प्रौद्योगिकियों के मामले में, जहां यथास्थिति, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा कोई मानक विहित नहीं किया गया है, मानक विनिर्दिष्ट करने के लिए केन्द्रीय प्रदूषण नियंत्रण बोर्ड से निवेदन करेगा।

(4) यथास्थिति, राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति जब कभी उचित समझा जाए किन्तु वर्ष में कम से कम एक बार, यथाअभिहित या अधिकथित मानकों तथा यथाअनुमोदित उपचार प्रौद्योगिकी तथा प्राधिकार में निर्दिष्ट शर्तों और इन नियमों के अधीन अनुसूची-1 और अनुसूची-2 में विनिर्दिष्ट मानकों का अनुपालन मॉनीटर करेगा।

(5) राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति परिसंकटमय अपशिष्ट भंडारण सुविधाओं में अपशिष्ट उत्पादकों द्वारा एकत्रित घरेलू परिसंकटमय अपशिष्ट के सुरक्षित प्रहस्तन और निस्तारण के लिए स्थानीय निकायों को निदेश देगा।

(6) राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा अपशिष्ट के अंतर राज्य प्रचालन को विनियमित किया जाएगा।

17. निपटानयोग्य उत्पादों तथा स्वास्थ्यकर नैपकिनों और डायपरों के विनिर्माताओं या ब्रांड स्वामियों के कर्तव्य.- (1) निपटान योग्य उत्पादों जैसे टिन, कांच, प्लास्टिक पैकेजिंग इत्यादि के सभी निर्माता या ऐसे उत्पादों को बाजार में लाने वाले ब्रांड स्वामी अपशिष्ट प्रबंधन प्रणाली की स्थापना के लिए स्थानीय निकायों को आवश्यक वित्तीय सहायता उपलब्ध कराएंगे।

(2) गैर जैव-निम्नीकरणीय पैकेजिंग सामग्री में अपने उत्पादों की बिक्री या विपणन करने वाले ऐसे सभी ब्रांड स्वामी उनके उत्पाद के कारण उत्पन्न हुए पैकेजिंग अपशिष्ट को वापस ग्रहण करने के लिए प्रणाली की व्यवस्था करेंगे।

(3) स्वास्थ्यकर नैपकिनों तथा डायपरों के विनिर्माताओं या ब्रांड स्वामियों या विपणन कंपनियों द्वारा अपने उत्पादों में सभी पुनर्चक्रणयोग्य सामग्रियों के प्रयोग की संभाव्यता का पता लगाएंगे या अपने स्वास्थ्यकर उत्पादों के पैकेट के साथ प्रत्येक नैपकिन या डायपर के निस्तारण के लिए एक पाउच या रैपर उपलब्ध कराएंगे।

(4) ऐसे सभी विनिर्माताओं, ब्रांड स्वामियों या विपणन कंपनियों द्वारा अपने उत्पादों को लपेटने और उनका निस्तारण करने के संबंध में लोगों को जानकारी दी जाएगी।

18. कचरा व्युत्पन्न ईंधन से सौ कि.मी. के अंदर अवस्थित औद्योगिक इकाइयों और ठोस अपशिष्ट आधारित ऊर्जा संयंत्रों के कर्तव्य.- ईंधन का प्रयोग करने वाली और ठोस अपशिष्ट आधारित कचरा व्युत्पन्न ईंधन संयंत्र से सौ कि.मी. के भीतर अवस्थित सभी औद्योगिक इकाइयां इस प्रकार उत्पन्न कचरा व्युत्पन्न ईंधन द्वारा अपनी ईंधन अपेक्षा के कम से कम 5 प्रतिशत का प्रतिस्थापन करने के लिए इन नियमों की अधिसूचना की तारीख से छह मास के भीतर व्यवस्था करेंगे।

19. ठोस अपशिष्ट प्रसंस्करण और शोधन सुविधा की स्थापना के लिए मानदंड.- (1) भूमि समनुदेशन कार्य आबंटन विभाग ठोस अपशिष्ट प्रसंस्करण और शोधन सुविधाओं की स्थापना के लिए उपयुक्त भूमि उपलब्ध कराने और राज्य सरकार या संघ राज्य क्षेत्र प्रशासन से ऐसे स्थलों को अधिसूचित करने के लिए उत्तरदायी होंगे।

(2) सुविधा का प्रचालक समय-समय पर इस संबंध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जारी तकनीकी मार्गदर्शी सिद्धांतों और शहरी विकास मंत्रालय द्वारा तैयार किए गए ठोस अपशिष्ट प्रबंधन संबंधी मैनुअल के अनुसार सुविधा का डिजाइन करेगा और इसकी स्थापना करेगा।

(3) सुविधा के प्रचालक द्वारा राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति से आवश्यक अनुमोदन प्राप्त किया जाएगा।

(4) राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति द्वारा ठोस अपशिष्ट प्रसंस्करण और शोधन सुविधाओं के प्रचालन के पर्यावरण मानकों की मॉनीटरिंग की जाएगी।

(5) सुविधा के प्रचालक का उत्तरदायित्व समय-समय पर केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जारी मार्गदर्शी सिद्धांतों और समय-समय पर शहरी विकास मंत्रालय द्वारा प्रकाशित नगरीय ठोस अपशिष्ट प्रबंधन संबंधी मैनुअल के अनुसार ठोस अपशिष्ट प्रसंस्करण और शोधन सुविधाओं के पर्यावरण के दृष्टि से अनुकूल प्रचालन की होगी।

(6) ठोस अपशिष्ट प्रसंस्करण और शोधन सुविधा के प्रचालक द्वारा राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति और स्थानीय प्राधिकरण को प्रत्येक वर्ष 30 अप्रैल तक प्ररूप 3 में वार्षिक रिपोर्ट प्रस्तुत करेगा।

20. पर्वतीय क्षेत्रों में ठोस अपशिष्ट प्रबंधन के मानदंड और की जाने वाली कार्रवाईयां.- पर्वतीय क्षेत्रों में स्थानीय प्राधिकरणों के कर्तव्य और दायित्व निम्नलिखित अतिरिक्त खंडों के सहित नियम 15 में उल्लिखित के समान होंगे :

(क) पर्वत पर भरण स्थल के संनिर्माण से बचना होगा। प्रसंस्करण सुविधा से अवशिष्ट अपशिष्ट और निष्क्रिय अपशिष्ट का संग्रहण करने के लिए एक उपयुक्त निकटतम अवस्थान पर एक अंतरण स्थान स्थापित किया जाएगा। स्वास्थ्यकर भरण की स्थापना करने के लिए 25 किलोमीटर के भीतर पहाड़ी के नीचे समतल भूमि क्षेत्र में योग्य भूमि का पहचान की जाएगी। अंतरण स्थान से अवशिष्ट अपशिष्ट का निपटान इस स्वास्थ्यकर भरण स्थल पर किया जाएगा।

(ख) ऐसी भूमि उपलब्ध न होने पर की दशा में निष्क्रिय और अवशिष्ट अपशिष्ट के लिए क्षेत्रीय स्वास्थ्यकर भरण स्थल स्थापित करने के प्रयास किए जाएंगे।

(ग) स्थानीय निकाय उपविधि बनाएगा और नागरिकों को गलियों में अपशिष्ट फैकने से प्रतिषिद्ध करने तथा पर्यटकों को गलियों में या पहाड़ियों से नीचे न फैकने किसी अपशिष्ट जैसे कागज, पानी की बोतल, शराब की बोतल, सॉफ्ट ड्रिंक के केन, टेट्रा पैक, अन्य कोई प्लास्टिक या कागज अपशिष्ट के स्थान पर सभी पर्यटक स्थलों पर स्थानीय निकाय द्वारा रखे गए कूड़ेदान में फैकने के निर्देश देना।

(घ) स्थानीय निकाय द्वारा, पर्वतीय क्षेत्रों का भ्रमण करने वाले सभी पर्यटकों को उपविधियों के अधीन ठोस अपशिष्ट प्रबंधन के उपबंधों को नगर में प्रवेश बिंदु के साथ-साथ होटलों तथा अतिथि गृहों इत्यादि के माध्यम से, जहां वे ठहरते हैं और पर्यटन स्थलों पर उपयुक्त विज्ञापन बोर्ड लगाकर, व्यवस्था करेगा।

(ङ.) स्थानीय निकाय ठोस अपशिष्ट प्रबंधन सेवाएं संवहनीय बनाने को प्रवेश द्वार पर पर्यटक से ठोस प्रबंधन प्रभार उदगृहीत कर सकेगा।

(च) भूमि समनुदेशन का प्रभारी विभाग विकेन्द्रीकृत अपशिष्ट प्रसंस्करण सुविधाओं की स्थापना के लिए पर्वतों पर उपयुक्त स्थल की पहचान और आबंटन करेगा। स्थानीय निकाय द्वारा ऐसी सुविधाएं स्थापित की जाएंगी। पर्वतीय स्थान का अनुकूलतम उपयोग करने के लिए सीढ़ी उद्यान प्रणाली को अपनाया जा सकेगा।

21. अपशिष्ट से उर्जा प्रसंस्करण के लिए मानदंड - (1) 1500 कि./कैल./कि.ग्रा. या अधिक के कैलोरिफिक मान रखने वाले गैर पुनःचक्रण अपशिष्टों को भरण स्थलों में निस्तारित नहीं किया जाएगा और उनका उपयोग या तो केवल व्युत्पन्न ईंधन

अवशेष के माध्यम से या अवशेष व्युत्पन्न ईंधन तैयार करने के लिए फीड स्टॉक के रूप में देकर या ऊर्जा का उत्पादन करने के लिए ही किया जाएगा।

- (2) उच्च कैलोरिफिक अपशिष्टों का उपयोग सीमेंट या ताप विद्युत संयंत्रों में सह-प्रसंस्करण के लिए किया जाएगा।
- (3) स्थानीय निकाय या सुविधा का प्रचालक या उनके द्वारा नामनिर्दिष्ट अभिकरण जो पांच टन प्रतिदिन से अधिक प्रसंस्करण क्षमता वाली सुविधा के अपशिष्ट के ऊर्जा संयंत्र की स्थापना करना चाहते हों, वे यथास्थिति, राज्य प्रदूषण नियंत्रक बोर्ड या प्रदूषण नियंत्रण समिति को प्राधिकार के लिए प्ररूप-1 में आवेदन प्रस्तुत करेंगे।
- (4) अपशिष्ट से ऊर्जा सुविधा की स्थापना करने के लिए ऐसे आवेदनों की प्राप्ति पर राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति उसका परीक्षण करेगा और साठ दिनों के अंदर अनुमति प्रदान करेगा।

22. क्रियान्वयन की समय-सीमा - इन नियमों के क्रियान्वयन के लिए आवश्यक अवसंरचना यथास्थिति, स्थानीय निकायों और अन्य संबंधित प्राधिकरणों द्वारा प्रत्यक्ष तथा स्वयं या नियोजित अभिकरणों द्वारा निम्नलिखित विनिर्दिष्ट समय-सीमा में सृजित की जाएंगी :

क्रम सं.	क्रियाकलाप	नियमों की अधिसूचना की तारीख से समय-सीमा
(1)	ठोस अपशिष्ट प्रसंस्करण सुविधा को स्थापित करने के लिए उपयुक्त स्थलों की पहचान करना	1 वर्ष
(2)	0.5 करोड़ जनसंख्या से कम के स्थानीय निकायों के योग्य उपयुक्त समूह के लिए साझा क्षेत्रीय स्वास्थ्यकर भरण सुविधा को स्थापित करने के लिए और 0.5 करोड़ या अधिक की जनसंख्या वाले सभी स्थानीय प्राधिकरणों द्वारा साझा क्षेत्रीय स्वास्थ्यकर भरण स्थल सुविधाओं या एकल भरण सुविधाओं की स्थापना करने के लिए उपयुक्त स्थलों की पहचान।	1 वर्ष
(3)	ठोस अपशिष्ट प्रसंस्करण सुविधा और स्वास्थ्यकर भरण स्थल सुविधाओं के लिए उपयुक्त स्थलों का उपापन।	2 वर्ष
(4)	जैव निम्नीकरणीय, पुनःचक्रण योग्य, दहन योग्य, स्वास्थ्यकर अपशिष्ट, घरेलू परिसंकटमय तथा निष्क्रिय ठोस अपशिष्टों का स्रोत पर पृथक्करण के लिए चलन के लिए अपशिष्ट उत्पन्नकर्ताओं को बाध्य करना ।	2 वर्ष
(5)	पृथक्कृत अपशिष्ट घर-घर से एकत्र करके और प्रसंस्करण या निपटान सुविधाओं का परिवहन आच्छादित वाहनों में सुनिश्चित करना।	2 वर्ष
(6)	संनिर्माण तथा विध्वंस अपशिष्टों का अलग-अलग भंडारण, संग्रहण और परिवहन सुनिश्चित करना।	2 वर्ष
(7)	100000 से अधिक जनसंख्या वाले सभी स्थानीय निकायों द्वारा ठोस अपशिष्ट प्रसंस्करण सुविधाओं की स्थापना करना।	2 वर्ष
(8)	100000 से कम जनसंख्या वाले स्थानीय निकायों और नगरों द्वारा ठोस अपशिष्ट प्रसंस्करण सुविधाओं की स्थापना करना।	3 वर्ष
(9)	इन नियमों के अधीन यथा अनुज्ञात प्रसंस्करण सुविधाओं से केवल ऐसे अपशिष्ट अपशिष्टों के साथ-साथ अशोधित निष्क्रिय अपशिष्ट के निपटान के	3 वर्ष

	लिए 0.5 करोड़ या उससे अधिक की जनसंख्या वाले सभी स्थानीय निकायों द्वारा या के लिए सम्मिलित या एकल भरण की स्थापना।	
(10)	इन नियमों के अधीन अनुज्ञात अपशिष्ट के निपटान के लिए 0.5 करोड़ से कम के अधीन सभी स्थानीय निकायों और जनसंख्या नगरों द्वारा सम्मिलित या क्षेत्रीय भरण स्थलों की स्थापना।	3 वर्ष
(11)	पुराने या परित्यक्त कूड़ा स्थलों का जैविक उपचार करना या उन्हें ढकना।	5 वर्ष

23. राज्य स्तरीय सलाहकार निकाय.- (1) संबंधित राज्य सरकार या संघ राज्य क्षेत्र प्रशासन के स्थानीय निकायों का प्रत्येक विभाग प्रभारी इन नियमों की अधिसूचना की तारीख से छह मास के भीतर एक राज्य स्तरीय सलाहकार समिति का गठन करेगा जिसमें निम्नलिखित सदस्य शामिल होंगे:-

क्रम संख्या	पदनाम	सदस्य
(1)	(2)	(3)
1.	राज्य के शहरी विकास विभाग/स्थानीय स्वशासन विभाग के सचिव	अध्यक्ष, पदेन
2.	राज्य सरकार के पंचायत या ग्रामीण विकास विभाग का संयुक्त सचिव से अन्यून पंक्ति का एक प्रतिनिधि	सदस्य, पदेन
3.	राज्य सरकार के राजस्व विभाग का एक प्रतिनिधि	सदस्य, पदेन
4.	पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकार का एक प्रतिनिधि	सदस्य, पदेन
5.	शहरी विकास मंत्रालय, भारत सरकार का एक प्रतिनिधि	सदस्य, पदेन
6.	ग्रामीण विकास मंत्रालय, भारत सरकार का एक प्रतिनिधि	सदस्य, पदेन
7.	केंद्रीय प्रदूषण नियंत्रण बोर्ड का एक प्रतिनिधि	सदस्य, पदेन
8.	राज्य प्रदूषण नियंत्रण बोर्ड .या प्रदूषण नियंत्रण समिति का एक प्रतिनिधि	सदस्य, पदेन
9.	भारतीय प्रौद्योगिकी संस्थान या राष्ट्रीय प्रौद्योगिकी संस्थान का एक प्रतिनिधि	सदस्य, पदेन
10.	राज्य का मुख्य नगर नियोजक	सदस्य
11.	स्थानीय निकायों के चक्रानुक्रम द्वारा तीन प्रतिनिधि,	सदस्य
12.	जनगणना नगरों/शहरी समुदायों के दो प्रतिनिधि	सदस्य
13.	अपशिष्ट चुनने वालों/अनौपचारिक पुनर्चक्रणकर्ता या ठोस अपशिष्ट प्रबंधन के लिए काम करने वाले विख्यात गैर सरकारी संगठन या सिविल सोसायटी का एक प्रतिनिधि	सदस्य

14.	राज्य या केन्द्रीय स्तर पर उद्योगों का प्रतिनिधित्व करने वाले निकाय का एक प्रतिनिधि	सदस्य
15.	अपशिष्ट पुनर्चक्रण उद्योग का एक प्रतिनिधि	सदस्य
16.	दो विषय विशेषज्ञ	सदस्य
17.	राज्य सरकार के राजस्व विभाग, कृषि विभाग और श्रम विभाग का सहयोजित एक प्रतिनिधि	सदस्य

(2) इन नियमों के क्रियान्वयन से संबंधित सभी विषयों, ठोस अपशिष्ट प्रबंध संबंधी राज्य की नीति तथा कार्यनीति की समीक्षा करने और इन नियमों के त्वरित और समुचित क्रियान्वयन के लिए आवश्यक उपाय करने के लिए राज्य सरकार को सलाह देने के लिए राज्य स्तरीय सलाहकार निकाय प्रत्येक छह माह में कम से कम एक बैठक करेगी।

(3) समीक्षा रिपोर्ट की प्रतियां आवश्यक कार्रवाई हेतु राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति को अग्रेषित की जाएंगी।

24. वार्षिक रिपोर्ट.- (1) सुविधा के प्रचालक द्वारा प्रत्येक वर्ष 30 अप्रैल को या इससे पूर्व प्ररूप III में स्थानीय निकाय को वार्षिक रिपोर्ट प्रस्तुत की जाएगी।

(2) स्थानीय नगरीय निकाय प्ररूप IV में अपनी वार्षिक रिपोर्ट राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण समिति और संबंधित राज्य या संघ राज्य क्षेत्र के शहरी विकास विभाग के प्रभारी सचिव या मेट्रोपालिटिन नगर की दशा में नगर पालिका प्रशासन के निदेशक या नगरपालिका प्रशासन के आयुक्त या राज्य के अन्य सभी स्थानीय निकायों के मामले में राज्य के स्थानीय निकायों प्रभारी अधिकारी को प्रत्येक वर्ष के 30 जून या उससे पहले अग्रेषित करेगी।

(3) यथास्थिति, प्रत्येक राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समिति, इन नियमों के क्रियान्वयन और अनुपालन न करने वाले स्थानीय निकायों पर की गई कार्रवाई की समेकित वार्षिक रिपोर्ट प्ररूप V में तैयार करेगी और प्रत्येक वर्ष के 31 जुलाई तक केन्द्रीय प्रदूषण नियंत्रण बोर्ड और शहरी विकास मंत्रालय को प्रस्तुत करेगी।

(4) केन्द्रीय प्रदूषण नियंत्रण बोर्ड, देश में स्थानीय निकायों द्वारा इन नियमों के क्रियान्वयन की स्थिति पर एक समेकित समीक्षा रिपोर्ट तैयार की जाएगी और शहरी विकास मंत्रालय और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय को अपनी सिफारिशों के साथ प्रत्येक वर्ष 31 अगस्त से पहले अग्रेषित की जाएगी।

(5) पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा केन्द्रीय निगरानी समिति की बैठक के दौरान वार्षिक रिपोर्ट का पुनर्विलोकन किया जाएगा।

25. दुर्घटना की रिपोर्ट देना - किसी ठोस अपशिष्ट प्रसंस्करण या सुविधा केंद्र या भराव भूमि स्थल पर कोई दुर्घटना होने की दशा में, तब सुविधा का प्रभारी अधिकारी प्ररूप VI में घटना की रिपोर्ट स्थानीय निकाय को भेजेगा। स्थानीय निकाय द्वारा समीक्षा की जाएगी और सुविधा के प्रभारी अधिकारी को अनुदेश, यदि कोई हो, जारी किया जाएगा।

अनुसूची I

[नियम 15 (ब), (घ), 16(1)(ख)(ड.), 16(4) देखें]

स्वास्थ्यकर भरण स्थलों के लिए विनिर्देश

क. स्थल चयन के लिए मानदंड. -

- (i) भूमि निर्धारण के कार्य आबंटन में विभाग द्वारा ठोस अपशिष्ट प्रसंस्करण और शोधन सुविधाओं की स्थापना करने के लिए उपयुक्त स्थल उपलब्ध कराया जाएगा और ऐसे स्थलों को अधिसूचित किया जाएगा।
- (ii) भूमि भरण स्थल योजनाबद्ध, तथा निर्माण योजना के साथ-साथ चरणबद्ध रीति से बंदी योजना के उचित प्रलेखन के साथ अभिकल्पित और विकसित किए जाएंगे। किसी विद्यमान भूमि भरण स्थल से लगी हुई कोई नई भूमि भरण सुविधा तैयार किए जाने की दशा में विद्यमान भूमि भरण स्थल की बंदी योजना, ऐसे नए भूमि भरण स्थल के प्रस्ताव का भाग होगी।
- (iii) भरण स्थलों का चयन आसपास की अपशिष्ट प्रसंस्करण सुविधाओं का प्रयोग करने के लिए किया जाएगा। अन्यथा अपशिष्ट प्रसंस्करण सुविधा की योजना भरण स्थल के अभिन्न भाग के रूप में बनाई जाएगी।
- (iv) भूमि भरण स्थल शहरी विकास मंत्रालय, भारत सरकार और केन्द्रीय प्रदूषण नियंत्रण बोर्ड के मार्गदर्शी सिद्धांतों के अनुसार स्थापित किए जाएंगे।
- (v) विद्यमान भूमि भरण स्थल, जो पांच वर्षों से अधिक से उपयोग में हैं, इस अनुसूची में दिए गए विनिर्देशों के अनुसरण में उन्नत किए जाएंगे।
- (vi) भूमि भरण स्थल कम से कम 20-25 वर्षों तक चलने के लिए पर्याप्त रूप से बड़े होंगे तथा जल जमाव और दुरुपयोग को रोकने के लिए चरणबद्ध रीति से "भूमि भरण सेल" विकसित किए जाएंगे।
- (vii) भूमि भरण स्थल नदी से 100 मीटर, तालाब से 200 मीटर, राजमार्गों, आवास स्थलों, सार्वजनिक उद्यानों और जल आपूर्ति कुंओं से 200 मीटर तथा विमानपत्तनों या हवाई अड्डे से 20 किमी की दूरी पर होंगे। तथापि, विशेष मामले में, भूमि भरण स्थल को नागर विमानन प्राधिकरण/वायु सेना, जैसा भी मामला हो, से अनापत्ति प्रमाण पत्र प्राप्त कर लेने के बाद विमानपत्तन/हवाईअड्डे से 10 और 20 किमी की दूरी के अंदर स्थापित किया जा सकता है। तटीय विनियम जोन, नमभूमि, महत्वपूर्ण आवासीय क्षेत्रों, संवेदनशील पारि-भंगुर क्षेत्रों और गत 100 वर्षों से यथा दर्ज बाढ़ के मैदानों के अंदर भूमि भरण स्थल के लिए अनुमति नहीं दी जाएगी।
- (viii) भरण स्थल और ठोस अपशिष्ट के शोधन तथा निस्तारण के लिए स्थलों को नगर आयोजना विभाग की भूमि उपयोग योजनाओं में शामिल किया जाएगा।
- (ix) पांच टन प्रतिदिन से अधिक की संस्थापित क्षमता वाली ठोस अपशिष्ट प्रसंस्करण तथा निस्तारण सुविधा के आसपास गैर विकास का बफर जोन बनाए रखा जाएगा। इसका अनुरक्षण ठोस अपशिष्ट प्रसंस्करण तथा निस्तारण सुविधा के कुल क्षेत्र के अंदर किया जाएगा। बफर जोन का निर्धारण स्थानीय प्राधिकरण द्वारा संबंधित राज्य प्रदूषण नियंत्रण बोर्ड के परामर्श से मामला दर मामला आधार पर किया जाएगा।
- (x) जैव-चिकित्सीय अपशिष्ट का निपटान समय-समय पर यथा संशोधित जैव-चिकित्सीय अपशिष्ट प्रबंधन नियम, 2016 के अनुसार किया जाएगा। परिसंकटमय अपशिष्टों का प्रबंधन समय-समय पर यथासंशोधित परिसंकटमय और अन्य अपशिष्ट (प्रबंधन और सीमा-पारीय संचलन) नियम, 2016 के अनुसार किया जाएगा। ई-अपशिष्टों का प्रबंधन समय-समय पर यथासंशोधित ई-अपशिष्ट (प्रबंधन) नियम, 2016 के अनुसार किया जाएगा।

- (xi) अपशिष्ट प्रसंस्करण का कार्य न हो पाने और आपातकाल या प्राकृतिक आपदाओं के दौरान अपशिष्ट को रखने के लिए प्रत्येक भरण स्थल पर ठोस अपशिष्ट के लिए अस्थाई भंडारण सुविधा स्थापित की जाएगी।

ख. स्वास्थ्यकर भरण स्थलों पर सुविधाओं के विकास के लिए मानदंड :-

- (i) भूमि भरण स्थल पर चार-दीवारी या बाड़ होगी और अंदर आने वाले वाहनों की निगरानी करने, अनधिकृत व्यक्तियों तथा आवारा पशुओं के प्रवेश को रोकने के लिए उचित उपयुक्त दरवाजा लगाया जाएगा।
- (ii) वाहनों और अन्य मशीनरी का मुक्त संचलन सुनिश्चित करने के लिए पट्टुच और/आंतरिक सड़कें ठोस या पक्की बनाई जाएगी ताकि वाहनीय संचलन के कारण धूल कणों को उड़ने से रोका जा सके।
- (iii) भूमि भरण स्थल पर भूमि भरण के लिए लाए जाने वाले अपशिष्ट की मॉनीटरी करने के लिए अपशिष्ट निरीक्षण सुविधा, अभिलेख रखने के लिए कार्यालय सुविधा तथा प्रदूषण मॉनीटरी उपस्कर सहित उपस्कर और मशीनरी रखने के लिए आश्रय स्थल होंगे। सुविधा का प्रचालक अपशिष्ट प्राप्ति, प्रसंस्करण और निपटान का लेखा-जोखा रखेगा।
- (iv) भूमि भरण स्थल पर लाए जाने वाले अपशिष्ट की मात्रा को मापने के लिए धर्मकांटा, अग्नि सुरक्षा उपस्कर और अन्य सुविधाएं, जो भी अपेक्षित हों, जैसे प्रावधान किए जाएंगे।
- (v) पेयजल और स्वास्थ्य सुविधाओं (अधिमानतः कर्मचारों के लिए धोने/नहाने की सुविधाओं) जैसी उपयोगिताओं और सहज भूमि भरण प्रचालनों, जब रात्रि के समय किए जाते हैं, के लिए प्रकाश व्यवस्था का प्रावधान होगा।
- (vi) भूमि भरण स्थलों पर कार्मिकों के स्वास्थ्य की जांच सहित सुरक्षा प्रावधान किए जाएंगे।
- (vii) परिवहन वाहनों की पार्किंग और सफाई या धुलाई के लिए प्रावधान किए जाएंगे। इस प्रकार उत्पन्न मल जल का शोधन विनिर्दिष्ट मानकों को पूरा करने के लिए किया जाएगा।

ग. भूमि भरण प्रचालनों और भूमि भरण पूर्ण होने पर उनको बंद करने के विनिर्देशों के लिए मानदण्ड:-

- (i) अपशिष्ट का उच्च घनत्व प्राप्त करने के लिए भूमि भरण किए जाने वाले अपशिष्ट को भारी कम्पेक्टरों का प्रयोग करते हुए पतली परतों में संहत किया जाएगा। अधिक वर्षा वाले क्षेत्रों, जहां भारी कम्पेक्टरों का प्रयोग नहीं किया जा सकता, में वैकल्पिक उपाय अपनाए जाएंगे।
- (ii) अपशिष्टों को तत्काल या प्रत्येक कार्य दिवस के अंत में कम से कम 10 सेमी मिट्टी, अक्रिय मलबे या निर्माण सामग्री से उस समय तक ढक दिया जाएगा जब तक कि कम्पोस्टिंग या पुनर्चक्रण या ऊर्जा पुनर्प्राप्ति के लिए अपशिष्ट प्रसंस्करण सुविधाएं स्थापित न कर दी जाएं।
- (iii) मानसून ऋतु के आरंभ होने से पूर्व भूमि भरण स्थल पर मानसून के दौरान पानी के रिसाव को रोकने के लिए उचित संहनन और श्रेणीकरण के साथ 40-65 सेमी मोटी मिट्टी का मध्यवर्ती आवरण बिछा दिया जाएगा। भूमि भरण स्थल के प्रभावी क्षेत्र से पानी के बहाव को विपथित करने के लिए उचित निकास नालियों का निर्माण किया जाएगा।
- (iv) भूमि भरण स्थल के पूरा हो जाने के पश्चात उसके रिसाव और अपरदन को न्यूनतम करने के लिए अंतिम आवरण डिजाइन किया जाएगा। अंतिम आवरण निम्नलिखित विनिर्देशों के अनुसार होगा, अर्थात् -
- (क) अंतिम आवरण में 1×10^{-7} सेमी/सेकंड से कम के पारगम्यता गुणांक सहित 60 सेमी की चिकनी मिट्टी या शोधित मिट्टी से युक्त अवरोधक मिट्टी की परत होगी।

- (ख) अवरोधक मिट्टी की परत के ऊपर 15 सेमी की एक निकास परत होगी।
- (ग) निकास परत के ऊपर प्रकृतिजन्य पादपों की वृद्धि में सहायता करने और अपरदन को कम करने के लिए 45 सेमी की एक वनस्पतिक परत होगी।

घ. प्रदूषण निवारण के मानदंड.- भूमि भरण प्रचालनों से प्रदूषण समस्याओं को रोकने के क्रम में निम्नलिखित प्रावधान किए जाएंगे, अर्थात्-

- (i) तूफान जल नाले को इस तरीके से डिजाइन और निर्मित किया जाए कि सतही जल बहाव, भूमि भरण स्थल से विपथित हो जाए और ठोस अपशिष्ट स्थानों से निक्षालक, सतही जल बहाव में मिश्रित न हो। निक्षालक उत्पत्ति को कम करने और सतही जल के प्रदूषण को रोकने तथा बाढ़ और दलदली स्थितियों से बचने के लिए भी तूफान जल प्रवाह नालियों के विपथन का प्रावधान किया जाएगा।
- (ii) अपशिष्ट निपटान क्षेत्र के आधार और दीवारों पर गैर-पारगम्य लाइनिंग प्रणाली का निर्माण। ऐसी अपशिष्ट प्रसंस्करण सुविधाओं के अवशिष्ट अथवा मिश्रित अपशिष्ट या खतरनाक सामग्रियों (जैसे कि ऐरोसोल, ब्लीच, पालिश, बैटरी, अपशिष्ट तेल, पेंट उत्पाद और कीटनाशक) के संदूषण वाले अपशिष्ट को भरने के लिए प्रयुक्त होने वाले भरण स्थलों के लिए न्यूनतम लाइनर विनिर्देश, एक ऐसा मिश्र अवरोधक होगा जो 1.5 मिमी मोटी उच्च घनत्व वाली पॉलीईथाइलीन (एचडीपीई) जियो-मेम्ब्रेन या जियो-सिंथेटिक लाइनर या उसके समतुल्य होगा तथा मिट्टी (चिकनी अथवा शोधित मिट्टी) के 90 सेमी के ऊपर होगी तथा इसका पारगम्यता गुणांक 1×10^{-7} सेमी/सेकंड से अधिक नहीं होगा। जल सारणी का अधिकतम स्तर, भूमि भरण स्थलों के निचले भाग पर उपलब्ध कराई गई चिकनी अथवा शोधित मिट्टी के अवरोधक परत के आधार से कम से कम दो मीटर नीचे होगा।
- (iii) निक्षालकों के संग्रहण और शोधन सहित इनके प्रबंधन के लिए प्रावधान किए जाएंगे। शोधित निक्षालक, अनुसूची-II में निर्दिष्ट मानकों को पूरा करने के पश्चात् पुनर्चक्रित या उपयोग में लाए जाएंगे। अन्यथा इन्हें मलनिर्यास लाइन में विमुक्त कर दिया जाएगा। किसी भी हाल में निक्षालक को खुले वातावरण में विमुक्त नहीं किया जाएगा।
- (iv) भूमि भरण क्षेत्र से बहने वाले जल को किसी नाले, धारा, नदी, झील या तालाब में प्रवेश करने से रोकने की व्यवस्था की जाएगी। जल बहाव के निक्षालक या ठोस अपशिष्ट के साथ मिश्रित होने के मामले में, समस्त मिश्रित जल को संबंधित प्राधिकरण द्वारा शोधित किया जाएगा।

ड. जल गुणवत्ता मॉनीटरि के लिए मानदंड.-

- (i) किसी भूमि भरण स्थल को स्थापित करने से पूर्व, क्षेत्र में भूमि जल गुणवत्ता के मूलाधार आंकड़े एकत्रित किए जाएंगे और उन्हें भविष्य में संदर्भ के लिए रिकार्ड में रखा जाएगा। भूमि भरण स्थल की परिधि के 50 मीटर के अंदर भूमि जल गुणवत्ता को वर्ष में विभिन्न ऋतुओं अर्थात् ग्रीष्म, मानसून और मानसून-पश्च अवधि के दौरान आवधिक रूप से मॉनीटर किया जाएगा ताकि यह सुनिश्चित हो सके कि भू-जल, स्वीकार्य सीमा से अधिक संदूषित न हो।
- (ii) किसी भी प्रयोजन (पेय जल और सिंचाई सहित) के लिए भूमि भरण स्थलों में और उनके आस-पास भूमि जल के उपयोग पर उसकी गुणवत्ता को सुनिश्चित करने के बाद विचार किया जाएगा। मॉनीटरि प्रयोजन के लिए पेयजल गुणवत्ता हेतु निम्नलिखित विनिर्देश लागू होंगे, अर्थात् :-

क्र.सं.	पैरामीटर	आईएस 10500:2012, संस्करण 2.2 (2003-09) वांछनीय सीमा (मिग्रा/ली., पीएच को छोड़कर)
(1)	(2)	(3)
(1)	आर्सेनिक	0.01
(2)	कैडमियम	0.01
(3)	क्रोमियम (Cr ⁶⁺ के रूप में)	0.05
(4)	तांबा	0.05
(5)	साइनाइड	0.05
(6)	सीसा	0.05
(7)	पारा	0.001
(8)	निकल	-
(9)	नाइट्रेट, एनओ ₃ के रूप में	45.0
(10)	पीएच (pH)	6.5-8.5
(11)	लोहा	0.3
(12)	कुल कठोरता (सीएसीओ ₃ के रूप में)	300.0
(13)	क्लोराइड	250
(14)	विलीन ठोस	500
(15)	फेनोलिक यौगिक (सी ₆ एच ₅ ओएच के रूप में)	0.001
(16)	जस्ता	5.0
(17)	सल्फेट (एसओ ₄ के रूप में)	200

च. परिवेशी वायु गुणवत्ता की मानीटरी के लिए मानदंड. -

- (i) भूमि भरण स्थल पर दुर्गंध को कम करने, गैसों को अपस्थलीय फैलने से रोकने, पुनर्वासित भूमि भरण स्थल सतह पर उगाई गई वनस्पति को बचाने के लिए गैस संग्रहण प्रणाली सहित भूमि भरण गैस नियंत्रण प्रणाली संस्थापित की जाएगी। भूमि भरण गैस पुनर्प्राप्ति को बढ़ाने के लिए गैस संग्रहण कुओं के साथ आच्छादन प्रणालियों में जियो मेम्ब्रेन के प्रयोग पर विचार किया जाएगा।

- (ii) भूमि भरण स्थल पर निकलने वाली मीथेन गैस का सान्द्रण, निम्न विस्फोटक सीमा (एलईएल) के 25 प्रतिशत से अधिक नहीं होगा।
- (iii) किसी भूमि भरण स्थल पर संग्रहण सुविधा से प्राप्त भूमि भरण गैस का उपयोग व्यवहार्यता के अनुसार या तो सीधे तापीय अनुप्रयोगों या विद्युत उत्पादन में किया जाएगा। अन्यथा, भूमि भरण गैस को जला (प्रदीप्त) दिया जाएगा और सीधे वायुमंडल में या अवैध रूप से निकासी के लिए नहीं छोड़ा जाएगा। यदि इसका उपयोग या प्रदीप्त संभव न हो तो निष्क्रिय निकास की अनुमति दी जाएगी।
- (iv) भूमि भरण स्थल पर और इसके आसपास परिवेशी वायु गुणवत्ता के नियमित रूप से माँनीटरी की जाएगी। परिवेशी वायु गुणवत्ता औद्योगिक क्षेत्र के लिए केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा विहित मानकों के अनुसार होगी।

छ. भूमि भरण स्थल पर पौधरोपण के लिए मानदंड.- तैयार स्थल के ऊपर निम्नलिखित विनिर्देशों के अनुसार वनस्पतिक आवरण बनाया जाएगा, अर्थात् :

- (क) स्थानीय रूप से अंगीकृत अखाद्य बारहमासी पौधों, जो सूखे तथा अत्यधिक तापमान के प्रतिरोधी हैं, को उगाया जाएगा;
- (ख) पौधे ऐसे प्रजाति के होंगे कि उनकी जड़ें 30 सेमी से अधिक गहरी न हों। यह शर्त, भूमि भरण स्थल के स्थिर होने तक लागू रहेगी;
- (ग) चयनित पौधों में न्यूनतम पोषक वृद्धि के साथ न्यून-पोषक मिट्टी में पनपने की क्षमता होगी;
- (घ) मिट्टी के अपरदन को कम करने के लिए पर्याप्त घनत्व में पौधरोपण किया जाएगा;
- (ङ.) राज्य प्रदूषण नियंत्रण बोर्डों या प्रदूषण नियंत्रण समितियों के परामर्श से भूमि भरण स्थल की सीमा के चारों ओर हरित क्षेत्र विकसित किए जाएंगे।

ज. भूमि भरण स्थल पर पश्चात्कर्ती देखरेख के लिए मानदंड. - (1) भूमि भरण स्थल की बंदी-पश्च देखरेख कम से कम पंद्रह वर्षों के लिए की जाएगी और दीर्घकालिक माँनीटरी या देखरेख योजना निम्नलिखित से युक्त होगी, अर्थात् :-

- (क) सबसे ऊपरी परत की अखंडता और प्रभाविता को बनाए रखना, मरम्मत करते रहना तथा सबसे ऊपरी परत को अपरदन या अन्य प्रकार के नुकसान के जारी रहने और बहने को रोकना;
- (ख) अपेक्षानुसार निक्षालक संग्रहण प्रणाली की माँनीटरी करना;
- (ग) भरण स्थल में और इसके आसपास भू-जल की माँनीटरी करना;
- (घ) मानकों के अनुरूप भूमि भरण गैस संग्रहण प्रणाली का अनुरक्षण और प्रचालन करना।

(2) पंद्रह वर्ष की बंदी-पश्च माँनीटरी के बाद बंद पड़े भूमि भरण स्थलों के उपयोग पर मानव बस्ती या अन्यथा प्रयोग किए जाने के बारे में यह सुनिश्चित करने के बाद ही विचार किया जाएगा कि गैसीय उत्सर्जन और निक्षालक गुणवत्ता विश्लेषण, विनिर्दिष्ट मानकों के अनुपालन में हैं और मृदा स्थिरता सुनिश्चित की गई है।

झ. पहाड़ी क्षेत्रों के लिए विशेष प्रावधानों हेतु मानदंड - पहाड़ों पर बसे नगरों और शहरों में स्थानीय प्राधिकरण द्वारा संबंधित राज्य बोर्ड या प्रदूषण नियंत्रण समिति के अनुमोदन से ठोस अपशिष्ट के अंतिम निपटान के लिए विकसित की गई स्थान-विशिष्ट पद्धतियां अपनाई जाएंगी। नगरपालिका प्राधिकरण जैवअवक्रमणीय जैविक अपशिष्ट को उपयोगी बनाने के लिए प्रसंस्करण सुविधाएं स्थापित करेगा। गैर-जैवअवक्रमणीय पुनर्चक्रण योग्य सामग्रियों का भण्डारण किया जाएगा और

इन्हें पुनर्चक्रण के लिए आवधिक रूप से भेजा जाएगा। अक्रिय और गैर-जैवअवक्रमणीय अपशिष्ट का उपयोग, सड़कें बनाने या पहाड़ों पर उपयुक्त क्षेत्रों की भराई करने के लिए किया जाएगा। पहाड़ी क्षेत्रों में पर्याप्त भूमि प्राप्त करने में आ रही कठिनाईयों के कारण सड़क पर बिछाने या भराई के लिए उपयुक्त न पाए गए अपशिष्ट का निपटान मैदानी क्षेत्रों में क्षेत्रीय भरण स्थलों में किया जाएगा।

ब. पुराने मलबा स्थलों को बंद और बहाल करना - ठोस अपशिष्ट के मलबा स्थल जिन्होंने अपनी क्षमता पूरी कर ली है या नए और उपयुक्त रूप से डिजाइन किए गए भरण स्थलों की स्थापना के बाद जिनमें अतिरिक्त अपशिष्ट नहीं डाले जाते हैं, उन्हें बंद कर दिया जाना चाहिए और निम्नलिखित विकल्पों की जांच करने के बाद बहाली की जानी चाहिए :

- (i) जैव खनन और अपशिष्ट प्रसंस्करण द्वारा अपशिष्ट को कम करना जिसके बाद नए भरण स्थलों या नीचे (ii) के अनुसार आच्छादन में अवशिष्टों को रखा जाएगा।
- (ii) ग्रीन हाऊस गैसों के संग्रहण और चमकाने/उपयोग में समर्थ बनाने के लिए ठोस अपशिष्ट आवरण या जियो मेम्ब्रेन से संवर्धित ठोस अपशिष्ट आवरण से आच्छादित किया जाना।
- (iii) ऊपर (ii) के अनुसार अतिरिक्त उपायों (जलोढ़ और अन्य खुरदरी दानेदार मिट्टियों में) जैसे संदूषित भू-जल को निकालने और शोधित करने के लिए कट-ऑफ वॉल और निष्कर्षण कुओं में आच्छादन।
- (iv) स्वीकार्य स्तर तक पर्यावरणीय प्रभाव को कम करने के लिए उपयुक्त कोई अन्य पद्धति।

अनुसूची II

[नियम 16(1), (ख), (ड.), 16(4) देखें]

ठोस अपशिष्ट के प्रसंस्करण और शोधन के मानक

क. खाद के मानक.- अपशिष्ट प्रसंस्करण सुविधाओं में जैव अवक्रमणीय अपशिष्ट के प्रसंस्करण हेतु प्रौद्योगिकियों में से एक के रूप में कंपोस्टिंग शामिल होगा। कंपोस्ट संयंत्र से होने वाले प्रदूषण को रोकने के उद्देश्य से निम्नलिखित का पालन किया जाएगा अर्थात् :

- (क) स्थल पर पहुंचने वाले जैविक अपशिष्ट का आगे के प्रसंस्करण से पूर्व समुचित रखरखाव किया जाएगा। जहां तक संभव हो, अपशिष्ट भण्डारण क्षेत्र ढका हुआ होना चाहिए। यदि ऐसा भण्डारण खुले में किया गया हो तो निक्षालक शोधन और निपटान सुविधा तक पहुंचने वाले पंक्तिबद्ध तालों में निक्षालक और सतही जल बहाव को एकत्रित करने की सुविधा के साथ अपारगम्य आधार उपलब्ध कराया जाना चाहिए;
- (ख) गंध, मक्खियों, कृंतकों, पक्षी के खतरे और आग के जोखिम की बाधा को कम करने के लिए आवश्यक सावधानियां बरती जाएंगी;
- (ग) संयंत्र के ब्रेकडाउन या रखरखाव के मामले में, अपशिष्ट अंतर्ग्राही को बंद कर दिया जाएगा और अपशिष्ट को अस्थायी प्रसंस्करण स्थल या अस्थायी भूमि भरण स्थलों की दिशा में विपथित करने की व्यवस्था की जाएगी, जिनका संयंत्र के ठीक-ठाक हो जाने पर पुनः प्रसंस्करण किया जाएगा;
- (घ) प्रसंस्करण सुविधा से प्रक्रिया पूर्व और प्रक्रिया-पश्च अवशिष्टों को नियमित आधार पर हटा दिया जाएगा और स्थल पर इकट्ठा नहीं होने दिया जाएगा। पुनर्चक्रण योग्य सामग्री, उपयुक्त विक्रेताओं के माध्यम से भेजी जाएगी। गैर-पुनर्चक्रण योग्य उच्च तापजनक अंशों को पृथक किया जाएगा और सीमेंट संयंत्रों में या विद्युत संयंत्रों को आरडीएफ उत्पादन, सह-प्रसंस्करण के लिए भेजा जाएगा। भूमि भरण स्थलों में केवल सभी प्रक्रियाओं के अवशिष्ट भेजे जाएंगे।

- (ड.) अपारगम्य आधार के साथ विंड्रो क्षेत्र उपलब्ध कराया जाएगा। ऐसा आधार बजरी या ठोस चिकनी मिट्टी, 50 सेमी मोटी, जिसका पारगम्यता गुणांक 10^{-7} सेमी/सेकंड से कम हो, का बनाया जाएगा। आधार में 1 से 2 प्रतिशत ढाल होगी और निक्षालक या सतही बहाव का संग्रहण करने के लिए इसकी चारों तरफ नालियों का घेरा होगा।
- (च) परिवेशी वायु गुणवत्ता की नियमित रूप से मॉनीटरी की जाएगी। प्रसंस्करण संयंत्र की बाहरी दीवार पर या नीचे की हवा की दिशा में गंध की समस्या की भी नियमित रूप से जांच की जाएगी।
- (छ) नमी बनाए रखने के लिए खाद संयंत्र में निक्षालक को पुनःपरिचालित किया जाएगा।
- (ज) अंतिम उत्पाद खाद, समय-समय पर अधिसूचित उर्वरक नियंत्रण आदेश के अंतर्गत विनिर्दिष्ट मानकों के अनुसार होगा।
- (झ) खाद का सुरक्षित अनुप्रयोग सुनिश्चित करने हेतु खाद गुणवत्ता के लिए निम्नलिखित विनिर्देशों को पूरा किया जाएगा, अर्थात् :-

पैरामीटर	जैविक खाद (एफसीओ 2009)	फॉस्फेट संपन्न जैविक खाद (एफसीओ 2013)
(1)	(2)	(3)
आर्सेनिक (मिग्रा/किग्रा)	10.00	10.00
कैडमियम (मिग्रा/किग्रा)	5.00	5.00
क्रोमियम (मिग्रा/किग्रा)	50.00	50.00
तांबा (मिग्रा/किग्रा)	300.00	300.00
सीसा (मिग्रा/किग्रा)	100.00	100.00
पारा (मिग्रा/किग्रा)	0.15	0.15
निकल (मिग्रा/किग्रा)	50.00	50.00
जस्ता (मिग्रा/किग्रा)	1000.00	1000.00
सी/एन अनुपात	<20	20:1 से कम
पीएच (pH)	6.5-7.5	(1:5 घोल) अधिकतम 6.7
नमी, भार का प्रतिशत, अधिकतम	15.0-25.0	25.0
थोक घनत्व (ग्राम/सेमी ³)	<1.0	1.6 से कम
कुल जैविक कार्बन, भार द्वारा प्रतिशत, न्यूनतम	12.0	7.9
कुल नाइट्रोजन (एन के रूप में), भार द्वारा प्रतिशत, न्यूनतम	0.8	0.4

कुल फॉस्फेट (पी ₂ ओ ₅ के रूप में) भार द्वारा प्रतिशत, न्यूनतम	0.4	10.4
कुल पोटेशियम (के ₂ ओ के रूप में), भार द्वारा प्रतिशत, न्यूनतम	0.4	-
रंग	गहरे भूरे से काले तक	-
गंध	बदबू की अनुपस्थिति	-
कण आकार	कम से कम 90% सामग्री, 4.0 मिमी आईएस छलनी से होकर गुजरनी चाहिए	कम से कम 90% सामग्री, 4.0 मिमी आईएस छलनी से होकर गुजरनी चाहिए
प्रवाहकत्व (डीएसएम-1 के रूप में), से कम	4.0	8.2

*उपरोक्त कथित संकेन्द्रण सीमाओं से अधिक वाली खाद (अंतिम उत्पाद) का उपयोग खाद्य फसलों के लिए नहीं किया जाएगा। तथापि, इसका उपयोग खाद्य फसलों को उगाने से भिन्न प्रयोजनों के लिए किया जा सकता है।

ख. शोधित निक्षालकों के लिए मानक. - शोधित निक्षालकों के निपटान में निम्नलिखित मानकों का पालन किया जाएगा, अर्थात्:-

क्र.सं.	मापदंड	मानक (निपटान का तरीका)		
		अंतर्देशीय सतही जल	सार्वजनिक सीवर	भूमि निपटान
(1)	(2)	(3)	(4)	(5)
1.	निलंबित ठोस, मिग्रा/ली, अधिकतम	100	600	200
2.	विलीन ठोस (अजैविक), मिग्रा/ली, अधिकतम	2100	2100	2100
3.	पीएच (ph) मान	5.5 से 9.0	5.5 से 9.0	5.5 से 9.0
4.	अमोनिकल नाइट्रोजन (एन के रूप में) मिग्रा/ली., अधिकतम	50	50	--
5.	कुल केलडाल नाइट्रोजन (एन के रूप में) मिग्रा/ली, अधिकतम	100	--	--

6.	जैव रासायनिक ऑक्सीजन मांग (27 ⁰ से. पर 3 दिन) अधिकतम (मिग्रा/ली)	30	350	100
7.	रासायनिक ऑक्सीजन मांग, मिग्रा/ली, अधिकतम	250	--	--
8.	आर्सेनिक (एएस के रूप में), मिग्रा/ ली, अधिकतम	0.2	0.2	0.2
9.	पारा (एचजी के रूप में), मिग्रा/ली, अधिकतम	0.01	0.01	--
10.	सीसा (पीबी के रूप में), मिग्रा/ली, अधिकतम	0.1	1.0	--
11.	कैडमियम (सीडी के रूप में), मिग्रा/ली, अधिकतम	2.0	1.0	--
12.	कुल क्रोमियम (सीआर के रूप में), मिग्रा/ली, अधिकतम	2.0	2.0	--
13.	तांबा (सीयू के रूप में), मिग्रा/ली, अधिकतम	3.0	3.0	--
14.	जस्ता ((जेडएन के रूप में), मिग्रा/ली, अधिकतम	5.0	15	--
15.	निकल (एनआई के रूप में), मिग्रा/ली, अधिकतम	3.0	3.0	--
16.	साइनाइड (सीएन के रूप में), मिग्रा/ली, अधिकतम	0.2	2.0	0.2
17.	क्लोराइड (सीएल के रूप में), मिग्रा/ली, अधिकतम	1000	1000	600
18.	फ्लोराइड (एफ के रूप में), मिग्रा/ली, अधिकतम	2.0	1.5	--
19.	फेनोलिक यौगिक (सी ₆ एच ₅ ओएच के रूप में), मिग्रा/ली, अधिकतम	1.0	5.0	--

नोट : आंतरिक सतही जल-निकायों में शोधित निक्षालकों को बहाते समय, बहाए जाने वाले निक्षालकों की मात्रा और प्राप्त करने वाले जल निकाय में उपलब्ध मिश्रित जल की मात्रा पर उचित रूप से ध्यान दिया जाएगा ।

ग. **भस्मीकरण के मानक :** ठोस अपशिष्ट शोधन/निपटान सुविधा में भस्मकों/ताप प्रौद्योगिकियों से होने वाले उत्सर्जन में निम्नलिखित मानकों का अनुपालन किया जाएगा, अर्थात् :

मानदण्ड	उत्सर्जन मानक	
	(1)	(2)
विविक्त-कण	50 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
एचसीएल	50 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
एसओ ₂	200 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
सीओ	100 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
	50 मिग्रा/एनएम ³	मानक का अर्थ दैनिक औसत मान से है
कुल जैविक कार्बन	20 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
एचएफ	4 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
एनओएक्स (एनओ ₂ के रूप में व्यक्त एनओ और एनओ ₂)	400 मिग्रा/एनएम ³	मानक का अर्थ आधे घंटे के औसत मान से है
कुल डाइऑक्साइड और फ्यूरेन	0.1 एनजी टीईक्यू/एनएम ³	मानक का अर्थ 6-8 घंटे के नमूने से है। कृपया कुल विषाक्त समतुल्यता प्राप्त करने के लिए विषाक्त समतुल्यता मानों हेतु 17 संबंधित समप्रकारी वस्तु के दिशानिर्देशों का संदर्भ लें।
सीडी+टीएच+उनके यौगिक	0.05 एमजी/एनएम ³	मानक का अर्थ 30 मिनट और 8 घंटे के बीच कहीं भी नमूना लिए गए समय से है।
एचजी और इसके यौगिक	0.05 एमजी/एनएम ³	मानक का अर्थ 30 मिनट और 8 घंटे के बीच कहीं भी नमूना लिए गए समय से है।
एसबी+एस+पीबी+सीआर+ सीओ+सीयू+एमएन+एनआई+वी+ उनके यौगिक	0.5 एमजी/एनएम ³	मानक का अर्थ 30 मिनट और 8 घंटे के बीच कहीं भी नमूना लिए गए समय से है।
नोट : सभी मानों में शुष्क आधार पर 11% ऑक्सीजन तक शुद्धि की गई है।		

टिप्पणी :

- (क) उपरोक्त उत्सर्जन सीमाओं को प्राप्त करने के लिए भस्मीकरण यंत्र के साथ उपयुक्त प्रकार के डिजाइन किए गए प्रदूषण नियंत्रण उपकरण संस्थापित या पुनःसंयोजित किए जाएंगे।
- (ख) भस्मीकृत किए जाने वाले अपशिष्ट को किसी क्लोरीनयुक्त कीटाणुनाशक के साथ रासायनिक तरीके से शोधित नहीं किया जाएगा।

- (ग) क्लोरीनयुक्त प्लास्टिक के भस्मीकरण को दो वर्षों के अंदर क्रमबद्ध रूप से समाप्त किया जाएगा।
- (घ) यदि भस्मीकरण राख में विषाक्त धातुओं की सांद्रता समय-समय पर यथासंशोधित परिसंकटमय अपशिष्ट (प्रबंधन, हथालन और सीमा-पारीय संचलन) नियम, 2008 में यथाविनिर्दिष्ट सीमाओं से अधिक हो तो ऐसे राख को परिसंकटमय अपशिष्ट शोधन, भंडारण और निपटान सुविधा को भेजा जाएगा।
- (ङ.) भस्मीकरण-यंत्र में ईंधन के रूप में केवल एलडीओ, एलएसएचएस, डीजल, बायोमास, कोयला, एलएनजी, सीएनजी, आरडीएफ और बायोगैस जैसे निम्न सल्फर ईंधन का ही प्रयोग किया जाएगा।
- (च) अधोवायु गैस में सीओ₂ संकेन्द्रण 7% से अधिक नहीं होगा।
- (छ) ट्विन चैम्बर भस्मीकरण-यंत्रों में सभी सुविधाएं इस प्रकार से डिजाइन की जाएंगी कि द्वितीय ज्वलन चैम्बर में 950° से. के न्यूनतम तापमान को प्राप्त करने के लिए और 2 (दो) सेकंड से अधिक के द्वितीय ज्वलन चैम्बर में गैस रह सके।
- (ज) भस्मीकरण संयंत्र (दहन चैम्बर) ऐसे तापमान, अवधारण समय और विक्षोभ के साथ परिचालित किए जाएंगे ताकि लावा और तलहटी राखों में कुल जैविक कार्बन (टीओसी) तत्व को 3% से कम किया जा सके या प्रज्वलन पर उनकी क्षति सूखे वजन के 5% से कम हो।
- (झ) स्थलों से निकलने वाली गंध का प्रबंधन केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा समय-समय पर जारी मार्गदर्शी सिद्धांतों के साथ किया जाएगा।

प्ररूप -I

[नियम 15 (म), 16(1)(ग), 21(3) देखें]

**ठोस अपशिष्ट के प्रसंस्करण/पुनर्चक्रण/शोधन और निपटान के लिए
ठोस अपशिष्ट प्रबंधन नियमों के अंतर्गत प्राधिकार प्राप्त करने के लिए आवेदन**

सेवा में,

..... के

सदस्य सचिव

राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति

महोदय,

मैं/हम ठोस अपशिष्ट के प्रसंस्करण, पुनर्चक्रण, शोधन और निपटान के लिए ठोस अपशिष्ट नियम, 2016 के अंतर्गत प्राधिकार के लिए एतद्वारा आवेदन करता हूँ/करते हैं।

1.	उनके/सुविधा के प्रचालक द्वारा नियुक्त स्थानीय निकाय/अभिकरण का नाम	
2.	पत्राचार का पता दूरभाष सं. फैक्स सं.	

	ई-मेल	
3.	नोडल अधिकारी और पदनाम (प्रसंस्करण/शोधन या निपटान सुविधा के प्रचालन के लिए उत्तरदायी स्थानीय निकाय या अभिकरण द्वारा प्राधिकृत अधिकारी)	
4.	सुविधा की स्थापना करने और प्रचालन के लिए अपेक्षित प्राधिकार (कृपया निशान लगाएं)	i. अपशिष्ट प्रसंस्करण ii. पुनर्चक्रण iii. शोधन iv. भूमि भरण स्थल पर निपटान
5.	इन दस्तावेजों की प्रतियां संलग्न करें	i. स्थल स्वीकृति (स्थानीय प्राधिकरण) ii. पर्यावरणीय स्वीकृति का प्रमाण iii. स्थापना के लिए अनुमति iv. नगरपालिका प्राधिकरण और प्रचालन अभिकरण के बीच करार v. परियोजना में निवेश और अपेक्षित आय
6.	ठोस अपशिष्ट का प्रसंस्करण/पुनर्चक्रण/शोधन i. प्रतिदिन प्रसंस्करित अपशिष्ट की कुल मात्रा क) पुनर्चक्रित किए जाने वाले अपशिष्ट की मात्रा ख) शोधित किए जाने वाले अपशिष्ट की मात्रा ग) भूमिभरण स्थल में निपटाए जाने वाले अपशिष्ट की मात्रा ii. प्रसंस्करित अपशिष्ट के लिए उपयोगिता कार्यक्रम (उत्पाद उपयोग) iii. निपटान के लिए कार्य-पद्धति (ब्यौरा संलग्न करें) क) निक्षालक की मात्रा ख) निक्षालक के लिए शोधन प्रौद्योगिकी iv. पर्यावरणीय प्रदूषण के निवारण और नियंत्रण के लिए किए जाने वाले उपाय v. संयंत्र में कार्यरत कर्मकारों की सुरक्षा के लिए किए जाने वाले उपाय vi. ठोस अपशिष्ट प्रसंस्करण/पुनर्चक्रण/शोधन/	

	निपटान सुविधा संबंधी ब्यौरा (संलग्न किया जाए)	
7.	ठोस अपशिष्ट का निपटान अभिज्ञात स्थलों की संख्या प्रतिदिन निपटाए जाने वाले अपशिष्ट की मात्रा स्थल चयन के लिए अपनाई गई कार्य-पद्धति या मानदण्ड का ब्यौरा (संलग्न करें) प्रचालन के अंतर्गत विद्यमान स्थल का ब्यौरा भूमि भरण की कार्य-पद्धति और प्रचालनात्क ब्यौरा पर्यावरणीय प्रदूषण को रोकने के लिए किए गए उपाय	
8.	कोई अन्य सूचना	

हस्ताक्षर :.....

पदनाम

तारीख :

स्थान :

प्ररूप-II

[नियम 16(1)(ड.) देखें]

प्राधिकार जारी करने के लिए प्रपत्र

फाइल सं. : _____

दिनांक : _____

प्राधिकार सं. : _____

सेवा में,

संदर्भ : आपका आवेदन सं. _____ दिनांक _____

_____ राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति द्वारा प्रस्ताव का परीक्षण करने के पश्चात _____ को जिनका प्रशासनिक कार्यालय _____ में है, पर अपशिष्ट प्रसंस्करण/पुनर्चक्रण/शोधन/ निपटान सुविधा स्थापित और प्रचालित करने के लिए प्राधिकृत किया जाता है।

यह प्राधिकार ठोस अपशिष्ट के प्रसंस्करण, पुनर्चक्रण, शोधन और निपटान के लिए सुविधा के प्रचालन हेतु प्रदान किया जाता है।

यह प्राधिकार नीचे उल्लिखित निबंधन एवं शर्तों और इन नियमों में अन्यथा यथानिर्दिष्ट ऐसी शर्तों और इन नियमों के अंतर्गत अनुसूचियों I और II में विनिर्धारित मानकों के अध्वधीन है।

_____ राज्य प्रदूषण नियंत्रण बोर्ड/संघ राज्य क्षेत्र प्रदूषण नियंत्रण समिति द्वारा किसी भी समय, प्राधिकार के अंतर्गत लागू किसी शर्त को रद्द किया जा सकता है और इसकी लिखित सूचना दी जाएगी।

ठोस अपशिष्ट प्रबंधन नियम, 2016 के उपबंध का उल्लंघन होने पर पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) के दंडात्मक उपबंध लागू होंगे।

दिनांक :

(सदस्य सचिव)

स्थान :

राज्य प्रदूषण नियंत्रण बोर्ड/संघ राज्य क्षेत्र

प्रदूषण नियंत्रण समिति

(हस्ताक्षर और पदनाम)

प्ररूप-III

[नियम 19(6), 24(1) देखें]

सुविधा के प्रचालक द्वारा स्थानीय निकाय को प्रस्तुत किए जाने के लिए वार्षिक रिपोर्ट का प्रपत्र

1.	शहर/नगर का नाम	
2.	जनसंख्या	
3.	क्षेत्रफल वर्ग किलो मीटर में	
4.	स्थानीय निकाय का नाम और पता दूरभाष सं. फैक्स ई-मेल :	
5.	सुविधा के प्रचालक का नाम और पता	
6.	सुविधा के प्रभारी अधिकारी का नाम दूरभाष सं. फैक्स ई-मेल :	

7.	शहर/नगर में परिवारों की संख्या शहर में गैर आवासीय परिसरों की संख्या शहर/नगर में चुनाव/प्रशासनिक वार्डों की संख्या	
8.	ठोस अपशिष्ट की मात्रा	
	प्रति दिन स्थानीय निकाय के क्षेत्र में उत्पन्न ठोस अपशिष्ट की अनुमानित मात्रा मीट्रिक टन में	/टीपीडी
	प्रतिदिन संग्रहित ठोस अपशिष्ट की मात्रा	/टीपीडी
	प्रतिदिन संग्रहित प्रति व्यक्ति अपशिष्ट	/ग्रा./दिन
	प्रसंसकृत ठोस अपशिष्ट की मात्रा	/टीपीडी
	भरण स्थल पर निपटान किए गए ठोस अपशिष्ट की मात्रा	/टीपीडी
9.	ठोस अपशिष्ट प्रबंधन सेवा की स्थिति	
	स्रोत पर अपशिष्ट का पृथक्करण और भंडारण	हां/नहीं
	क्या घरेलू/वाणिज्यिक/संस्थागत बिनों में स्रोत पर ठोस अपशिष्ट का भंडारण किया जाता है, यदि हां	%
	घरेलू बिनों में स्रोत पर अपशिष्ट के भंडारण की घरेलू रीति की प्रतिशतता	%
	वाणिज्यिक/संस्थागत बिनों में स्रोत पर अपशिष्ट का गैर आवासीय परिसरों में भंडारण करने की प्रतिशतता	%
	गलियों में घरों के ठोस अपशिष्ट का निपटान करने या फेंकने की प्रतिशतता	%
	गलियों में गैर आवासीय परिसरों के ठोस अपशिष्ट का निपटान करने या फेंकने की प्रतिशतता	%
	क्या ठोस अपशिष्ट को स्रोत पर पृथक्कृत स्वरूप में भंडारित किया जाता है	हां/नहीं
	यदि हां, तो स्रोत पर अपशिष्ट का पृथक्करण करने वाले परिसरों की प्रतिशतता	%
	ठोस अपशिष्ट का घर-घर जाकर संग्रहण	
	क्या शहर/नगर में ठोस अपशिष्ट का घर-घर जाकर संग्रहण किया जाता है	हां/नहीं
	यदि हां, तो अपशिष्ट के घर-घर जाकर संग्रहण किए जाने में शामिल वार्डों की संख्या	
	शामिल किए गए घरों की संख्या	
	शामिल किए गए वाणिज्यिक संस्थापनाओं, होटलों, रेस्तराओं, शैक्षिक संस्थाओं/कार्यालय इत्यादि सहित गैर आवासीय परिसरों की संख्या	
	निम्न के माध्यम से घर-घर जाकर संग्रहण किए जाने में शामिल आवासीय और गैर आवासीय परिसरों की प्रतिशतता : मोटरकृत वाहन कंटेनरकृत तिपहिया साइकिल/हैंड कार्ट अन्य साधन	

		%			
		%			
		%			
यदि नहीं, तो संग्रहण में अपनाई गई प्राथमिक पद्धति					
गलियों में झाड़ू लगाया जाना					
शहर में सड़कों, गलियों, लेनों, बाइलेनों की लम्बाई जिनकी सफाई किए जाने की आवश्यकता है		कि.मी.			
गली में झाड़ू लगाए जाने की बारंबारता और लाभान्वित जनसंख्या की प्रतिशतता	बारंबारता	रोजाना	एकांतर दिवस पर	सप्ताह में दो बार	कभी-कभी
	लाभान्वित जनसंख्या की प्रतिशतता				
प्रयुक्त साधन		%			
हाथ से झाड़ू लगाया जाना		%			
यांत्रिक रूप से झाड़ू लगाया जाना					
क्या सफाई कर्मचारियों द्वारा लंबी हैंडल वाले झाड़ू का प्रयोग किया जाता है		हां/नहीं			
क्या प्रत्येक सफाई कर्मचारी को अपशिष्ट का संग्रहण करने के लिए हैंडकार्ट/तिपहिया साइकिल दी जाती है		हां/नहीं			
क्या हैंडकार्ट/तिपहिया साइकिल में कंटेनर लगा है		हां/नहीं			
क्या संग्रहण का साधन प्रयोग किए गए संग्रहण/अपशिष्ट भंडारण के कंटेनरों समकालिक है		हां/नहीं			
द्वितीयक अपशिष्ट भंडारण सुविधाएं					
शहर/नगर में अपशिष्ट भंडारण डिपो की संख्या और प्रकार खुले अपशिष्ट भंडारण स्थल चिनाई किए गए बिन		संख्या क्षमता घन मीटर में			

सीमेंट कंक्रीट सिलिंडर के बिन ढलाव/ढके हुए कक्ष/स्थान ढके हुए धातु/प्लास्टिक के कंटेनर 1.1 घन मीटर तक के बिन 2 से 5 घन मीटर के बिन 5 घन मीटर से बड़े कंटेनर बिन रहित शहर		
बिन/जनसंख्या अनुपात		
अपशिष्ट भंडारण डिपो का वार्डवार विवरण (संलग्न करें) : वार्ड सं. : क्षेत्रफल : जनसंख्या : रखे हुए बिनों की संख्या रखे गए बिनों का कुल आयतन		
अपशिष्ट भंडारण सुविधाओं की कुल भंडारण क्षमता घन मीटर में		
अपशिष्ट भंडारण डिपो में प्रतिदिन वास्तविक रूप से भंडारित कुल अपशिष्ट		
डिपो से अपशिष्ट के संग्रहण की बारंबारता बताएं साफ किए गए बिनों की संख्या	बारंबारता	बिनों की संख्या
	प्रतिदिन	
	एकांतर दिवस	
	सप्ताह में दो बार	
	सप्ताह में एक बार	
	कभी-कभी	
क्या भंडारण डिपो में पृथक्कृत अपशिष्ट को हरे, नीले और काले बिनों में भंडार करके रखने की सुविधा है	हां/नहीं (यदि हां तो विवरण दें) हरे बिनों की संख्या : नीले बिनों की संख्या : काले बिनों की संख्या :	
भंडारण डिपो से ठोस अपशिष्ट उठाने का कार्य हाथ से किया जाता है		

या यांत्रिक तरीके से? प्रतिशत बताएं ठोस अपशिष्ट को हाथ से उठाए जाने की प्रतिशतता यांत्रिक तरीके से उठाने की प्रतिशतता	% %
यदि यांत्रिक है तो प्रयुक्त पद्धति का स्पष्ट उल्लेख करें	फ्रंट-एंड लोडर/टॉप लोडर
क्या ठोस अपशिष्ट को घर-घर से उठाया जाता है और पृथक्कृत स्वरूप में सीधे शोधन संयंत्र तक भेजा जाता है	हां/नहीं (यदि हां तो स्पष्ट उल्लेख करें)
प्रतिदिन अपशिष्ट का परिवहन प्रयोग किए गए वाहनों का प्रकार और संख्या (कृपया टिक करें या जोड़ें) पशु गाड़ी ट्रैक्टर नॉन टीपिंग ट्रक टीपिंग ट्रक डम्पर प्लेसर अवशिष्ट संग्राहक कम्पैक्टर अन्य जेसीबी - लोडर	अपशिष्ट का परिवहन करने में लगाए गए फेरों की संख्या
अपशिष्ट के परिवहन की बारंबारता	बारंबारता परिवहन किए गए अपशिष्ट का प्रतिशत प्रतिदिन एकांतर दिवस पर सप्ताह में दो बार सप्ताह में एक बार कभी-कभी
प्रत्येक दिन परिवहन किए गए अपशिष्ट की मात्रा	/टीपीडी
प्रतिदिन परिवहन किए गए कुल अपशिष्ट की प्रतिशतता	%
प्रयोग की गई अपशिष्ट शोधन प्रौद्योगिकियां	
क्या ठोस अपशिष्ट का प्रसंस्करण किया जाता है	हां/नहीं

यदि हां, तो प्रतिदिन प्रसंस्करण किए गए अपशिष्ट की मात्रा	/टीपीडी
अपशिष्ट प्रसंस्करण के लिए स्थानीय निकाय के पास उपलब्ध भूमि (हेक्टेयर में)	
अपशिष्ट प्रसंस्करण के लिए वर्तमान में प्रयुक्त भूमि	
प्रचालनरत ठोस अपशिष्ट प्रसंस्करण सुविधाएं	
निर्माणाधीन ठोस अपशिष्ट प्रसंस्करण सुविधाएं	
शहर/नगर की सीमा से प्रसंस्करण सुविधाओं की दूरी	
अपनाई गई प्रौद्योगिकियों का विवरण	
कंपोस्टिंग	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
वर्मी कंपोस्टिंग	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
बायो-मिथेनेशन	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
अवशिष्ट जनित ईंधन	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
अपशिष्ट से ऊर्जा प्रौद्योगिकी जैसे कि भष्मीकरण, गैसीकरण, पाइरोलेसिस या कोई अन्य प्रौद्योगिकी (विवरण दें)	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
सह-प्रसंस्करण	प्रसंस्करण की गई कच्ची सामग्री
सीमेंट संयंत्र को आपूर्तित दहनशील अपशिष्ट	

	ठोस अपशिष्ट आधारित विद्युत संयंत्रों को आपूर्ति दहनशील अपशिष्ट	
	अन्य	मात्रा
	ठोस अपशिष्ट निपटान सुविधाएं	
	स्थानीय निकाय के पास उपलब्ध मलबा स्थलों की संख्या	
	स्थानीय निकाय के पास उपलब्ध स्वास्थ्यकर भरण स्थलों की संख्या	
	अपशिष्ट के निपटान हेतु उपलब्ध ऐसे प्रत्येक स्थल का क्षेत्रफल	
	अपशिष्ट के निपटान के लिए वर्तमान में प्रयुक्त भूमि का क्षेत्रफल	
	शहर/नगर से मलबा स्थल/भरण सुविधा की दूरी	कि.मी.
	निकटतम वसावट से दूरी	कि.मी.
	जल निकाय से दूरी	कि.मी.
	राज्य/राष्ट्रीय राजमार्ग से दूरी	कि.मी.
	विमानपत्तन से दूरी	कि.मी.
	महत्वपूर्ण धार्मिक स्थलों या ऐतिहासिक स्मारक से दूरी	कि.मी.
	क्या यह बाढ़ संभावित क्षेत्र में पड़ता है	हां/नहीं
	क्या यह भूकंप संभावित क्षेत्र में पड़ता है	हां/नहीं
	प्रत्येक दिन भरण में डाले गए अपशिष्ट की मात्रा	टीपीडी
	क्या भरण स्थल को घेरा गया है	हां/नहीं
	क्या स्थल पर रोशनी की सुविधा उपलब्ध है	हां/नहीं
	क्या धर्मकांटा सुविधा उपलब्ध है	हां/नहीं
	भरण स्थल पर प्रयुक्त वाहन और उपकरण (स्पष्ट करें)	उपलब्ध बुलडोजर, कम्पैक्टर इत्यादि
	भरण स्थल पर नियोजित जनशक्ति	हां/नहीं (यदि हां तो विवरण संलग्न करें)
	क्या ढकने का काम दैनिक आधार पर किया जाता है	हां/नहीं
	यदि नहीं, तो भरण स्थल पर जमा अपशिष्ट को ढकने की बारंबारता	
	ढकने के लिए प्रयुक्त सामग्री	
	क्या ढकने की पर्याप्त सामग्री उपलब्ध है	हां/नहीं
	क्या गैस निकलने की व्यवस्था की गई है	हां/नहीं (यदि हां, तो तकनीकी डाटा शीट संलग्न करें)
	निक्षालन संग्रहण का प्रावधान	हां/नहीं (यदि हां, तो तकनीकी डाटा शीट संलग्न करें)
10.	क्या शहर में ठोस अपशिष्ट प्रबंधन पद्धतियों में सुधार लाने के लिए	हां/नहीं

	कार्ययोजना बनाई गई है	(यदि हां, तो तकनीकी डाटा शीट संलग्न करें)
11.	निम्न के लिए कौन से पृथक प्रावधान किए गए हैं : डेयरी से संबंधित कार्यकलाप : बूचड़खाने के अपशिष्ट : निर्माण एवं विध्वंस अपशिष्ट (निर्माण मलबा) :	प्रस्तावों, उठाए गए कदमों के संबंध में विवरण संलग्न करें हां/नहीं हां/नहीं हां/नहीं
12.	पश्च संवृत्ति योजना का विवरण	योजना संलग्न करें
13.	कितनी मलिन बस्तियों का निर्धारण किया गया है और क्या इनमें ठोस अपशिष्ट प्रबंधन सुविधाएं उपलब्ध कराई गई हैं :	हां/नहीं (यदि हां, तो विवरण संलग्न करें)
14.	गली में झाड़ू लगाने, अपशिष्ट के द्वितीयक भंडारण, परिवहन, प्रसंस्करण और निपटान सहित संग्रहण के लिए ठेकेदार/रियायतग्राही की नियोजित जनशक्ति का विवरण दें	
15.	इन नियमों के प्रावधानों का अनुपालन करने में स्थानीय निकाय द्वारा महसूस की जा रही कठिनाइयों का संक्षेप में उल्लेख करें	
16.	ठोस अपशिष्ट से संबंधित समस्या से निपटने के लिए किसी अभिनव विचार का संक्षेप में उल्लेख करें जिसे अन्य स्थानीय निकायों द्वारा अपनाया जा सके	

प्रचालक के हस्ताक्षर

तारीख :

स्थान :

प्ररूप-IV

[नियम 15 (यक), 24(2) देखें]

स्थानीय निकाय द्वारा प्रस्तुत किए जाने के लिए ठोस अपशिष्ट प्रबंधन संबंधी
वार्षिक रिपोर्ट का प्रारूप

कैलेंडर वर्ष	रिपोर्ट प्रस्तुत करने की तारीख

1.	शहर/नगर का नाम	
2.	जनसंख्या	
3.	क्षेत्रफल वर्ग किलो मीटर में	
4.	स्थानीय निकाय का नाम और पता दूरभाष सं. फैक्स ई-मेल :	
5.	ठोस अपशिष्ट प्रबंधन (वेस्टेम) से संबंधित प्रभारी अधिकारी का नाम दूरभाष सं. फैक्स ई-मेल :	
6.	शहर/नगर में परिवारों की संख्या शहर में गैर आवासीय परिसरों की संख्या शहर/नगर में चुनाव/प्रशासनिक वार्डों की संख्या	
7.	ठोस अपशिष्ट की मात्रा	
	प्रति दिन स्थानीय निकाय के क्षेत्र में उत्पन्न ठोस अपशिष्ट की अनुमानित मात्रा मीट्रिक टन में	/टीपीडी
	प्रतिदिन संग्रहित ठोस अपशिष्ट की मात्रा	/टीपीडी
	प्रतिदिन संग्रहित प्रति व्यक्ति अपशिष्ट	/ग्रा./दिन
	प्रसंसकृत ठोस अपशिष्ट की मात्रा	/टीपीडी
	मलबा स्थल/भरण स्थल पर निपटान किए गए ठोस अपशिष्ट की मात्रा	/टीपीडी
8.	ठोस अपशिष्ट प्रबंधन सेवा की स्थिति	
	स्रोत पर अपशिष्ट का पृथक्करण और भंडारण	
	क्या घरेलू/वाणिज्यिक/संस्थागत बिनों में स्रोत पर ठोस अपशिष्ट का भंडारण किया जाता है, यदि हां	हां/नहीं

घरेलू बिनों में स्रोत पर अपशिष्ट के भंडारण की घरेलू रीति की प्रतिशतता		%			
वाणिज्यिक/संस्थागत बिनों में स्रोत पर अपशिष्ट का गैर आवासीय परिसरों में भंडारण करने की प्रतिशतता		%			
गलियों में घरों के ठोस अपशिष्ट का निपटान करने या फेंकने की प्रतिशतता		%			
गलियों में गैर आवासीय परिसरों के ठोस अपशिष्ट का निपटान करने या फेंकने की प्रतिशतता		%			
ठोस अपशिष्ट का घर-घर जाकर संग्रहण					
क्या शहर/नगर में ठोस अपशिष्ट का घर-घर जाकर संग्रहण किया जाता है		हां/नहीं			
यदि हां, तो अपशिष्ट के घर-घर जाकर संग्रहण किए जाने में शामिल वार्डों की संख्या					
शामिल किए गए घरों की संख्या					
शामिल किए गए वाणिज्यिक संस्थापनाओं, होटलों, रेस्तराओं, शैक्षिक संस्थाओं/कार्यालय इत्यादि सहित गैर आवासीय परिसरों की संख्या					
निम्न के माध्यम से घर-घर जाकर संग्रहण किए जाने में शामिल आवासीय और गैर आवासीय परिसरों की प्रतिशतता :					
मोटरकृत वाहन		%			
कंटेनरकृत तिपहिया साइकिल/हैंड कार्ट		%			
अन्य साधन		%			
यदि नहीं, तो संग्रहण में अपनाई गई प्राथमिक पद्धति					
गलियों में झाड़ू लगाया जाना					
शहर में सड़कों, गलियों, लेनों, बाइलेनों की लम्बाई जिनकी सफाई किए जाने की आवश्यकता है		कि.मी.			
गली में झाड़ू लगाए जाने की बारंबारता और लाभान्वित जनसंख्या की प्रतिशतता	बारंबारता	रोजाना	एकांतर दिवस पर	सप्ताह में दो बार	कभी-कभी
	लाभान्वित जनसंख्या की प्रतिशतता				
प्रयुक्त साधन					%
हाथ से झाड़ू लगाया जाना					%
यांत्रिक रूप से झाड़ू लगाया जाना					%

	क्या सफाई कर्मचारियों द्वारा लंबी हैंडल वाले झाड़ू का प्रयोग किया जाता है	हां/नहीं
	क्या प्रत्येक सफाई कर्मचारी को अपशिष्ट का संग्रहण करने के लिए हैंडकार्ट/तिपहिया साइकिल दी जाती है	हां/नहीं
	क्या हैंडकार्ट/तिपहिया साइकिल में कंटेनर लगा है	हां/नहीं
	क्या संग्रहण का साधन प्रयोग किए गए संग्रहण/अपशिष्ट भंडारण के कंटेनरों समकालिक है	हां/नहीं
	द्वितीयक अपशिष्ट भंडारण सुविधाएं	
	शहर/नगर में अपशिष्ट भंडारण डिपो की संख्या और प्रकार खुले अपशिष्ट भंडारण स्थल चिनाई किए गए बिन सीमेंट कंक्रीट सिलिंडर के बिन ढलाव/ढके हुए कक्ष/स्थान ढके हुए धातु/प्लास्टिक के कंटेनर 1.1 घन मीटर तक के बिन 2 से 5 घन मीटर के बिन 5 घन मीटर से बड़े कंटेनर बिन रहित शहर	संख्या क्षमता घन मीटर में
	बिन/जनसंख्या अनुपात	
	अपशिष्ट भंडारण डिपो का वार्डवार विवरण (संलग्न करें) : वार्ड सं. : क्षेत्रफल : जनसंख्या : रखे हुए बिनों की संख्या रखे गए बिनों का कुल आयतन	
	अपशिष्ट भंडारण सुविधाओं की कुल भंडारण क्षमता घन मीटर में	
	अपशिष्ट भंडारण डिपो में प्रतिदिन वास्तविक रूप से भंडारित कुल अपशिष्ट	

	डिपो से अपशिष्ट के संग्रहण की बारंबारता बताएं साफ किए गए बिनो की संख्या	बारंबारता	बिनो की संख्या
		प्रतिदिन	
		एकांतर दिवस	
		सप्ताह में दो बार	
		सप्ताह में एक बार	
		कभी-कभी	
	क्या भंडारण डिपो में पृथककृत अपशिष्ट को हरे, नीले और काले बिनो में भंडार करके रखने की सुविधा है	हां/नहीं (यदि हां तो विवरण दें) हरे बिनो की संख्या : नीले बिनो की संख्या : काले बिनो की संख्या :	
	भंडारण डिपो से ठोस अपशिष्ट उठाने का कार्य हाथ से किया जाता है या यांत्रिक तरीके से? प्रतिशत बताएं ठोस अपशिष्ट को हाथ से उठाए जाने की प्रतिशतता यांत्रिक तरीके से उठाने की प्रतिशतता	% %	
	यदि यांत्रिक है तो प्रयुक्त पद्धति का स्पष्ट उल्लेख करें	फ्रंट-एंड लोडर/टॉप लोडर	
	क्या ठोस अपशिष्ट को घर-घर से उठाया जाता है और पृथककृत स्वरूप में सीधे शोधन संयंत्र तक भेजा जाता है	हां/नहीं (यदि हां तो स्पष्ट उल्लेख करें)	
	प्रतिदिन अपशिष्ट का परिवहन प्रयोग किए गए वाहनों का प्रकार और संख्या	अपशिष्ट का परिवहन करने में लगाए गए फेरों की संख्या	

पशु गाड़ी ट्रैक्टर नॉन टीपिंग ट्रक टीपिंग ट्रक डम्पर प्लेसर अवशिष्ट संग्राहक कम्पैक्टर अन्य जेसीबी - लोडर	
अपशिष्ट के परिवहन की बारंबारता	बारंबारता परिवहन किए गए अपशिष्ट का प्रतिशत प्रतिदिन एकांतर दिवस पर सप्ताह में दो बार सप्ताह में एक बार कभी-कभी
प्रत्येक दिन परिवहन किए गए अपशिष्ट की मात्रा	/टीपीडी
प्रतिदिन परिवहन किए गए कुल अपशिष्ट की प्रतिशतता	%
प्रयोग की गई अपशिष्ट शोधन प्रौद्योगिकियां	
क्या ठोस अपशिष्ट का प्रसंस्करण किया गया है	हां/नहीं
यदि हां, तो प्रतिदिन प्रसंस्करण किए गए अपशिष्ट की मात्रा	/टीपीडी
क्या शोधन का कार्य स्थानीय निकाय या किसी अभिकरण के माध्यम से किया जाता है	
अपशिष्ट प्रसंस्करण के लिए स्थानीय निकाय के पास उपलब्ध भूमि (हेक्टेयर में)	
अपशिष्ट प्रसंस्करण के लिए वर्तमान में प्रयुक्त भूमि	
प्रचालनरत ठोस अपशिष्ट प्रसंस्करण सुविधाएं	
निर्माणाधीन ठोस अपशिष्ट प्रसंस्करण सुविधाएं	
शहर/नगर की सीमा से प्रसंस्करण सुविधाओं की दूरी	

	अपनाई गई प्रौद्योगिकियों का विवरण	
	कंपोस्टिंग	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
	वर्मी कंपोस्टिंग	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
	बायो-मिथेनेशन	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
	अवशिष्ट जनित ईंधन	प्रसंस्करण की गई कच्ची सामग्री की मात्रा उत्पन्न किए गए अंतिम उत्पाद की मात्रा बेची गई मात्रा भरण स्थल में डाले गए शेष अपशिष्ट की मात्रा
	सह-प्रसंस्करण	प्रसंस्करण की गई कच्ची सामग्री
	सीमेंट संयंत्र को आपूर्ति दहनशील अपशिष्ट	
	ठोस अपशिष्ट आधारित विद्युत संयंत्रों को आपूर्ति दहनशील अपशिष्ट	
	अन्य	मात्रा
	ठोस अपशिष्ट निपटान सुविधाएं	
	स्थानीय निकाय के पास उपलब्ध मलबा स्थलों की संख्या	
	स्थानीय निकाय के पास उपलब्ध स्वास्थ्यकर भरण स्थलों की संख्या	

	अपशिष्ट के निपटान हेतु उपलब्ध ऐसे प्रत्येक स्थल का क्षेत्रफल	
	अपशिष्ट के निपटान के लिए वर्तमान में प्रयुक्त भूमि का क्षेत्रफल	
	शहर/नगर से मलबा स्थल/भरण सुविधा की दूरी	कि.मी.
	निकटतम वसावट से दूरी	कि.मी.
	जल निकाय से दूरी	कि.मी.
	राज्य/राष्ट्रीय राजमार्ग से दूरी	कि.मी.
	विमानपत्तन से दूरी	कि.मी.
	महत्वपूर्ण धार्मिक स्थलों या ऐतिहासिक स्मारक से दूरी	कि.मी.
	क्या यह बाढ़ संभावित क्षेत्र में पड़ता है	हां/नहीं
	क्या यह भूकंप संभावित क्षेत्र में पड़ता है	हां/नहीं
	प्रत्येक दिन भरण में डाले गए अपशिष्ट की मात्रा	टीपीडी
	क्या भरण स्थल को घेरा गया है	हां/नहीं
	क्या स्थल पर रोशनी की सुविधा उपलब्ध है	हां/नहीं
	क्या धर्मकांटा सुविधा उपलब्ध है	हां/नहीं
	भरण स्थल पर प्रयुक्त वाहन और उपकरण (स्पष्ट करें)	उपलब्ध बुलडोजर, कम्पैक्टर इत्यादि
	भरण स्थल पर नियोजित जनशक्ति	हां/नहीं (यदि हां तो विवरण संलग्न करें)
	क्या ढकने का काम दैनिक आधार पर किया जाता है	हां/नहीं
	यदि नहीं, तो भरण स्थल पर जमा अपशिष्ट को ढकने की बारंबारता	
	ढकने के लिए प्रयुक्त सामग्री	
	क्या ढकने की पर्याप्त सामग्री उपलब्ध है	हां/नहीं
	क्या गैस निकलने की व्यवस्था की गई है	हां/नहीं (यदि हां, तो तकनीकी डाटा शीट संलग्न करें)
	निक्षालन संग्रहण का प्रावधान	हां/नहीं (यदि हां, तो तकनीकी डाटा शीट संलग्न करें)
9.	क्या शहर में ठोस अपशिष्ट प्रबंधन पद्धतियों में सुधार लाने के लिए कार्ययोजना बनाई गई है	हां/नहीं (यदि हां, तो तकनीकी डाटा शीट संलग्न करें)
10.	निम्न के लिए कौन से पृथक प्रावधान किए गए हैं : डेयरी से संबंधित कार्यकलाप : बूचड़खाने के अपशिष्ट : निर्माण एवं विध्वंस अपशिष्ट (निर्माण मलबा) :	प्रस्तावों, उठाए गए कदमों के संबंध में विवरण संलग्न करें हां/नहीं

		हां/नहीं हां/नहीं
11.	पश्च संवृत्ति योजना का विवरण	योजना संलग्न करें
12.	कितनी मलिन बस्तियों का निर्धारण किया गया है और क्या इनमें ठोस अपशिष्ट प्रबंधन सुविधाएं उपलब्ध कराई गई हैं :	हां/नहीं (यदि हां, तो विवरण संलग्न करें)
13.	कृपया विवरण दें : गली में झाड़ू लगाने, अपशिष्ट के द्वितीयक भंडारण, परिवहन, प्रसंस्करण और निपटान सहित संग्रहण के लिए स्थानीय निकाय की स्वयं की जनशक्ति	
14.	कृपया विवरण दें : गली में झाड़ू लगाने, अपशिष्ट के द्वितीयक भंडारण, परिवहन, प्रसंस्करण और निपटान सहित संग्रहण के लिए ठेकेदार/रियायतग्राही की नियोजित जनशक्ति	
15.	इन नियमों के प्रावधानों का अनुपालन करने में स्थानीय निकाय द्वारा महसूस की जा रही कठिनाइयों का संक्षेप में उल्लेख करें	
16.	ठोस अपशिष्ट से संबंधित समस्या से निपटने के लिए किसी अभिनव विचार का संक्षेप में उल्लेख करें जिसे अन्य स्थानीय निकायों द्वारा अपनाया जा सके	

मुख्य कार्यकारी अधिकारी/
नगरपालिका आयुक्त/कार्यकारी अधिकारी/
मुख्य अधिकारी के हस्ताक्षर

तारीख :

स्थान :

प्ररूप-V

[नियम 24(3) देखें]

राज्य प्रदूषण नियंत्रण बोर्ड या प्रदूषण नियंत्रण समितियों द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड को प्रस्तुत की जाने वाली वार्षिक रिपोर्ट का प्रपत्र

भाग क

सेवा में,

अध्यक्ष,

केन्द्रीय प्रदूषण नियंत्रण बोर्ड,
परिवेश भवन, पूर्वी अर्जुन नगर,

दिल्ली-110032

1.	राज्य/संघ राज्य क्षेत्र का नाम	:	
2.	राज्य प्रदूषण नियंत्रण बोर्ड का नाम और पता	:	
3.	इन नियमों के अंतर्गत राज्य/संघ राज्य क्षेत्र में ठोस अपशिष्टों के प्रबंधन के लिए उत्तरदायी स्थानीय निकायों की संख्या	:	
4.	प्राप्त हुए प्राधिकार आवेदनों की संख्या	:	
5.	ठोस अपशिष्ट प्रबंधन के संबंध में स्थानीय निकाय द्वारा की गई प्रगति के संबंध में सारांश विवरण	:	कृपया अनुबंध- I के रूप में संलग्न करें
6.	अपशिष्ट संग्रहण, पृथक्करण, परिवहन और निपटान के संबंध में स्थानीय निकायों द्वारा की गई प्रगति के संबंध में सारांश विवरण	:	कृपया अनुबंध- II के रूप में संलग्न करें
7.	अनुसूची II के कार्यान्वयन के संबंध में स्थानीय निकायों द्वारा की गई प्रगति के संबंध में सारांश विवरण	:	कृपया अनुबंध- III के रूप में संलग्न करें
तारीख :		अध्यक्ष या सदस्य सचिव	
स्थान :		राज्य प्रदूषण नियंत्रण बोर्ड/ प्रदूषण नियंत्रण समिति	

भाग ख**नगर/शहर**

नगरों/शहरों की कुल संख्या

शहरी स्थानीय निकायों की कुल संख्या

श्रेणी-I तथा श्रेणी-II नगरों/शहरों की संख्या

प्राधिकार की स्थिति (नाम/संख्या)

प्राप्त हुए आवेदनों की संख्या

प्रदान किए गए प्राधिकारों की संख्या

जांच के अधीन प्राधिकार

ठोस अपशिष्ट उत्पादन की स्थिति

राज्य में ठोस अपशिष्ट उत्पादन (टीपीडी)

संग्रहित

शोधित

खत्ते में डाले गए

ठोस अपशिष्ट नियम की अनुसूची I का अनुपालन (नगरों की संख्या/नाम/क्षमता)

शहरों/नगरों में अच्छी रीतियां

घर-घर से संग्रहण

पृथक्करण

भंडारण

आवृत्त परिवहन

टोस अपशिष्ट का प्रसंस्करण (नगरों की संख्या/नाम/क्षमता)

टोस अपशिष्ट प्रसंस्करण सुविधाओं की स्थापना :

क्रम सं.	कम्पोस्टिंग	वर्मी-कम्पोस्टिंग	वायो गैस	आरडीएफ/गुटिकाकरण

प्रचालनरत प्रसंस्करण सुविधा

क्रम सं.	कम्पोस्टिंग	वर्मी-कम्पोस्टिंग	वायो गैस	आरडीएफ/गुटिकाकरण

संस्थापनाधीन/योजनाकृत प्रसंस्करण सुविधा

क्रम सं.	कम्पोस्टिंग	वर्मी-कम्पोस्टिंग	वायो गैस	आरडीएफ/गुटिकाकरण

अपशिष्ट से ऊर्जा संयंत्र : (नगरों की संख्या/नाम/क्षमता)

क्रम सं.	संयंत्र का स्थान	प्रचालन की स्थिति	विद्युत उत्पादन (मेगा वाट)	अभ्युक्ति

टोस अपशिष्ट का निपटान (नगरों की संख्या/नाम/क्षमता)

अभिनिर्धारित भरण स्थल

निर्मित भरण स्थल

निर्माणाधीन भरण स्थल

प्रचालनरत भरण स्थल

निश्शेषित भरण स्थल

आच्छादित भरण स्थल

टोस अपशिष्ट मलबा स्थल (नगरों की संख्या/नाम/क्षमता)

विद्यमान मलबा स्थलों की कुल संख्या

पुनर्निर्मित/आच्छादित भरण स्थल

स्वास्थ्यकर भरण स्थल में परिवर्तित मलबा स्थल

अपशिष्ट प्रसंस्करण/भरण स्थलों पर निगरानी

क्रम सं.	सुविधाओं का नाम	परिवेशी वायु	भू जल	निक्षालन की गुणवत्ता	कंपोस्ट की गुणवत्ता	वीओसी
1.						
2.						
3.						

नगरपालिकाओं द्वारा तैयार की गई कार्य योजनाओं की स्थिति

नगरपालिकाओं की कुल संख्या:

प्रस्तुत की गई कार्य योजना की संख्या:

प्ररूप-VI

[नियम 25 देखें]

दुर्घटना का प्रतिवेदन

1.	दुर्घटना की तारीख और समय	:	
2.	दुर्घटना के लिए कारकों का अनुक्रम	:	
3.	दुर्घटना में शामिल अपशिष्ट	:	
4.	मानव स्वास्थ्य और पर्यावरण पर दुर्घटनाओं के प्रभावों का मूल्यांकन	:	
5.	किए गए आपातकालीन उपाय	:	
6.	दुर्घटनाओं के प्रभावों को कम करने के लिए उठाए गए कदम	:	
7.	ऐसी किसी दुर्घटना की पुनरावृत्ति को रोकने के लिए उठाए गए कदम	:	
तारीख		हस्ताक्षर	
स्थान		पदनाम	

[फा. सं.18-3/2004-एचएसएमडी]

विश्वनाथ सिन्हा, संयुक्त सचिव

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 8th April, 2016

S.O. 1357(E).—Whereas the draft of the Solid Waste Management Rules, 2015 were published under the notification of the Government of India in the Ministry of Environment, Forest and Climate Change number G.S.R. 451 (E), dated the 3rd June, 2015 in the Gazette of India, part II, Section 3, sub-section (i) of the same date inviting objections or suggestions from the persons likely to be affected thereby, before the expiry of the period of sixty days from the publication of the said notification on the Solid Waste Management Rules, 2015 in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000;

And whereas, copies of the said Gazette were made available to the public on the 3rd June, 2015;

And whereas, the objections or comments received within the stipulated period were duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) and in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government hereby makes the following rules for management of Solid Waste, namely:-

1. **Short title and commencement.-**

- (1) These rules may be called the Solid Waste Management Rules, 2016.
- (2) They shall come into force on the date of their publication in the Official Gazette.

2. **Application.-** These rules shall apply to every urban local body, outgrowths in urban agglomerations, census towns as declared by the Registrar General and Census Commissioner of India, notified areas, notified industrial townships, areas under the control of Indian Railways, airports, airbases, Ports and harbours, defence establishments, special economic zones, State and Central government organisations, places of pilgrims, religious and historical importance as may be notified by respective State government from time to time and to every domestic, institutional, commercial and any other non residential solid waste generator situated in the areas except industrial waste, hazardous waste, hazardous chemicals, bio medical wastes, e-waste, lead acid batteries and radio-active waste, that are covered under separate rules framed under the Environment (Protection) Act, 1986.

3. **Definitions** –(1) In these rules, unless the context otherwise requires,- (1) **“aerobic composting”** means a controlled process involving microbial decomposition of organic matter in the presence of oxygen;

2. **“anaerobic digestion”** means a controlled process involving microbial decomposition of organic matter in absence of oxygen;
3. **“authorisation”** means the permission given by the State Pollution Control Board or Pollution Control Committee, as the case may be, to the operator of a facility or urban local authority, or any other agency responsible for processing and disposal of solid waste;
4. **“biodegradable waste ”** means any organic material that can be degraded by micro-organisms into simpler stable compounds;
5. **“bio-methanation”** means a process which entails enzymatic decomposition of the organic matter by microbial action to produce methane rich biogas;
6. **“brand owner”** means a person or company who sells any commodity under a registered brand label.
7. **“buffer zone”** means zone of no development to be maintained around solid waste processing and disposal facility, exceeding 5 TPD of installed capacity. This will be maintained within total and area allotted for the solid waste processing and disposal facility.
8. **“bulk waste generator”** means and includes buildings occupied by the Central government departments or undertakings, State government departments or undertakings, local bodies, public sector undertakings or private companies, hospitals, nursing homes, schools, colleges, universities, other educational institutions, hostels, hotels, commercial establishments, markets, places of worship, stadia and sports complexes having an average waste generation rate exceeding 100kg per day;
9. **“bye-laws”** means regulatory framework notified by local body, census town and notified area townships for facilitating the implementation of these rules effectively in their jurisdiction.
10. **“census town”** means an urban area as defined by the Registrar General and Census Commissioner of India;
11. **“combustible waste”** means non-biodegradable, non-recyclable, non-reusable, non hazardous solid waste having minimum calorific value exceeding 1500 kcal/kg and excluding chlorinated materials like plastic, wood pulp, etc;
12. **“composting”** means a controlled process involving microbial decomposition of organic matter;
13. **“contractor”** means a person or firm that undertakes a contract to provide materials or labour to perform a service or do a job for service providing authority;
14. **“co-processing”** means use of non-biodegradable and non recyclable solid waste having calorific value exceeding 1500k/cal as raw material or as a source of energy or both to replace or supplement the natural mineral resources and fossil fuels in industrial processes;
15. **“decentralised processing”** means establishment of dispersed facilities for maximizing the processing of bio-degradable waste and recovery of recyclables closest to the source of generation so as to minimize transportation of waste for processing or disposal;
16. **“disposal”** means the final and safe disposal of post processed residual solid waste and inert street sweepings and silt from surface drains on land as specified in Schedule I to prevent contamination of ground water, surface water, ambient air and attraction of animals or birds;
17. **“domestic hazardous waste”** means discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level;

18. **"door to door collection"** means collection of solid waste from the door step of households, shops, commercial establishments, offices, institutional or any other non residential premises and includes collection of such waste from entry gate or a designated location on the ground floor in a housing society, multi storied building or apartments, large residential, commercial or institutional complex or premises;
19. **"dry waste"** means waste other than bio-degradable waste and inert street sweepings and includes recyclable and non recyclable waste, combustible waste and sanitary napkin and diapers, etc;
20. **"dump sites"** means a land utilised by local body for disposal of solid waste without following the principles of sanitary land filling;
21. **"extended producer responsibility" (EPR)** means responsibility of any producer of packaging products such as plastic, tin, glass and corrugated boxes, etc., for environmentally sound management, till end-of-life of the packaging products;
22. **"facility"** means any establishment wherein the solid waste management processes namely segregation, recovery, storage, collection, recycling, processing, treatment or safe disposal are carried out;
23. **"fine"** means penalty imposed on waste generators or operators of waste processing and disposal facilities under the bye-laws for non-compliance of the directions contained in these rules and/or bye- laws
24. **"Form"** means a Form appended to these rules;
25. **"handling"** includes all activities relating to sorting, segregation, material recovery, collection, secondary storage, shredding, baling, crushing, loading, unloading, transportation, processing and disposal of solid wastes;
26. **"inerts"** means wastes which are not bio-degradable, recyclable or combustible street sweeping or dust and silt removed from the surface drains;
27. **"incineration"** means an engineered process involving burning or combustion of solid waste to thermally degrade waste materials at high temperatures;
28. **"informal waste collector"** includes individuals, associations or waste traders who are involved in sorting, sale and purchase of recyclable materials;
29. **"leachate"** means the liquid that seeps through solid waste or other medium and has extracts of dissolved or suspended material from it;
30. **"local body"** for the purpose of these rules means and includes the municipal corporation, nagar nigam, municipal council, nagarpalika, nagar Palikaparishad, municipal board, nagar panchayat and town panchayat, census towns, notified areas and notified industrial townships with whatever name they are called in different States and union territories in India;
31. **"materials recovery facility" (MRF)** means a facility where non-compostable solid waste can be temporarily stored by the local body or any other entity mentioned in rule 2 or any person or agency authorised by any of them to facilitate segregation, sorting and recovery of recyclables from various components of waste by authorised informal sector of waste pickers, informal recyclers or any other work force engaged by the local body or entity mentioned in rule 2 for the purpose before the waste is delivered or taken up for its processing or disposal;
32. **"non-biodegradable waste"** means any waste that cannot be degraded by micro organisms into simpler stable compounds;
33. **"operator of a facility"** means a person or entity, who owns or operates a facility for handling solid waste which includes the local body and any other entity or agency appointed by the local body;
34. **primary collection"** means collecting, lifting and removal of segregated solid waste from source of its generation including households, shops, offices and any other non-residential premises or from any collection points or any other location specified by the local body;
35. **"processing"** means any scientific process by which segregated solid waste is handled for the purpose of reuse, recycling or transformation into new products;
36. **"recycling"** means the process of transforming segregated non-biodegradable solid waste into new material or product or as raw material for producing new products which may or may not be similar to the original products;
37. **"redevelopment"** means rebuilding of old residential or commercial buildings at the same site, where the existing buildings and other infrastructures have become dilapidated;

38. "**refused derived fuel**"(RDF) means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste ;
39. "**residual solid waste**" means and includes the waste and rejects from the solid waste processing facilities which are not suitable for recycling or further processing;
40. "**sanitary land filling** " means the final and safe disposal of residual solid waste and inert wastes on land in a facility designed with protective measures against pollution of ground water, surface water and fugitive air dust, wind-blown litter, bad odour, fire hazard, animal menace, bird menace, pests or rodents, greenhouse gas emissions, persistent organic pollutants slope instability and erosion;
41. "**sanitary waste**" means wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste;
42. "**Schedule**" means the Schedule appended to these rules;
43. "**secondary storage**" means the temporary containment of solid waste after collection at secondary waste storage depots or MRFs or bins for onward transportation of the waste to the processing or disposal facility;
44. "**segregation**" means sorting and separate storage of various components of solid waste namely biodegradable wastes including agriculture and dairy waste, non biodegradable wastes including recyclable waste, non-recyclable combustible waste, sanitary waste and non recyclable inert waste, domestic hazardous wastes, and construction and demolition wastes;
45. "**service provider**" means an authority providing public utility services like water, sewerage, electricity, telephone, roads, drainage, etc;
46. "**solid waste**" means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non residential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities mentioned in rule 2;
47. "**sorting**" means separating various components and categories of recyclables such as paper, plastic, cardboards, metal, glass, etc., from mixed waste as may be appropriate to facilitate recycling;
48. "**stabilising**" means the biological decomposition of biodegradable wastes to a stable state where it generates no leachate or offensive odours and is fit for application to farm land ,soil erosion control and soil remediation;
49. "**street vendor**" means any person engaged in vending of articles, goods, wares, food items or merchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other public place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific; and the words "street vending" with their grammatical variations and cognate expressions, shall be construed accordingly;
50. "**tipping fee**" means a fee or support price determined by the local authorities or any state agency authorised by the State government to be paid to the concessionaire or operator of waste processing facility or for disposal of residual solid waste at the landfill;
51. "**transfer station**" means a facility created to receive solid waste from collection areas and transport in bulk in covered vehicles or containers to waste processing and, or, disposal facilities;
52. "**transportation**" means conveyance of solid waste, either treated, partly treated or untreated from a location to another location in an environmentally sound manner through specially designed and covered transport system so as to prevent the foul odour, littering and unsightly conditions;
53. "**treatment**" means the method, technique or process designed to modify physical, chemical or biological characteristics or composition of any waste so as to reduce its volume and potential to cause harm;
54. "**user fee**" means a fee imposed by the local body and any entity mentioned in rule 2 on the waste generator to cover full or part cost of providing solid waste collection, transportation, processing and disposal services.
55. "**vermi composting**" means the process of conversion of bio-degradable waste into compost using earth worms;
56. "**waste generator**" means and includes every person or group of persons, every residential premises and non residential establishments including Indian Railways, defense establishments, which generate solid waste;
57. "**waste hierarchy**" means the priority order in which the solid waste is to should be managed by giving

emphasis to prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the disposal at the landfill being the least;

58. **“waste picker”** means a person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the source of waste generation the streets, bins, material recovery facilities, processing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood.

(2) Words and expressions used herein but not defined, but defined in the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, Water (Prevention and Control of Pollution) Cess Act, 1977 and the Air (prevention and Control of Pollution) Act, 1981 shall have the same meaning as assigned to them in the respective Acts.

4 Duties of waste generators.- (1) Every waste generator shall,-

(a) segregate and store the waste generated by them in three separate streams namely bio-degradable, non bio-degradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorised waste pickers or waste collectors as per the direction or notification by the local authorities from time to time;

(b) wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or brand owners of these products or in a suitable wrapping material as instructed by the local authorities and shall place the same in the bin meant for dry waste or non- bio-degradable waste;

(c) store separately construction and demolition waste, as and when generated, in his own premises and shall dispose off as per the Construction and Demolition Waste Management Rules, 2016; and

(d) store horticulture waste and garden waste generated from his premises separately in his own premises and dispose of as per the directions of the local body from time to time.

(2) No waste generator shall throw, burn or bury the solid waste generated by him, on streets, open public spaces outside his premises or in the drain or water bodies.

(3) All waste generators shall pay such user fee for solid waste management, as specified in the bye-laws of the local bodies.

(4) No person shall organise an event or gathering of more than one hundred persons at any unlicensed place without intimating the local body, at least three working days in advance and such person or the organiser of such event shall ensure segregation of waste at source and handing over of segregated waste to waste collector or agency as specified by the local body.

(5) Every street vendor shall keep suitable containers for storage of waste generated during the course of his activity such as food waste, disposable plates, cups, cans, wrappers, coconut shells, leftover food, vegetables, fruits, etc., and shall deposit such waste at waste storage depot or container or vehicle as notified by the local body.

(6) All resident welfare and market associations shall, within one year from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(7) All gated communities and institutions with more than 5,000 sqm area shall, within one year from the date of notification of these rules and in partnership with the local body, ensure segregation of waste at source by the generators as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorized recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

(8) All hotels and restaurants shall, within one year from the date of notification of these rules and in partnership with the local body ensure segregation of waste at source as prescribed in these rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorised waste pickers or the authorised recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local body.

5. Duties of Ministry of Environment, Forest and Climate Change.- (1) The Ministry of Environment, Forest and Climate Change shall be responsible for over all monitoring the implementation of these rules in the country. It shall constitute a Central Monitoring Committee under the Chairmanship of Secretary, Ministry of Environment, Forest and Climate Change comprising officer not below the rank of Joint Secretary or Advisor from the following namely,-

- 1) Ministry of Urban Development
- 2) Ministry of Rural Development
- 3) Ministry of Chemicals and Fertilizers
- 4) Ministry of Agriculture
- 5) Central Pollution Control Board
- 6) Three State Pollution Control Boards or Pollution Control Committees by rotation
- 7) Urban Development Departments of three State Governments by rotation
- 8) Rural Development Departments from two State Governments by rotation
- 9) Three Urban Local bodies by rotation
- 10) Two census towns by rotation
- 11) FICCI, CII
- 12) Two subject experts

2. This Central Monitoring Committee shall meet at least once in a year to monitor and review the implementation of these rules. The Ministry of Environment, Forest and Climate Change may co-opt other experts, if needed. The Committee shall be renewed every three years.

6. Duties of Ministry of Urban Development.- (1) The Ministry of Urban Development shall coordinate with State Governments and Union territory Administrations to,-

- (a) take periodic review of the measures taken by the states and local bodies for improving solid waste management practices and execution of solid waste management projects funded by the Ministry and external agencies at least once in a year and give advice on taking corrective measures;
- (b) formulate national policy and strategy on solid waste management including policy on waste to energy in consultation with stakeholders within six months from the date of notification of these rules;
- (c) facilitate States and Union Territories in formulation of state policy and strategy on solid management based on national solid waste management policy and national urban sanitation policy;
- (d) promote research and development in solid waste management sector and disseminate information to States and local bodies;
- (e) undertake training and capacity building of local bodies and other stakeholders;and
- (f) provide technical guidelines and project finance to states, Union territories and local bodies on solid waste management to facilitate meeting timelines and standards.

7. Duties of Department of Fertilisers, Ministry of Chemicals and Fertilisers.- (1) The Department of Fertilisers through appropriate mechanisms shall,-

- (a) provide market development assistance on city compost; and
- (b) ensure promotion of co-marketing of compost with chemical fertilisers in the ratio of 3 to 4 bags: 6 to 7 bags by the fertiliser companies to the extent compost is made available for marketing to the companies.

8. Duties of Ministry of Agriculture, Government of India.- The Ministry of Agriculture through appropriate mechanisms shall,-

- (a) provide flexibility in Fertiliser Control Order for manufacturing and sale of compost;
- (b) propagate utilisation of compost on farm land;
- (c) set up laboratories to test quality of compost produced by local authorities or their authorised agencies; and
- (d) issue suitable guidelines for maintaining the quality of compost and ratio of use of compost visa-a-vis chemical fertilizers while applying compost to farmland.

9. Duties of the Ministry of Power.-The Ministry of Power through appropriate mechanisms shall,-

- (a) decide tariff or charges for the power generated from the waste to energy plants based on solid waste.
- (b) compulsory purchase power generated from such waste to energy plants by distribution company.

10. Duties of Ministry of New and Renewable Energy Sources- The Ministry of New and Renewable Energy Sources through appropriate mechanisms shall,-

- (a) facilitate infrastructure creation for waste to energy plants; and
- (b) provide appropriate subsidy or incentives for such waste to energy plants.

11. Duties of the Secretary-in-charge, Urban Development in the States and Union territories.- (1) The Secretary, Urban Development Department in the State or Union territory through the Commissioner or Director of Municipal Administration or Director of local bodies shall,-

- (a) prepare a state policy and solid waste management strategy for the state or the union territory in consultation with stakeholders including representative of waste pickers, self help group and similar groups working in the field of waste management consistent with these rules, national policy on solid waste management and national urban sanitation policy of the ministry of urban development, in a period not later than one year from the date of notification of these rules;
- (b) while preparing State policy and strategy on solid waste management, lay emphasis on waste reduction, reuse, recycling, recovery and optimum utilisation of various components of solid waste to ensure minimisation of waste going to the landfill and minimise impact of solid waste on human health and environment;
- (c) state policies and strategies should acknowledge the primary role played by the informal sector of waste pickers, waste collectors and recycling industry in reducing waste and provide broad guidelines regarding integration of waste picker or informal waste collectors in the waste management system.
- (d) ensure implementation of provisions of these rules by all local authorities;
- (e) direct the town planning department of the State to ensure that master plan of every city in the State or Union territory provisions for setting up of solid waste processing and disposal facilities except for the cities who are members of common waste processing facility or regional sanitary landfill for a group of cities; and
- (f) ensure identification and allocation of suitable land to the local bodies within one year for setting up of processing and disposal facilities for solid wastes and incorporate them in the master plans (land use plan) of the State or as the case may be, cities through metropolitan and district planning committees or town and country planning department;
- (h) direct the town planning department of the State and local bodies to ensure that a separate space for segregation, storage, decentralised processing of solid waste is demarcated in the development plan for group housing or commercial, institutional or any other non-residential complex exceeding 200 dwelling or having a plot area exceeding 5,000 square meters;
- (i) direct the developers of Special Economic Zone, Industrial Estate, Industrial Park to earmark at least five percent of the total area of the plot or minimum five plots or sheds for recovery and recycling facility.
- (j) facilitate establishment of common regional sanitary land fill for a group of cities and towns falling within a distance of 50 km (or more) from the regional facility on a cost sharing basis and ensure professional management of such sanitary landfills;
- (k) arrange for capacity building of local bodies in managing solid waste, segregation and transportation or processing of such waste at source;
- (l) notify buffer zone for the solid waste processing and disposal facilities of more than five tons per day in consultation with the State Pollution Control Board; and
- (m) start a scheme on registration of waste pickers and waste dealers.

12. Duties of District Magistrate or District Collector or Deputy Commissioner.- The District Magistrate or District Collector or as the case may be, the Deputy Commissioner shall, -

- (a) facilitate identification and allocation of suitable land as per clause (f) of rules 11 for setting up solid waste processing and disposal facilities to local authorities in his district in close coordination with the Secretary-in-charge of State Urban Development Department within one year from the date of notification of these rules;
- (b) review the performance of local bodies, at least once in a quarter on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the Commissioner or Director of Municipal Administration or Director of local bodies and secretary-in-charge of the State Urban Development.

13. Duties of the Secretary-in-charge of Village Panchayats or Rural Development Department in the State and Union territory.- (1) The Secretary-in-charge of Village Panchayats or Rural Development Department in the State and Union territory shall have the same duties as the Secretary-in-charge, Urban Development in the States and Union territories, for the areas which are covered under these rules and are under their jurisdictions.

14. Duties of Central Pollution Control Board.-The Central Pollution Control Board shall, -

- (a) co-ordinate with the State Pollution Control Boards and the Pollution Control Committees for implementation of these rules and adherence to the prescribed standards by local authorities;
- (b) formulate the standards for ground water, ambient air, noise pollution, leachate in respect of all solid waste processing and disposal facilities;
- (c) review environmental standards and norms prescribed for solid waste processing facilities or treatment technologies and update them as and when required;
- (d) review through State Pollution Control Boards or Pollution Control Committees, at least once in a year, the implementation of prescribed environmental standards for solid waste processing facilities or treatment technologies and compile the data monitored by them;
- (e) review the proposals of State Pollution Control Boards or Pollution Control Committees on use of any new technologies for processing, recycling and treatment of solid waste and prescribe performance standards, emission norms for the same within 6 months;
- (f) monitor through State Pollution Control Boards or Pollution Control Committees the implementation of these rules by local bodies;
- (g) prepare an annual report on implementation of these rules on the basis of reports received from State Pollution Control Boards and Committees and submit to the Ministry of Environment, Forest and Climate Change and the report shall also be put in public domain;
- (h) publish guidelines for maintaining buffer zone restricting any residential, commercial or any other construction activity from the outer boundary of the waste processing and disposal facilities for different sizes of facilities handling more than five tons per day of solid waste;
- (i) publish guidelines, from time to time, on environmental aspects of processing and disposal of solid waste to enable local bodies to comply with the provisions of these rules; and
- (j) provide guidance to States or Union territories on inter-state movement of waste.

15. Duties and responsibilities of local authorities and village Panchayats of census towns and urban agglomerations.- The local authorities and Panchayats shall,-

- (a) prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification of state policy and strategy and submit a copy to respective departments of State Government or Union territory Administration or agency authorised by the State Government or Union territory Administration;
- (b) arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non residential premises. From multi-storage buildings, large commercial complexes, malls, housing complexes, etc., this may be collected from the entry gate or any other designated location;
- (c) establish a system to recognise organisations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste;
- (d) facilitate formation of Self Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste;
- (e) frame bye-laws incorporating the provisions of these rules within one year from the date of notification of these rules and ensure timely implementation;
- (f) prescribe from time to time user fee as deemed appropriate and collect the fee from the waste generators on its own or through authorised agency;
- (g) direct waste generators not to litter i.e throw or dispose of any waste such as paper, water bottles, liquor bottles, soft drink cans, tetra packs, fruit peel, wrappers, etc., or burn or bury waste on streets, open public spaces, drains, waste bodies and to segregate the waste at source as prescribed under these rules and hand over the segregated waste to authorised the waste pickers or waste collectors authorised by the local body;
- (h) setup material recovery facilities or secondary storage facilities with sufficient space for sorting of recyclable materials to enable informal or authorised waste pickers and waste collectors to separate recyclables from the waste and provide easy access to waste pickers and recyclers for collection of segregated recyclable waste such as paper, plastic, metal, glass, textile from the source of generation or from material recovery facilities; Bins for storage of bio-degradable wastes shall be painted green, those for storage of recyclable wastes shall be printed white and those for storage of other wastes shall be printed black;

- (i) establish waste deposition centres for domestic hazardous waste and give direction for waste generators to deposit domestic hazardous wastes at this centre for its safe disposal. Such facility shall be established in a city or town in a manner that one centre is set up for the area of twenty square kilometers or part thereof and notify the timings of receiving domestic hazardous waste at such centres;
- (j) ensure safe storage and transportation of the domestic hazardous waste to the hazardous waste disposal facility or as may be directed by the State Pollution Control Board or the Pollution Control Committee;
- (k) direct street sweepers not to burn tree leaves collected from street sweeping and store them separately and handover to the waste collectors or agency authorised by local body;
- (l) provide training on solid waste management to waste-pickers and waste collectors;
- (m) collect waste from vegetable, fruit, flower, meat, poultry and fish market on day to day basis and promote setting up of decentralised compost plant or bio-methanation plant at suitable locations in the markets or in the vicinity of markets ensuring hygienic conditions;
- (n) collect separately waste from sweeping of streets, lanes and by-lanes daily, or on alternate days or twice a week depending on the density of population, commercial activity and local situation;
- (o) set up covered secondary storage facility for temporary storage of street sweepings and silt removed from surface drains in cases where direct collection of such waste into transport vehicles is not convenient. Waste so collected shall be collected and disposed of at regular intervals as decided by the local body;
- (p) collect horticulture, parks and garden waste separately and process in the parks and gardens, as far as possible;
- (q) transport segregated bio-degradable waste to the processing facilities like compost plant, bio-methanation plant or any such facility. Preference shall be given for on site processing of such waste;
- (r) transport non-bio-degradable waste to the respective processing facility or material recovery facilities or secondary storage facility;
- (s) transport construction and demolition waste as per the provisions of the Construction and Demolition Waste management Rules, 2016;
- (t) involve communities in waste management and promotion of home composting, bio-gas generation, decentralised processing of waste at community level subject to control of odour and maintenance of hygienic conditions around the facility;
- (u) phase out the use of chemical fertilizer in two years and use compost in all parks, gardens maintained by the local body and wherever possible in other places under its jurisdiction. Incentives may be provided to recycling initiatives by informal waste recycling sector.
- (v) facilitate construction, operation and maintenance of solid waste processing facilities and associated infrastructure on their own or with private sector participation or through any agency for optimum utilisation of various components of solid waste adopting suitable technology including the following technologies and adhering to the guidelines issued by the Ministry of Urban Development from time to time and standards prescribed by the Central Pollution Control Board. Preference shall be given to decentralised processing to minimize transportation cost and environmental impacts such as-
- a) bio-methanation, microbial composting, vermi-composting, anaerobic digestion or any other appropriate processing for bio-stabilisation of biodegradable wastes;
 - b) waste to energy processes including refused derived fuel for combustible fraction of waste or supply as feedstock to solid waste based power plants or cement kilns;
- (w) undertake on their own or through any other agency construction, operation and maintenance of sanitary landfill and associated infrastructure as per Schedule I for disposal of residual wastes in a manner prescribed under these rules;
- (x) make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget ensuring that funds for discretionary functions of the local body have been allocated only after meeting the requirement of necessary funds for solid waste management and other obligatory functions of the local body as per these rules;
- (y) make an application in Form-I for grant of authorisation for setting up waste processing, treatment or disposal facility, if the volume of waste is exceeding five metric tones per day including sanitary landfills from the State Pollution Control Board or the Pollution Control Committee, as the case may be;
- (z) submit application for renewal of authorisation at least sixty days before the expiry of the validity of authorisation;

- (za) prepare and submit annual report in Form IV on or before the 30th April of the succeeding year to the Commissioner or Director, Municipal Administration or designated Officer;
- (zb) the annual report shall then be sent to the Secretary -in-Charge of the State Urban Development Department or village panchayat or rural development department and to the respective State Pollution Control Board or Pollution Control Committee by the 31st May of every year;
- (zc) educate workers including contract workers and supervisors for door to door collection of segregated waste and transporting the unmixed waste during primary and secondary transportation to processing or disposal facility;
- (zd) ensure that the operator of a facility provides personal protection equipment including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid waste and the same are used by the workforce;
- (ze) ensure that provisions for setting up of centers for collection, segregation and storage of segregated wastes, are incorporated in building plan while granting approval of building plan of a group housing society or market complex; and
- (zf) frame bye-laws and prescribe criteria for levying of spot fine for persons who litters or fails to comply with the provisions of these rules and delegate powers to officers or local bodies to levy spot fines as per the bye laws framed; and
- (zg) create public awareness through information, education and communication campaign and educate the waste generators on the following; namely:-
- (i) not to litter;
 - (ii) minimise generation of waste;
 - (iii) reuse the waste to the extent possible;
 - (iv) practice segregation of waste into bio-degradable, non-biodegradable (recyclable and combustible), sanitary waste and domestic hazardous wastes at source;
 - (v) practice home composting, vermi-composting, bio-gas generation or community level composting;
 - (vi) wrap securely used sanitary waste as and when generated in the pouches provided by the brand owners or a suitable wrapping as prescribed by the local body and place the same in the bin meant for non-biodegradable waste;
 - (vii) storage of segregated waste at source in different bins;
 - (viii) handover segregated waste to waste pickers, waste collectors, recyclers or waste collection agencies; and
 - (ix) pay monthly user fee or charges to waste collectors or local bodies or any other person authorised by the local body for sustainability of solid waste management.
- (zh) stop land filling or dumping of mixed waste soon after the timeline as specified in rule 23 for setting up and operationalisation of sanitary landfill is over;
- (zi) allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill and the sanitary landfill sites shall meet the specifications as given in Schedule-I, however, every effort shall be made to recycle or reuse the rejects to achieve the desired objective of zero waste going to landfill;
- (zj) investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of bio-mining and bio-remediation and wheresoever feasible, take necessary actions to bio-mine or bio-remediate the sites;
- (zk) in absence of the potential of bio-mining and bio-remediation of dumpsite, it shall be scientifically capped as per landfill capping norms to prevent further damage to the environment.

16. Duties of State Pollution Control Board or Pollution Control Committee.- (1) The State Pollution Control Board or Pollution Control Committee shall,-

- (a) enforce these rules in their State through local bodies in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department;
- (b) monitor environmental standards and adherence to conditions as specified under the Schedule I and Schedule II for waste processing and disposal sites;
- (c) examine the proposal for authorisation and make such inquiries as deemed fit, after the receipt of the application for the same in Form I from the local body or any other agency authorised by the local body;

- (d) while examining the proposal for authorisation, the requirement of consents under respective enactments and views of other agencies like the State Urban Development Department, the Town and Country Planning Department, District Planning Committee or Metropolitan Area Planning Committee, as may be applicable, Airport or Airbase Authority, the Ground Water Board, Railways, power distribution companies, highway department and other relevant agencies shall be taken into consideration and they shall be given four weeks time to give their views, if any;
- (e) issue authorisation within a period of sixty days in Form II to the local body or an operator of a facility or any other agency authorised by local body stipulating compliance criteria and environmental standards as specified in Schedules I and II including other conditions, as may be necessary;
- (f) synchronise the validity of said authorisation with the validity of the consents;
- (g) suspend or cancel the authorization issued under clause (a) any time, if the local body or operator of the facility fails to operate the facility as per the conditions stipulated:
provided that no such authorization shall be suspended or cancelled without giving notice to the local body or operator, as the case may be; and
- (h) on receipt of application for renewal, renew the authorisation for next five years, after examining every application on merit and subject to the condition that the operator of the facility has fulfilled all the provisions of the rules, standards or conditions specified in the authorisation, consents or environment clearance.
- (2) The State Pollution Control Board or Pollution Control Committee shall, after giving reasonable opportunity of being heard to the applicant and for reasons thereof to be recorded in writing, refuse to grant or renew an authorisation.
- (3) In case of new technologies, where no standards have been prescribed by the Central Pollution Control Board, State Pollution Control Board or Pollution Control Committee, as the case may be, shall approach Central Pollution Control Board for getting standards specified.
- (4) The State Pollution Control Board or the Pollution Control Committee, as the case may be, shall monitor the compliance of the standards as prescribed or laid down and treatment technology as approved and the conditions stipulated in the authorisation and the standards specified in Schedules I and II under these rules as and when deemed appropriate but not less than once in a year.
- (5) The State Pollution Control Board or the Pollution Control Committee may give directions to local bodies for safe handling and disposal of domestic hazardous waste deposited by the waste generators at hazardous waste deposition facilities.
- (6) The State Pollution Control Board or the Pollution Control Committee shall regulate Inter-State movement of waste.

17. Duty of manufacturers or brand owners of disposable products and sanitary napkins and diapers.- (1) All manufacturers of disposable products such as tin, glass, plastics packaging, etc., or brand owners who introduce such products in the market shall provide necessary financial assistance to local authorities for establishment of waste management system.

- (2) All such brand owners who sell or market their products in such packaging material which are non-biodegradable shall put in place a system to collect back the packaging waste generated due to their production.
- (3) Manufacturers or brand owners or marketing companies of sanitary napkins and diapers shall explore the possibility of using all recyclable materials in their products or they shall provide a pouch or wrapper for disposal of each napkin or diapers along with the packet of their sanitary products.
- (4) All such manufacturers, brand owners or marketing companies shall educate the masses for wrapping and disposal of their products.

18. Duties of the industrial units located within one hundred km from the refused derived fuel and waste to energy plants based on solid waste- All industrial units using fuel and located within one hundred km from a solid waste based refused derived fuel plant shall make arrangements within six months from the date of notification of these rules to replace at least five percent of their fuel requirement by refused derived fuel so produced.

19. Criteria for Duties regarding setting-up solid waste processing and treatment facility.- (1) The department in-charge of the allocation of land assignment shall be responsible for providing suitable land for setting up of the solid waste processing and treatment facilities and notify such sites by the State Government or Union territory Administration.

- (2) The operator of the facility shall design and set up the facility as per the technical guidelines issued by the Central Pollution Control Board in this regard from time to time and the manual on solid waste management prepared by the Ministry of Urban Development.

- (3) The operator of the facility shall obtain necessary approvals from the State Pollution Control Board or Pollution Control Committee.
- (4) The State Pollution Control Board or Pollution Control Committee shall monitor the environment standards of the operation of the solid waste processing and treatment facilities.
- (5) The operator of the facility shall be responsible for the safe and environmentally sound operations of the solid waste processing and or treatment facilities as per the guidelines issued by the Central Pollution Control Board from time to time and the Manual on Municipal Solid Waste Management published by the Ministry of Urban Development and updated from time to time-
- (6) The operator of the solid waste processing and treatment facility shall submit annual report in Form III each year by 30th April to the State Pollution Control Board or Pollution Committee and concerned local body.

20. Criteria and actions to be taken for solid waste management in hilly areas.- In the hilly areas, the duties and responsibilities of the local authorities shall be the same as mentioned in rule 15 with additional clauses as under:

- (a) Construction of landfill on the hill shall be avoided. A transfer station at a suitable enclosed location shall be setup to collect residual waste from the processing facility and inert waste. A suitable land shall be identified in the plain areas down the hill within 25 kilometers for setting up sanitary landfill. The residual waste from the transfer station shall be disposed of at this sanitary landfill.
- (b) In case of non-availability of such land, efforts shall be made to set up regional sanitary landfill for the inert and residual waste.
- (c) Local body shall frame Bye-laws and prohibit citizen from littering wastes on the streets and give strict direction to the tourists not to dispose any waste such as paper, water bottles, liquor bottles, soft drink canes, tetra packs, any other plastic or paper waste on the streets or down the hills and instead direct to deposit such waste in the litter bins that shall be placed by the local body at all tourist destinations.
- (d) Local body shall arrange to convey the provisions of solid waste management under the bye-laws to all tourists visiting the hilly areas at the entry point in the town as well as through the hotels, guest houses or like where they stay and by putting suitable hoardings at tourist destinations.
- (e) Local body may levy solid waste management charge from the tourist at the entry point to make the solid waste management services sustainable.
- (f) The department in- charge of the allocation of land assignment shall identify and allot suitable space on the hills for setting up decentralised waste processing facilities. Local body shall set up such facilities. Step garden system may be adopted for optimum utilisation of hill space.

21. Criteria for waste to energy process.- (1) Non recyclable waste having calorific value of 1500 K/cal/kg or more shall not be disposed of on landfills and shall only be utilised for generating energy either or through refuse derived fuel or by giving away as feed stock for preparing refuse derived fuel.

- (2) High calorific wastes shall be used for co-processing in cement or thermal power plants.
- (3) The local body or an operator of facility or an agency designated by them proposing to set up waste to energy plant of more than five tones per day processing capacity shall submit an application in Form-I to the State Pollution Control Board or Pollution Control Committee, as the case may be, for authorisation.
- (4) The State Pollution Control Board or Pollution Control Committee, on receiving such application for setting up waste to energy facility, shall examine the same and grant permission within sixty days.

22. Time frame for implementation.- Necessary infrastructure for implementation of these rules shall be created by the local bodies and other concerned authorities, as the case may be, on their own, by directly or engaging agencies within the time frame specified below:

Sl. No.	Activity	Time limit from the date of notification of rules
(1)	(2)	(3)
1.	identification of suitable sites for setting up solid waste processing facilities	1 year

2.	identification of suitable sites for setting up common regional sanitary landfill facilities for suitable clusters of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities or stand alone sanitary landfill facilities by all local authorities having a population of 0.5 million or more .	1 year
3.	procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	2 years
4.	enforcing waste generators to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source ,	2 years
5.	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities.	2 years
6.	ensure separate storage, collection and transportation of construction and demolition wastes	2 years
7.	setting up solid waste processing facilities by all local bodies having 100000 or more population	2 years
8.	Setting up solid waste processing facilities by local bodies and census towns below 100000 population.	3 years
9.	setting up common or stand alone sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as untreatable inert wastes as permitted under the Rules	3 years
10.	setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population for the disposal of permitted waste under the rules	3years
11.	bio-remediation or capping of old and abandoned dump sites	5years

23. State Level Advisory Body. – (1) Every Department in-charge of local bodies of the concerned State Government or Union territory administration shall constitute a State Level Advisory Body within six months from the date of notification of these rules comprising the following members, namely:-

Sl. No	Designation	Member
(1)	(2)	(3)
1.	Secretary, Department of Urban Development or Local self government department of the State	Chairperson, ex-officio
2.	One representative of Panchayats or Rural development Department not below the rank of Joint Secretary to State Government	Member, ex-officio
3.	one representative of Revenue Department of State Government	Member, ex-officio
4.	One representative from Ministry of Environment, Forest and Climate Change Government of India	Member, ex-officio

5.	One representative from Ministry of Urban Development, Government of India	Member, ex-officio
6.	One representative from Ministry of Rural Development, Government of India	Member, ex-officio
7.	One representative from the Central Pollution Control Board	Member, ex-officio
8.	One representative from the State Pollution Control Board or Pollution Control Committee	Member, ex-officio
9.	One representative from Indian Institute of Technology or National Institute of Technology	Member, Ex-officio
10.	Chief town planner of the state	Member
11.	Three representatives from the local bodies by rotation	Member
12.	Two representatives from census towns or urban agglomerations by rotation.	Member
13.	One representative from reputed Non-Governmental Organisation or Civil Society working for the waste pickers or informal recycler or solid waste management	Member
14.	One representative from a body representing Industries at the State or Central level	Member
15.	one representative from waste recycling industry	member
16.	Two subject experts	Member
17.	Co-opt one representative each from agriculture department, and labour department of State Government.	Member

(2) The State Level Advisory Body shall meet at least one in every six months to review the matters related to implementation of these rules, state policy and strategy on solid waste management and give advice to state government for taking measures that are necessary for expeditious and appropriate implementation of these rules.

(3) The copies of the review report shall be forwarded to the State Pollution Control Board or Pollution Control Committee for necessary action.

24. Annual report.- (1) The operator of facility shall submit the annual report to the local body in Form-III on or before the 30th day of April every year.

(2) The local body shall submit its annual report in Form-IV to State P Control Board or P Committee and the Secretary-in-Charge of the Department of Urban Development of the concerned State or Union Territory in case of metropolitan city and to the Director of Municipal Administration or Commissioner of Municipal Administration or Officer in -Charge of Urban local bodies in the state in case of all other local bodies of state on or before the 30th day of June every year

(3) Each State Pollution Control Board or Pollution Control Committee as the case may be, shall prepare and submit the consolidated annual report to the Central Pollution Control Board and Ministry of Urban Development on the implementation of these rules and action taken against non complying local body by the 31st day of July of each year in Form-V.

(4) The Central Pollution Control Board shall prepare a consolidated annual review report on the status of implementation of these rules by local bodies in the country and forward the same to the Ministry of Urban Development

and Ministry of Environment, Forest and Climate Change, along with its recommendations before the 31st day of August each year.

(5) The annual report shall be reviewed by the Ministry of Environment, Forest and Climate Change during the meeting of Central Monitoring Committee.

25. Accident reporting- In case of an accident at any solid waste processing or treatment or disposal facility or landfill site, the Officer- in- charge of the facility shall report to the local body in Form-VI and the local body shall review and issue instructions if any, to the in- charge of the facility.

SCHEDULE I

[see rule 15 (w),(zi), 16 (1) (b) (e), 16 (4)]

Specifications for Sanitary Landfills

(A) Criteria for site selection.-

- (i) The department in the business allocation of land assignment shall provide suitable site for setting up of the solid waste processing and treatment facilities and notify such sites.
- (ii) The sanitary landfill site shall be planned, designed and developed with proper documentation of construction plan as well as a closure plan in a phased manner. In case a new landfill facility is being established adjoining an existing landfill site, the closure plan of existing landfill should form a part of the proposal of such new landfill.
- (iii) The landfill sites shall be selected to make use of nearby wastes processing facilities. Otherwise, wastes processing facility shall be planned as an integral part of the landfill site.
- (iv) Landfill sites shall be set up as per the guidelines of the Ministry of Urban Development, Government of India and Central Pollution Control Board.
- (v) The existing landfill sites which are in use for more than five years shall be improved in accordance with the specifications given in this Schedule.
- (vi) The landfill site shall be large enough to last for at least 20-25 years and shall develop 'landfill cells' in a phased manner to avoid water logging and misuse.
- (vii) The landfill site shall be 100 meter away from river, 200 meter from a pond, 200 meter from Highways, Habitations, Public Parks and water supply wells and 20 km away from Airports or Airbase. However in a special case, landfill site may be set up within a distance of 10 and 20 km away from the Airport/Airbase after obtaining no objection certificate from the civil aviation authority/ Air force as the case may be. The Landfill site shall not be permitted within the flood plains as recorded for the last 100 years, zone of coastal regulation, wetland, Critical habitat areas, sensitive eco-fragile areas..
- (viii) The sites for landfill and processing and disposal of solid waste shall be incorporated in the Town Planning Department's land-use plans.
- (ix) A buffer zone of no development shall be maintained around solid waste processing and disposal facility, exceeding five Tonnes per day of installed capacity. This will be maintained within the total area of the solid waste processing and disposal facility. The buffer zone shall be prescribed on case to case basis by the local body in consultation with concerned State Pollution Control Board.
- (x) The biomedical waste shall be disposed of in accordance with the Bio-medical Waste Management Rules, 2016, as amended from time to time . The hazardous waste shall be managed in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended from time to time. The E-waste shall be managed in accordance with the e-Waste (Management) Rules, 2016 as amended from time to time.
- (xi) Temporary storage facility for solid waste shall be established in each landfill site to accommodate the waste in case of non- operation of waste processing and during emergency or natural calamities.

(B) Criteria for development of facilities at the sanitary landfills.-

- (i) Landfill site shall be fenced or hedged and provided with proper gate to monitor incoming vehicles, to prevent entry of unauthorised persons and stray animals
- (ii) The approach and / internal roads shall be concreted or paved so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.
- (iii) The landfill site shall have waste inspection facility to monitor waste brought in for landfilling h, office facility for record keeping and shelter for keeping equipment and machinery including pollution monitoring equipment. The operator of the facility shall maintain record of waste received, processed and disposed.

- (iv) Provisions like weigh bridge to measure quantity of waste brought at landfill site, fire protection equipment and other facilities as may be required shall be provided.
- (v) Utilities such as drinking water and sanitary facilities (preferably washing/bathing facilities for workers) and lighting arrangements for easy landfill operations during night hours shall be provided.
- (vi) Safety provisions including health inspections of workers at landfill sites shall be carried out made.
- (vii) Provisions for parking, cleaning, washing of transport vehicles carrying solid waste shall be provided. The wastewater so generated shall be treated to meet the prescribed standards.

(C) Criteria for specifications for land filling operations and closure on completion of land filling.-

- (i) Waste for land filling shall be compacted in thin layers using heavy compactors to achieve high density of the waste. In high rainfall areas where heavy compactors cannot be used, alternative measures shall be adopted.
- (ii) Till the time waste processing facilities for composting or recycling or energy recovery are set up, the waste shall be sent to the sanitary landfill. The landfill cell shall be covered at the end of each working day with minimum 10 cm of soil, inert debris or construction material..
- (iii) Prior to the commencement of monsoon season, an intermediate cover of 40-65 cm thickness of soil shall be placed on the landfill with proper compaction and grading to prevent infiltration during monsoon. Proper drainage shall be constructed to divert run-off away from the active cell of the landfill.
- (iv) After completion of landfill, a final cover shall be designed to minimise infiltration and erosion. The final cover shall meet the following specifications, namely :-
 - a) The final cover shall have a barrier soil layer comprising of 60 cm of clay or amended soil with permeability coefficient less than 1×10^{-7} cm/sec.
 - b) On top of the barrier soil layer, there shall be a drainage layer of 15 cm.
 - c) On top of the drainage layer, there shall be a vegetative layer of 45 cm to support natural plant growth and to minimise erosion.

(D) Criteria for pollution prevention.-In order to prevent pollution from landfill operations, the following provisions shall be made, namely:-

- (i) The storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted from the landfilling site and leachates from solid waste locations do not get mixed with the surface runoff water. Provisions for diversion of storm water discharge drains shall be made to minimise leachate generation and prevent pollution of surface water and also for avoiding flooding and creation of marshy conditions.
- (ii) Non-permeable lining system at the base and walls of waste disposal area. For landfill receiving residues of waste processing facilities or mixed waste or waste having contamination of hazardous materials (such as aerosols, bleaches, polishes, batteries, waste oils, paint products and pesticides) shall have liner of composite barrier of 1.5 mm thick high density polyethylene (HDPE) geo-membrane or geo-synthetic liners, or equivalent, overlying 90 cm of soil (clay or amended soil) having permeability coefficient not greater than 1×10^{-7} cm/sec. The highest level of water table shall be at least two meter below the base of clay or amended soil barrier layer provided at the bottom of landfills.
- (iii) Provisions for management of leachates including its collection and treatment shall be made. The treated leachate shall be recycled or utilized as permitted, otherwise shall be released into the sewerage line, after meeting the standards specified in Schedule- II. In no case, leachate shall be released into open environment.
- (iv) Arrangement shall be made to prevent leachate runoff from landfill area entering any drain, stream, river, lake or pond. In case of mixing of runoff water with leachate or solid waste, the entire mixed water shall be treated by the concern authority.

(E) Criteria for water quality monitoring.-

- (i) Before establishing any landfill site, baseline data of ground water quality in the area shall be collected and kept in record for future reference. The ground water quality within 50 meter of the periphery of landfill site shall be periodically monitored covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated.
- (ii) Usage of groundwater in and around landfill sites for any purpose (including drinking and irrigation) shall be considered only after ensuring its quality. The following specifications for drinking water quality shall apply for monitoring purpose, namely :-

S. No.	Parameters	IS 10500:2012, Edition 2.2(2003-09) Desirable limit (mg/l except for pH)
(1)	(2)	(3)
	Arsenic	0.01
	Cadmium	0.01
	Chromium(as Cr ⁶⁺)	0.05
	Copper	0.05
	Cyanide	0.05
	Lead	0.05
	Mercury	0.001
	Nickel	-
	Nitrate as NO ₃	45.0
	pH	6.5-8.5
	Iron	0.3
	Total hardness (as CaCO ₃)	300.0
	Chlorides	250
	Dissolved solids	500
	Phenolic compounds (as C ₆ H ₅ OH)	0.001
	Zinc	5.0
	Sulphate (as SO ₄)	200

(F) Criteria for ambient air quality monitoring.-

- (i) Landfill gas control system including gas collection system shall be installed at landfill site to minimize odour, prevent off-site migration of gases, to protect vegetation planted on the rehabilitated landfill surface. For enhancing landfill gas recovery, use of geomembranes in cover systems along with gas collection wells should be considered.
- (ii) The concentration of methane gas generated at landfill site shall not exceed 25 per cent of the lower explosive limit (LEL).
- (iii) The landfill gas from the collection facility at a landfill site shall be utilized for either direct thermal applications or power generation, as per viability. Otherwise, landfill gas shall be burnt (flared) and shall not be allowed to escape directly to the atmosphere or for illegal tapping. Passive venting shall be allowed in case if its utilisation or flaring is not possible.
- (iv) Ambient air quality at the landfill site and at the vicinity shall be regularly monitored. Ambient air quality shall

meet the standards prescribed by the Central Pollution Control Board for Industrial area.

G. Criteria for plantation at landfill Site.- A vegetative cover shall be provided over the completed site in accordance with the following specifications, namely:-

- (a) Locally adopted non-edible perennial plants that are resistant to drought and extreme temperatures shall be planted;
- (b) The selection of plants should be of such variety that their roots do not penetrate more than 30 cms. This condition shall apply till the landfill is stabilized;
- (c) Selected plants shall have ability to thrive on low-nutrient soil with minimum nutrient addition;
- (d) Plantation to be made in sufficient density to minimise soil erosion.
- (e) Green belts shall be developed all around the boundary of the landfill in consultation with State Pollution Control Boards or Pollution Control Committees .

H. Criteria for post-care of landfill site.- (1) The post-closure care of landfill site shall be conducted for at least fifteen years and long term monitoring or care plan shall consist of the following, namely :-⁴

- (a) Maintaining the integrity and effectiveness of final cover, making repairs and preventing run-on and run-off from eroding or otherwise damaging the final cover;
 - (b) Monitoring leachate collection system in accordance with the requirement;
 - (c) Monitoring of ground water in and around landfill;
 - (d) Maintaining and operating the landfill gas collection system to meet the standards.
- (2) Use of closed landfill sites after fifteen years of post-closure monitoring can be considered for human settlement or otherwise only after ensuring that gaseous emission and leachate quality analysis complies with the specified standards and the soil stability is ensured.

I. Criteria for special provisions for hilly areas.-Cities and towns located on hills shall have location-specific methods evolved for final disposal of solid waste by the local body with the approval of the concerned State Pollution Control Board or the Pollution Control Committee. The local body shall set up processing facilities for utilisation of biodegradable organic waste. The non-biodegradable recyclable materials shall be stored and sent for recycling periodically. The inert and non-biodegradable waste shall be used for building roads or filling-up of appropriate areas on hills. In case of constraints in finding adequate land in hilly areas, waste not suitable for road-laying or filling up shall be disposed of in regional landfills in plain areas.

J. Closure and Rehabilitation of Old Dumps- Solid waste dumps which have reached their full capacity or those which will not receive additional waste after setting up of new and properly designed landfills should be closed and rehabilitated by examining the following options:

- (i) Reduction of waste by bio mining and waste processing followed by placement of residues in new landfills or capping as in (ii) below.
- (i). Capping with solid waste cover or solid waste cover enhanced with geomembrane to enable collection and flaring / utilisation of greenhouse gases.
- (iii) Capping as in (ii) above with additional measures (in alluvial and other coarse grained soils) such as cut-off walls and extraction wells for pumping and treating contaminated ground water.
- (iv) Any other method suitable for reducing environmental impact to acceptable level.

SCHEDULE II

[see rule 16 (1), (b), (e), 16 (4)]

Standards of processing and treatment of solid waste

A. Standards for composting.- The waste processing facilities shall include composting as one of the technologies for processing of bio degradable waste. In order to prevent pollution from compost plant, the following shall be complied with namely :-

- (a) The incoming organic waste at site shall be stored properly prior to further processing. To the extent possible, the waste storage area should be covered. If, such storage is done in an open area, it shall be provided with impermeable base with facility for collection of leachate and surface water run-off into lined drains leading to a leachate treatment and disposal facility;
- (b) Necessary precaution shall be taken to minimise nuisance of odour, flies, rodents, bird menace and fire hazard;

- (c) In case of breakdown or maintenance of plant, waste intake shall be stopped and arrangements be worked out for diversion of waste to the temporary processing site or temporary landfill sites which will be again reprocessed when plant is in order;
- (d) Pre-process and post-process rejects shall be removed from the processing facility on regular basis and shall not be allowed to pile at the site. Recyclables shall be routed through appropriate vendors. The non-recyclable high calorific fractions to be segregated and sent to waste to energy or for RDF production, co-processing in cement plants or to thermal power plants. Only rejects from all processes shall be sent for sanitary landfill site(s).
- (e) The windrow area shall be provided with impermeable base. Such a base shall be made of concrete or compacted clay of 50 cm thick having permeability coefficient less than 10^{-7} cm/sec. The base shall be provided with 1 to 2 per cent slope and circled by lined drains for collection of leachate or surface run-off;
- (f) Ambient air quality monitoring shall be regularly carried out. Odour nuisance at down-wind direction on the boundary of processing plant shall also be checked regularly.
- (g) Leachate shall be re-circulated in compost plant for moisture maintenance.
- (h) The end product compost shall meet the standards prescribed under Fertilizer Control Order notified from time to time.
- (i) In order to ensure safe application of compost, the following specifications for compost quality shall be met, namely:-

Parameters	Organic Compost (FCO 2009)	Phosphate Rich Organic Manure (FCO 2013)
(1)	(2)	(3)
Arsenic (mg/Kg)	10.00	10.00
Cadmium (mg/Kg)	5.00	5.00
Chromium (mg/Kg)	50.00	50.00
Copper (mg/Kg)	300.00	300.00
Lead (mg/Kg)	100.00	100.00
Mercury (mg/Kg)	0.15	0.15
Nickel (mg/Kg)	50.00	50.00
Zinc (mg/Kg)	1000.00	1000.00
C/N ratio	<20	Less than 20:1
pH	6.5-7.5	(1:5 solution) maximum 6.7
Moisture, percent by weight, maximum	15.0-25.0	25.0
Bulk density (g/cm ³)	<1.0	Less than 1.6
Total Organic Carbon, per cent by weight, minimum	12.0	7.9

Total Nitrogen (as N), per cent by weight, minimum	0.8	0.4
Total Phosphate (as P ₂ O ₅) percent by weight, minimum	0.4	10.4
Total Potassium (as K ₂ O), percent by weight, minimum	0.4	-
Colour	Dark brown to black	-
Odour	Absence of foul Odor	-
Particle size	Minimum 90% material should pass through 4.0 mm IS sieve	Minimum 90% material should pass through 4.0 mm IS sieve
Conductivity (as dsm-1), not more than	4.0	8.2

* Compost (final product) exceeding the above stated concentration limits shall not be used for food crops. However, it may be utilized for purposes other than growing food crops.

B. Standards for treated leachates.—The disposal of treated leachates shall meet the following standards, namely:-

S. No	Parameter	Standards (Mode of Disposal)		
		Inland surface water	Public sewers	Land disposal
(1)	(2)	(3)	(4)	(5)
1.	Suspended solids, mg/l, max	100	600	200
2.	Dissolved solids (inorganic) mg/l, max.	2100	2100	2100
3	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
4	Ammonical nitrogen (as N), mg/l, max.	50	50	-
5	Total Kjeldahl nitrogen (as N), mg/l, max.	100	-	-
6	Biochemical oxygen demand (3 days at 27 ⁰ C) max.(mg/l)	30	350	100
7	Chemical oxygen demand, mg/l, max.	250	-	-
8	Arsenic (as As), mg/l, max	0.2	0.2	0.2
9	Mercury (as Hg), mg/l, max	0.01	0.01	-
10	Lead (as Pb), mg/l, max	0.1	1.0	-
11	Cadmium (as Cd), mg/l, max	2.0	1.0	-

12	Total Chromium (as Cr), mg/l, max.	2.0	2.0	-
13	Copper (as Cu), mg/l, max.	3.0	3.0	-
14	Zinc (as Zn), mg/l, max.	5.0	15	-
15	Nickel (as Ni), mg/l, max	3.0	3.0	-
16	Cyanide (as CN), mg/l, max.	0.2	2.0	0.2
17	Chloride (as Cl), mg/l, max.	1000	1000	600
18	Fluoride (as F), mg/l, max	2.0	1.5	-
19	Phenolic compounds (as C ₆ H ₅ OH) mg/l, max.	1.0	5.0	-

Note : While discharging treated leachates into inland surface waters, quantity of leachates being discharged and the quantity of dilution water available in the receiving water body shall be given due consideration.

C. Standards for incineration: The Emission from incinerators /thermal technologies in Solid Waste treatment/disposal facility shall meet the following standards, namely:-

Parameter	Emission standard		
	(1)	(2)	(3)
Particulates	50 mg/Nm ³	Standard refers to half hourly average value	
HCl	50 mg/Nm ³	Standard refers to half hourly average value	
SO₂	200 mg/Nm ³	Standard refers to half hourly average value	
CO	100 mg/Nm ³	Standard refers to half hourly average value	
	50 mg/Nm ³	Standard refers to daily average value	
Total Organic Carbon	20 mg/Nm ³	Standard refers to half hourly average value	
HF	4 mg/Nm ³	Standard refers to half hourly average value	
NO_x (NO and NO₂ expressed as NO₂)	400 mg/Nm ³	Standard refers to half hourly average value	
Total dioxins and furans	0.1 ng TEQ/Nm ³	Standard refers to 6-8 hours sampling. Please refer guidelines for 17 concerned congeners for toxic equivalence values to arrive at total toxic equivalence.	
Cd + Th + their compounds	0.05 mg/Nm ³	Standard refers to sampling time anywhere between 30 minutes and 8 hours.	
Hg and its compounds	0.05 mg/Nm ³	Standard refers to sampling time anywhere between 30 minutes and 8 hours.	

Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V + their compounds	0.5 mg/Nm ³	Standard refers to sampling time anywhere between 30 minutes and 8 hours.
<i>Note.- All values corrected to 11% oxygen on a dry basis.</i>		

Note:

- (a) Suitably designed pollution control devices shall be installed or retrofitted with the incinerator to achieve the above emission limits..
- (b) Waste to be incinerated shall not be chemically treated with any chlorinated disinfectants.
- (c) Incineration of chlorinated plastics shall be phased out within two years.
- (d) if the concentration of toxic metals in incineration ash exceeds the limits specified in the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008, as amended from time to time, the ash shall be sent to the hazardous waste treatment, storage and disposal facility.
- (e) Only low sulphur fuel like LDO, LSHS, Diesel, bio-mass, coal, LNG, CNG, RDF and bio-gas shall be used as fuel in the incinerator.
- (f) The CO₂ concentration in tail gas shall not be more than 7%.
- (g) All the facilities in twin chamber incinerators shall be designed to achieve a minimum temperature of 950^oC in secondary combustion chamber and with a gas residence time in secondary combustion chamber not less than 2 (two) seconds.
- (h) Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve total Organic Carbon (TOC) content in the slag and bottom ash less than 3%, or the loss on ignition is less than 5% of the dry weight.
- (i) Odour from sites shall be managed as per guidelines of CPCB issued from time to time

FORM – I**[see rule 15 (v) 16 (1) (c), 21(3)]**

**Application for obtaining authorisation under solid waste management rules
for processing/recycling/treatment and disposal of solid waste**

To,
The Member Secretary,
State Pollution Control Board or Pollution Control Committee,
of.....
Sir,

I/We hereby apply for authorisation under the Solid Waste Management Rules, 2016 for processing, recycling, treatment and disposal of solid waste.

1.	Name of the local body/agency appointed by them/ operator of facility	
2.	Correspondence address Telephone No. Fax No. ,e-mail:	

3.	Nodal Officer & designation (Officer authorised by the local body or agency responsible for operation of processing/ treatment or disposal facility)	
4.	Authorisation required for setting up and operation of the facility (Please tick mark)	waste processing recycling treatment disposal at landfill
5.	Attach copies of the Documents Site clearance (local body) Proof of Environmental Clearance Consent for establishment Agreement between municipal authority and operating agency Investment on the project and expected return	
6.	Processing/recycling/treatment of solid waste (i) Total Quantity of waste to be processed per day Quantity of waste to be recycled Quantity of waste to be treated Quantity of waste to be disposed into landfill (ii) Utilisation programme for waste processed (Product utilisation) (iii) Methodology for disposal (attach details) Quantity of leachate Treatment technology for leachate (iv) Measures to be taken for prevention and control of environmental pollution (v) Measures to be taken for safety of workers working in the plant (vi) Details on solid waste processing/recycling/ treatment/disposal facility (to be attached)	
7.	Disposal of solid waste Number of sites identified Quantity of waste to be disposed per day Details of methodology or criteria followed for site selection (attach) Details of existing site under operation Methodology and operational details of landfilling Measures taken to check environmental pollution	
8	Any other information.	

Date:

Place:

Signature:

Designation

Form- II

[see rule 16 (1) (e)]

Format for issue of authorisation

File No.: _____

Dated: _____

Authorisation No

To _____

Ref: Your application number _____ dt. _____

The _____ State Pollution Control Board/Pollution Control Committee after examining the proposal hereby authorises _____ having administrative office at _____ to set up and operate waste processing/recycling/ treatment/disposal facility at _____

The authorisation is hereby granted to operate the facility for processing, recycling, treatment and disposal of solid waste.

The authorisation is subject to the terms and conditions stated below and such conditions as may be otherwise specified in these rules and the standards laid down in Schedules I and II under these rules.

The _____ State Pollution Control Board/Pollution Control Committees of the UT _____ may, at any time, revoke any of the conditions applicable under the authorisation and shall communicate the same in writing.

Any violation of the provision of the Solid Waste Management Rules, 2016 will attract the penal provision of the Environment (Protection) Act, 1986 (29 of 1986).

(Member Secretary)

State Pollution Control Board/Pollution Control Committee of the UT

(Signature and designation)

Date: _____

Place: _____

Form – III

[see rule 19 (6), 24 (1)]

Format of annual report to be submitted by the operator of facility to the local body

1	Name of the City/Town and State	
2	Population	
3	Area in sq. kilometers	
4	Name & Address of the local body Telephone No. Fax No. E-mail:	
5	Name and address of operator of the facility	
6	Name of officer in-charge of the facility Phone No: Fax No: E-mail:	

7	Number of households in the city/town , Number of non-residential premises in the city Number of election/ administrative wards in the city/town	
8	Quantity of Solid waste	
	Estimated Quantity of solid waste generated in the local body area per day in metric tones	/tpd
	Quantity of solid waste collected per day	/tpd
	Per capita waste collected per day	/gm/day
	Quantity of solid waste processed	/tpd
	Quantity of solid waste disposed at landfill	/tpd
9	Status of Solid Waste Management (SWM) service	
	Segregation and storage of waste at source Whether solid waste is stored at source in domestic/commercial/ institutional bins If yes, Percentage of households practice storage of waste at source in domestic bins Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins Percentage of households dispose of throw solid waste on the streets Percentage of non-residential premises dispose of throw solid waste on the streets Whether solid waste is stored at source in a segregated form If yes, Percentage of premises segregating the waste at source	Yes/No % % % % Yes/No %
	Door to Door Collection of solid waste	
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes/No
	if yes	
	Number of wards covered in D2D collection of waste	
	No. of households covered	
	No. of non-residential premises including commercial establishments ,hotels, restaurants educational institutions/ offices etc covered	

	Percentage of residential and non-residential premises covered in door to door collection through : Motorized vehicle Containerized tricycle/handcart Other device	%				
	If not, method of primary collection adopted					
	Sweeping of streets					
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	km				
	Frequency of street sweepings and percentage of population covered	frequency	Daily	Alternate days	Twice a week	Occasionally
		% of population covered				
	Tools used Manual sweeping Mechanical sweeping Whether long handle broom used by sanitation workers Whether each sanitation worker is given handcart/tricycle for collection of waste Whether handcart / tricycle is containerized Whether the collection tool synchronizes with collection/ waste storage containers utilized	%				
	Secondary Waste Storage facilities					
	No. and type of waste storage depots in the city/town Open waste storage sites Masonry bins Cement concrete cylinder bins Dhalao/covered rooms/space Covered metal/plastic containers Upto 1.1 m ³ bins 2 to 5 m ³ bins Above 5m ³ containers Bin-less city	No.	Capacity in m ³			
	Bin/ population ratio					

Waste Transportation per day Type and Number of vehicles used (pl tick or add)	No. Trips made waste transported
Animal cart Tractors Non tipping Truck Tipping Truck Dumper Placers Refuse collectors Compactors Others JCB/loader	
Frequency of transportation of waste	Frequency (%) of waste transported Daily Alternate day Twice a week Once a week Occasionally
Quantity of waste transported each day	/tpd
Percentage of total waste transported daily	%
Waste Treatment Technologies used Whether solid waste is processed	Yes/No
If yes, Quantity of waste processed daily Land(s) available with the local body for waste processing (in Hectares)	/tpd
Land currently utilized for waste processing	
Solid waste processing facilities in operation	
Solid waste processing facilities under construction Distance of processing facilities from city/town boundary	
Details of technologies adopted	

Composting , vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Qty. of residual waste landfilled Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give detail) Co-processing	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled Qty. raw material processed
Combustible waste supplied to cement plant	
Combustible waste supplied to solid waste based power plants	
Others	Qty.
Solid waste disposal facilities	
No. of dumpsites sites available with the local body	
No. of sanitary landfill sites available with the local body Area of each such sites available for waste disposal	
Area of land currently used for waste disposal	
Distance of dumpsite/landfill facility from city/town	kms
Distance from the nearest habitation	kms
Distance from water body	kms

	Distance from state/national highway	kms
	Distance from Airport	kms
	Distance from important religious places or historical monument	kms
	Whether it falls in flood prone area	Yes/No
	Whether it falls in earthquake fault line area	Yes/No
	Quantity of waste landfilled each day	tpd
	Whether landfill site is fenced	Yes / No
	Whether Lighting facility is available on site	Yes / No
	Whether Weigh bridge facility available	Yes / No
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compacters etc. available
	Manpower deployed at landfill site	Yes/No (if yes, attach details)
	Whether covering is done on daily basis	Yes/No
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	
	Whether adequate covering material is available	Yes/No
	Provisions for gas venting provided	Yes/No, (if yes, attach technical data sheet)
	Provision for leachate collection	Yes/No, (if yes, attach technical data sheet)
10	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes/No (if Yes attach Action Plan details)
11	What separate provisions are made for : Dairy related activities : Slaughter houses waste : C&D waste (construction debris) :	Attach details on Proposals, Steps taken, Yes/No Yes/No Yes/No
12	Details of Post Closure Plan	Attach Plan
13	How many slums are identified and whether these are provided with Solid Waste Management facilities :	Yes/ No (if Yes, attach details)
14	Give details of manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	

15	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	
16	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies.	

Signature of Operator

Dated :

Place:

Form – IV

[see rules 15(za), 24(2)]

Format for annual report on solid waste management to be submitted by the local body

CALENDAR YEAR:	DATE OF SUBMISSION OF REPORT:

1	Name of the City/Town and State	
2	Population	
3	Area in sq. kilometers	
4	Name & Address of local body Telephone No. Fax No. E-mail:	
5	Name of officer in-charge dealing with solid waste management (SOLID WASTEM)Phone No: Fax No: E-mail:	
6	Number of households in the city/town Number of non-residential premises in the city Number of election/ administrative wards in the city/town	
7	Quantity of Solid waste (solid waste)	
	Estimated Quantity of solid waste generated in the local body area per day in metric tones	/tpd
	Quantity of solid waste collected per day	/tpd

	Per capita waste collected per day	/gm/day
	Quantity of solid waste processed	/tpd
	Quantity of solid waste disposed at dumpsite/ landfill	/tpd
8	Status of Solid Waste Management service	
	Segregation and storage of waste at source Whether SOLID WASTE is stored at source in domestic/commercial/ institutional bins, If yes, Percentage of households practice storage of waste at source in domestic bins Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins Percentage of households dispose or throw solid waste on the streets Percentage of non-residential premises dispose of throw solid waste on the streets Whether solid waste is stored at source in a segregated form, If yes, Percentage of premises segregating the waste at source	Yes/No % % % % Yes/No %
	Door to Door Collection of solid waste	
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes/No
	if yes	
	Number of wards covered in D2D collection of waste	
	No. of households covered	
	No. of non-residential premises including commercial establishments ,hotels, restaurants educational institutions/ offices etc covered	
	Percentage of residential and non-residential premises covered in door to door collection through : Motorized vehicle Containerized tricycle/handcart Other device	% % %
	If not, method of primary collection adopted	
	Sweeping of streets	
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	km

	Frequency of street sweepings and percentage of population covered	frequency	Daily	Alternate days	Twice a week	Occasionally
		% of population covered				
	Tools used					
	Manual sweeping			%		
	Mechanical sweeping			%		
	Whether long handle broom used by sanitation workers			Yes/No		
	Whether each sanitation worker is given handcart/tricycle for collection of waste			Yes/No		
	Whether handcart / tricycle is containerized			Yes/No		
	Whether the collection tool synchronizes with collection/ waste storage containers utilized			Yes/No		
	Secondary Waste Storage facilities					
	No. and type of waste storage depots in the city/town	No.	Capacity in m ³			
	Open waste storage sites					
	Masonry bins					
	Cement concrete cylinder bins					
	Dhalao/covered rooms/space					
	Covered metal/plastic containers					
	Upto 1.1 m ³ bins					
	2 to 5 m ³ bins					
	Above 5m ³ containers					
	Bin-less city					
	Bin/ population ratio					
	Ward wise details of waste storage depots (attach) :					
	Ward No:					
	Area:					
	Population:					
	No. of bins placed					
	Total volume of bins placed					
	Total storage capacity of waste storage facilities in cubic meters					
	Total waste actually stored at the waste storage depots daily					

	Give frequency of collection of waste from the depots Number of bins cleared	Frequency	No. of bins
		Daily Alternate day Twice a week Once a week Occasionally	
	Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes/ No (if yes, add details) No. of green bins: No. of blue bins: No. of black bins:	
	Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage (%) of Manual Lifting of solid waste (%) of Mechanical lifting	% %	
	If mechanical – specify the method used	front-end loaders/ Top loaders	
	Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Yes/ No (if yes, specify)	
	Waste transportation per day Type and Number of vehicles used	No. Trips made waste transported	
	Animal cart Tractors Non tipping Truck Tipping Truck Dumper Placers Refuse collectors Compactors Others JCB/loader		

Frequency of transportation of waste	Frequency (%) of waste transported Daily Alternate day Twice a week Once a week Occasionally
Quantity of waste transported each day	/tpd
Percentage of total waste transported daily	%
Waste Treatment Technologies used	
Whether solid waste is processed	Yes/No
If yes, Quantity of waste processed daily	/tpd
Whether treatment is done by local body or through an agency	
Land(s) available with the local body for waste processing (in Hectares)	
Land currently utilized for waste processing	
Solid waste processing facilities in operation	
Solid waste processing facilities under construction	
Distance of processing facilities from city/town boundary	
Details of technologies adopted	
Composting ,	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled

Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give detail)	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
Co-processing	Qty. raw material processed
Combustible waste supplied to cement plant	
Combustible waste supplied to solid waste based power plants	
Others	Qty.
Solid waste disposal facilities	
No. of dumpsites sites available with the local body	
No. of sanitary landfill sites available with the local body	
Area of each such sites available for waste disposal	
Area of land currently used for waste disposal	
Distance of dumpsite/landfill facility from city/town	kms
Distance from the nearest habitation	kms
Distance from water body	kms
Distance from state/national highway	kms
Distance from Airport	kms
Distance from important religious places or historical monument	kms
Whether it falls in flood prone area	Yes/No
Whether it falls in earthquake fault line area	Yes/No
Quantity of waste landfilled each day	tpd
Whether landfill site is fenced	Yes / No
Whether Lighting facility is available on site	Yes / No

	Whether Weigh bridge facility available	Yes / No
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compacters etc. available
	Manpower deployed at landfill site	Yes/No (if yes, attach details)
	Whether covering is done on daily basis	Yes/No
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	
	Whether adequate covering material is available	Yes/No
	Provisions for gas venting provided	Yes/No (if yes, attach technical data sheet)
	Provision for leachate collection	Yes/No (if yes, attach technical data sheet)
9	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes/No (if Yes attach Action Plan details)
10	What separate provisions are made for : Dairy related activities : Slaughter houses waste : C&D waste (construction debris) :	Attach details on Proposals,Steps taken, Yes/No Yes/No Yes/No
11	Details of Post Closure Plan	Attach Plan
12	How many slums are identified and whether these are provided with Solid Waste Management facilities :	Yes/ No (if Yes, attach details)
13	Give details of: Local body's own manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
14	Give details of: Contractor/ concessionaire's manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
15	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	

16	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies	
----	--	--

Signature of CEO/Municipal Commissioner/
Executive Officer/Chief Officer

Date:

Place:

Form – V

[see rule 24(3)]

Format of annual report to be submitted by the state pollution control board or pollution control committee committees to the central pollution control board

PART A

To,

The Chairman
Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar
DELHI- 110 0032

1.	Name of the State/Union territory	:	
2.	Name & address of the State Pollution Control	:	
3.	Number of local bodies responsible for management of solid waste in the State/Union territory under these rules	:	
4.	No. of authorisation application Received	:	
5.	A Summary Statement on progress made by local body in respect of solid waste management	:	Please attach as Annexure-I
6.	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal	:	Please attach as Annexure-II
7.	A summary statement on progress made by local bodies in respect of implementation of Schedule II	:	Please attach as Annexure-III

Date:	Chairman or the Member Secretary State Pollution Control Board/ Pollution Control Committee
Place:	

PART B**Towns/cities**

Total number of towns/cities

Total number of ULBs

Number of class I & class II cities/towns

Authorisation status (names/number)

Number of applications received

Number of authorisations granted

Authorisations under scrutiny

SOLID WASTE Generation status

Solid waste generation in the state (TPD)

collected

treated

landfilled

Compliance to Schedule I of SW Rules (Number/names of towns/capacity)

Good practices in cities/towns

House-to-house collection

Segregation

Storage

Covered transportation

Processing of SW (Number/names of towns/capacity)

Solid Waste processing facilities setup:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization

Processing facility operational:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization

Processing facility under installation/planned:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletisation

Waste-to-Energy Plants: (Number/names of towns/capacity)

Sl. No.	Plant Location	Status of operation	Power generation (MW)	Remarks

Disposal of solid waste (number/names of towns/capacity):

Landfill sites identified

Landfill constructed

Landfill under construction

Landfill in operation

Landfill exhausted

Landfilled capped

Solid Waste Dumpsites (number/names of towns/capacity):

Total number of existing dumpsites

Dumpsites reclaimed/capped

Dumpsites converted to sanitary landfill

Monitoring at Waste processing/Landfills sites

Sl. No.	Name of facilities	Ambient air	Groundwater	Leachate quality	Compost quality	VOCs
1.						
2.						
3.						

Status of Action Plan prepared by Municipalities

Total number of municipalities:

Number of Action Plan submitted:

Form – VI

[see rule 25]

Accident Reporting

1.	Date and time of accident	:	
2.	Sequence of events leading to accident	:	
3.	The waste involved in accident	:	

4.	Assessment of the effects of the accidents on human health: and the environment	:	
5.	Emergency measures taken	:	
6.	Steps taken to alleviate the effects of accidents	:	
7.	Steps taken to prevent the recurrence of such an accident	:	
Date:		Signature:.....	
Place:		Designation:	

[F. No. 18-3/2004-HSMD]
BISHWANATH SINHA, Jt. Secy.

[Published In the Gazette of India, Part-II, Section-3, Sub-section (ii)]
 Ministry of Environment, Forest and Climate Change

NOTIFICATION

New Delhi, the 29th March, 2016

G.S.R. 317(E).-Whereas the Municipal Solid Wastes (Management and Handling) Rules, 2000 published vide notification number S.O. 908(E), dated the 25th September, 2000 by the Government of India in the erstwhile Ministry of Environment and Forests, provided a regulatory frame work for management of Municipal Solid Waste generated in the urban area of the country;

And whereas, to make these rules more effective and to improve the collection, segregation, recycling, treatment and disposal of solid waste in an environmentally sound manner, the Central Government reviewed the existing rules and it was considered necessary to revise the existing rules with a emphasis on the roles and accountability of waste generators and various stakeholders, give thrust to segregation, recovery, reuse, recycle at source, address in detail the management of construction and demolition waste.

And whereas, the draft rules, namely, the Solid Waste Management Rules, 2015 with a separate chapter on construction and demolition waste were published by the Central Government in the Ministry of Environment, Forest and Climate Change vide G.S.R. 451 (E), dated the 3rd June, 2015 inviting objections or suggestions from the public within sixty days from the date of publication of the said notification;

And Whereas, the objections or suggestions received within the stipulated period were duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 6, 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Municipal Solid Wastes (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government hereby notifies the following rules for Management of Construction and Demolition Waste –

1. Short title and commencement.-(1) These rules shall be called the Construction and Demolition Waste Management Rules, 2016.

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

2. Application.-The rules shall apply to every waste resulting from construction, re-modeling, repair and demolition of any civil structure of individual or organisation or authority who generates construction and demolition waste such as building materials, debris, rubble.

3. Definitions –(1) In these rules, unless the context otherwise requires,-

(a) “ ACT’ means the Environment (Protection) Act, 1986 (29 of 1986);

(b) "**construction**" means the process of erecting of building or built facility or other structure, or

building of infrastructure including alteration in these entities,;

- (c) **"construction and demolition waste"** means the waste comprising of building materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure;
- (d) **"de-construction"** means a planned selective demolition in which salvage, re-use and recycling of the demolished structure is maximized;
- (e) **"demolition"** means breaking down or tearing down buildings and other structures either manually or using mechanical force (by various equipment) or by implosion using explosives.
- (f) **"form"** means a Form annexed to these rules;
- (g) **"local authority"** means an urban local authority with different nomenclature such as municipal corporation, municipality, nagarpalika, nagarnigam, nagarpanchayat, municipal council including notified area committee and not limited to or any other local authority constituted under the relevant statutes such as gram panchayat, where the management of construction and demolition waste is entrusted to such agency;
- (h) **"schedule"** means a schedule annexed to these rules;
- (i) **"service provider"** means authorities who provide services like water, sewerage, electricity, telephone, roads, drainage etc. often generate construction and demolition waste during their activities, which includes excavation, demolition and civil work;
- (j) **"waste generator"** means any person or association of persons or institution, residential and commercial establishments including Indian Railways, Airport, Port and Harbour and Defence establishments who undertakes construction of or demolition of any civil structure which generate construction and demolition waste.

(2) Words and expressions used but not defined herein shall have the same meaning defined in the ACT.

(4) Duties of the waste generator -

- (1) Every waste generator shall prima-facie be responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in consonance with these rules.
- (2) The generator shall ensure that other waste (such as solid waste) does not get mixed with this waste and is stored and disposed separately.
- (3) Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodeling work and keep the concerned

authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.

(4) Every waste generator shall keep the construction and demolition waste within the premise or get the waste deposited at collection centre so made by the local body or handover it to the authorised processing facilities of construction and demolition waste; and ensure that there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or the public or drains.

(5) Every waste generator shall pay relevant charges for collection, transportation, processing and disposal as notified by the concerned authorities; Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall have to pay for the processing and disposal of construction and demolition waste generated by them, apart from the payment for storage, collection and transportation. The rate shall be fixed by the concerned local authority or any other authority designated by the State Government.

(5) Duties of service provider and their contractors -

(1) The service providers shall prepare within six months from the date of notification of these rules, a comprehensive waste management plan covering segregation, storage, collection, reuse, recycling, transportation and disposal of construction and demolition waste generated within their jurisdiction.

(2) The service providers shall remove all construction and demolition waste and clean the area every day, if possible, or depending upon the duration of the work, the quantity and type of waste generated, appropriate storage and collection, a reasonable timeframe shall be worked out in consultation with the concerned local authority.

(3) In case of the service providers have no logistics support to carry out the work specified in sub-rules (1) and (2) , they shall tie up with the authorised agencies for removal of construction and demolition waste and pay the relevant charges as notified by the local authority.

(6) Duties of local authority-The local authority shall,-

(1) issue detailed directions with regard to proper management of construction and demolition waste within its jurisdiction in accordance with the provisions of these rules and the local authority shall seek detailed plan or undertaking as applicable, from generator of construction and demolition waste;

(2) chalk out stages, methodology and equipment, material involved in the overall activity and final clean up after completion of the construction and demolition ;

(3c) seek assistance from concerned authorities for safe disposal of construction and demolition waste contaminated with industrial hazardous or toxic material or nuclear waste if any;

(4) shall make arrangements and place appropriate containers for collection of waste and shall remove at regular intervals or when they are filled, either through own resources or by appointing private operators;

- (5) shall get the collected waste transported to appropriate sites for processing and disposal either through own resources or by appointing private operators;
- (6) shall give appropriate incentives to generator for salvaging, processing and or recycling preferably in-situ;
- (7) shall examine and sanction the waste management plan of the generators within a period of one month or from the date of approval of building plan, whichever is earlier from the date of its submission;
- (8) shall keep track of the generation of construction and demolition waste within its jurisdiction and establish a data base and update once in a year;
- (9) shall device appropriate measures in consultation with expert institutions for management of construction and demolition waste generated including processing facility and for using the recycled products in the best possible manner;
- (10) shall create a sustained system of information, education and communication for construction and demolition waste through collaboration with expert institutions and civil societies and also disseminate through their own website;
- (11) shall make provision for giving incentives for use of material made out of construction and demolition waste in the construction activity including in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads.

(7) Criteria for storage, processing or recycling facilities for construction and demolition waste and application of construction and demolition waste and its products-

- (1) The site for storage and processing or recycling facilities for construction and demolition waste shall be selected as per the criteria given in **Schedule I**;
- (2) The operator of the facility as specified in sub- rules (1) shall apply in **Form I** for authorization from State Pollution Control Board or Pollution Control Committee.
- (3) The operator of the facility shall submit the annual report to the State Pollution Control Board in **Form II**.
- (3) Application of materials made from construction and demolition waste in operation of sanitary landfill shall be as per the criteria given in **Schedule II**.

(8) Duties of State Pollution Control Board or Pollution Control Committee-

- (1) State Pollution Control Board or Pollution Control Committee shall monitor the implementation of these rules by the concerned local bodies and the competent authorities and the annual report shall be sent to the Central Pollution Control Board and the State Government or Union Territory or any other State level nodal agency identified by the State Government or Union Territory administration for generating State level comprehensive data. Such reports shall also contain the comments and suggestions of the State Pollution Control Board or Pollution Control Committee with respect to any comments or changes required;

(2) State Pollution Control Board or Pollution Control Committee shall grant authorization to construction and demolition waste processing facility in **Form-III** as specified under these rules after examining the application received in **Form I**;

(3) State Pollution Control Board or Pollution Control Committee shall prepare annual report in **Form IV** with special emphasis on the implementation status of compliance of these rules and forward report to Central Pollution Control Board before the 31st July for each financial year.

(9) Duties of State Government or Union Territory Administration-

(1) The Secretary in-charge of development in the State Government or Union territory administration shall prepare their policy document with respect to management of construction and demolition of waste in accordance with the provisions of these rules within one year from date of final notification of these rules.

(2) The concerned department in the State Government dealing with land shall be responsible for providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition waste.

(3) The Town and Country planning Department shall incorporate the site in the approved land use plan so that there is no disturbance to the processing facility on a long term basis.

(4) Procurement of materials made from construction and demolition waste shall be made mandatory to a certain percentage (say 10-20%) in municipal and Government contracts subject to strict quality control.

(10) Duties of the Central Pollution Control Board - (1) The Central Pollution Control Board shall,-

(a) prepare operational guidelines related to environmental management of construction and demolition waste management;

(b) analyze and collate the data received from the State Pollution Control Boards or Pollution Control Committee to review these rules from time to time;

(c) coordinate with all the State Pollution Control Board and Pollution Control Committees for any matter related to development of environmental standards;

(d) forward annual compliance report to Central Government before the 30th August for each financial year based on reports given by State Pollution Control Boards of Pollution Control Committees.

(11) Duties of Bureau of Indian Standards and Indian Roads Congress -The Bureau of Indian Standards and Indian Roads Congress shall be responsible for preparation of code of practices and standards for use of recycled materials and products of construction and demolition waste in respect of construction activities and the role of Indian Road Congress shall be specific to the standards and practices pertaining to construction of roads.

(12) Duties of the Central Government -

- (1) The Ministry of Urban Development, and the Ministry of Rural Development, Ministry of Panchayat Raj, shall be responsible for facilitating local bodies in compliance of these rules;
- (2) The Ministry of Environment, Forest and Climate Change shall be responsible for reviewing implementation of these rules as and when required.

13. Timeframe for implementation of the provisions of these rules -The timeline for implementation of these rules shall be as specified in **Schedule III**:

14. Accident reporting by the construction and demolition waste processing facilities-In case of any accident during construction and demolition waste processing or treatment or disposal facility, the officer in charge of the facility in the local authority or the operator of the facility shall report of the accident in **Form-V** to the local authority. Local body shall review and issue instruction if any, to the in-charge of the facility.

Schedule I**Criteria for Site Selection for Storage and Processing or Recycling Facilities for construction and demolition Waste**

[See Rule 7(1)]

- (1) The concerned department in the State Government dealing with land shall be responsible for providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition and hand over the sites to the concerned local authority for development, operation and maintenance, which shall ultimately be given to the operators by Competent Authority and wherever above Authority is not available, shall lie with the concerned local authority.
- (2) The Local authority shall co-ordinate (in consultation with Department of Urban Development of the State or the Union territory) with the concerned organizations for giving necessary approvals and clearances to the operators.
- (3) Construction and demolition waste shall be utilized in sanitary landfill for municipal solid waste of the city or region as mentioned at Schedule I of these rule. Residues from construction and demolition waste processing or recycling industries shall be land filled in the sanitary landfill for solid waste.
- (4) The processing or recycling shall be large enough to last for 20-25 years (project based on-site recycling facilities).
- (5) The processing or recycling site shall be away from habitation clusters, forest areas, water bodies, monuments, National Parks, Wetlands and places of important cultural, historical or religious interest.
- (6) A buffer zone of no development shall be maintained around solid waste processing and disposal facility, exceeding five Tonnes per day of installed capacity. This will be maintained within the

total area of the solid waste processing and disposal facility. The buffer zone shall be prescribed on case to case basis by the local authority in consultation with concerned State Pollution Control Board.

- (7) Processing or recycling site shall be fenced or hedged and provided with proper gate to monitor incoming vehicles or other modes of transportation.
- (8) The approach and or internal roads shall be concreted or paved so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.
- (9) Provisions of weigh bridge to measure quantity of waste brought at landfill site, fire protection equipment and other facilities as may be required shall be provided.
- (10) Utilities such as drinking water and sanitary facilities (preferably washing/bathing facilities for workers) and lighting arrangements for easy landfill operations during night hours shall be provided and Safety provisions including health inspections of workers at landfill sites shall be carried out made.
- (11) In order to prevent pollution from processing or recycling operations, the following provisions shall be made, namely:
 - (a) Provision of storm water drains to prevent stagnation of surface water;
 - (b) Provision of paved or concreted surface in selected areas in the processing or recycling facility for minimizing dust and damage to the site.
 - (c) Prevention of noise pollution from processing and recycling plant:
 - (d) provision for treatment of effluent if any, to meet the discharge norms as per Environment (Protection) Rules, 1986.
- (12) Work Zone air quality at the Processing or Recycling site and ambient air quality at the vicinity shall be monitored.
- (13) The measurement of ambient noise shall be done at the interface of the facility with the surrounding area, i.e., at plant boundary.
- (14) The following projects shall be exempted from the norms of pollution from dust and noise as mentioned above:

For construction work, where at least 80 percent construction and demolition waste is recycled or reused in-situ and sufficient buffer area is available to protect the surrounding habitation from any adverse impact.
- (15) A vegetative boundary shall be made around Processing or Recycling plant or site to strengthen the buffer zone.

Schedule II

Application of materials made from construction and demolition waste and its products.

[See Rule 7(3)]

Sl. No.	Parameters	Compliance Criteria
1	<p>Drainage layer in leachate collection system at bottom of Sanitary Landfill Gas Collection Layer above the waste at top of Sanitary Landfill and Drainage Layer in top Cover System above Gas Collection Layer of Sanitary Landfill For capping of sanitary landfill or dumpsite, drainage layer at the top</p>	<p>Only crushed and graded hard material (stone, concrete etc.) shall be used having coarse sand size graded material (2mm – 4.75mm standard sieve size). Since the coarse sand particles will be angular in shape (and not rounded as for riverbed sand), protection layers of non-woven geo-textiles may be provided, wherever required, to prevent puncturing of adjacent layers or components.</p>
2	Daily cover	<p>Fines from construction and demolition processed waste having size up to 2 mm shall be used for daily cover over the fresh waste.</p> <p>Use of construction and demolition fines as landfill cover shall be mandatory where such material is available. Fresh soil (sweet earth) shall not be used for such places and borrow-pits shall not be allowed. Exception – soil excavated during construction of the same landfill. During hot windy days in summer months, some fugitive dust problems may arise. These can be minimised by mixing with local soil wherever available for limited period.</p>
3	Civil construction in a sanitary landfill	Non-structural applications, such as kerb stones, drain covers, paving blocks in pedestrian areas.

Schedule III
Timeframe for Planning and Implementation
[See Rule 13]

Sl. No.	Compliance Criteria	Cities with population of 01 million and above	Cities with population of 0.5-01 million	Cities with population of less than 0.5 million
1	Formulation of policy by State Government	12 months	12 months	12 months
2	Identification of sites for collection and processing facility	18 months	18 months	18 months
3	Commissioning and implementation of the facility	18 months	24 months	36 months
4	Monitoring by SPCBs	3 times a year – once in 4 months	2 times a year – once in 6 months	2 times a year – once in 6 months

**The time Schedule is effective from the date of notification of these rules.*

FORM – I

See [Rule 7 (2)]

Application for obtaining authorisation

To,
The Member Secretary

_____ Name of the local authority or Name of the agency :
appointed by the municipal authority

Correspondence address Telephone No. Fax No.	
Nodal Officer and designation (Officer authorized by the competent authority or agency responsible for operation of processing or recycling or disposal facility)	
Authorisation applied for (Please tick mark)	Setting up of processing or recycling facility of construction and demolition waste
Detailed proposal of construction and demolition waste processing or recycling facility to include the following Location of site approved and allotted by the Competent Authority. Average quantity (in tons per day) and composition of construction and demolition waste to be handled	

<p>at the specific site.</p> <p>Details of construction and demolition waste processing or recycling technology to be used.</p> <p>Quantity of construction and demolition waste to be processed per day.</p> <p>Site clearance from Prescribed Authority.</p> <p>Salient points of agreement between competent authority or local authority and operating agency (attach relevant document).</p> <p>Plan for utilization of recycled product.</p> <p>Expected amount of process rejects and plan for its disposal (e.g., sanitary landfill for solid waste).</p> <p>Measures to be taken for prevention and control of environmental pollution.</p> <p>Investment on project and expected returns.</p> <p>Measures to be taken for safety of workers working in the processing or recycling plant.</p> <p>Any preventive plan for accident during the collection, transportation and treatment including processing and recycling should be informed to the Competent Authority (Local Authority) or Prescribed Authority</p>	
<p>Date:</p>	<p>Signature of Nodal Officer</p>

Form-II

See [Rule (7) (3)]

Format for Issue of Authorisation to the Operator

File No.: _____

Date : _____

To,

Ref : Your application number _____ **Dt.**

The _____ State Pollution Control Board or Pollution Control Committee after examining the proposal hereby authorizes _____ having their administrative office at _____ to set up and operate construction and demolition waste processing facility at _____ on the terms and conditions (including the standards to comply) attached to this authorisation letter.

1. The validity of this authorisation is till _____. After expiry of the validity period, renewal of authorisation is to be sought.

2. The _____ State Pollution Control Board or Pollution Control Committee may, at any time, for justifiable reason, revoke any of the conditions applicable under the authorisation and shall communicate the same in writing.

3. Any violation of the provision of the construction and demolition Waste Management Rules, 2016 shall attract the penal provision of the Environment (Protection) Act, 1986 (29 of 1986).

Date:
Place:

(Member Secretary)
**State Pollution Control Board/
Pollution Control Committee**

Form –III

See [Rule 8(2)]

Format of Annual Report to be submitted by Local Authority to the State Pollution Control Board

- (i) Name of the City or Town.....
- (ii) Population.....
- (iii) Name and address of local authority or competent authority

Telephone No :

Fax :

Email ID:

Website:

- (iv) Name of In-charge or Nodal Officer dealing with construction and demolition wastes management with designation

1. Quantity and composition of construction and demolition waste including any deconstruction waste

- (a) Total quantity of construction and demolition waste generated during the whole year in metric ton

Any figures for lean period and peak period generation per day

Average generation of construction and demolition waste (TPD)

Total quantity of construction and demolition waste collected per day

Any Processing / Recycling Facility set up in the city

Status of the facility

- (b) Total quantity of construction and demolition waste processed / recycled (in metric ton)
 - Non-structural concrete aggregate :
 - Manufactured sand :
 - Ready-mix concrete (RMC) :
 - Paving blocks :
 - GSB :

Others, if any, please specify :

(c) Total quantity of Construction & Demolition waste disposed by land filling without processing (last option) or filling low lying areas

No of landfill sites used :
 Area used :
 Whether weigh-bridge : Yes No
 facility used for quantity estimation?

(d) Whether construction and demolition waste used in sanitary landfill (for solid waste) as per Schedule III : Yes No

2. Storage facilities

(a) Area or location or plot or societies covered for collection of Construction and Demolition waste

(b) No. of large Projects (including roadways project) covered

(c) Whether Area or location or plot or societies collection is Practiced (if yes, whether done by Competent Authority or Local Authority or through Private Agency or Non-Governmental Organization) :

(d) Storage Bins : -----

Specifications (Shape & Size)	Existing Number	Proposed for future
----------------------------------	--------------------	------------------------

(i) Containers or receptacle (Capacity) :
 (ii) Others, please specify :

(e) Whether all storage bins/collection spots are attended for daily lifting : Yes No

(e) Whether lifting of Construction & Demolition Waste from Storage bins is manual or mechanical (please tick mark) please specify mode : Manual Mechanical Others, and equipment used (specify equipment)

3. Transportation

 Existing Actually Required/Proposed number

Truck :
 Truck-Hydraulic :
 Tractor-Trailer :
 Dumper-placers :
 Tricycle :

Refuse-collector :
 Others (Please specify) :

4. Whether any proposal has been made to improve Construction and Demolition waste management practices

**5. Have any efforts been made to involve PPP for processing of Construction & Demolition waste :
 If yes, what is (are) the technologies being used, such as:**

Processing / recycling Technology	(Quantity to be processed)	Steps taken

Dry Process	:	
Wet Process	:	
Others, if any, Please specify	:	

6. What provisions are available to check unauthorized operations of:

- Encroachment on river bank or wet bodies :
- Unauthorized filling of low line areas :
- Mixing with solid waste :
- Encroachment in Parks, Footpaths etc. :

7. How many slums are provided with construction and demolition waste receptacles facilities:

8. Are municipal magistrates appointed for taking penal action for non-compliance with these rules: Yes No
 [If yes, how many cases registered & settled during last three years (give year wise details)]

Dated: _____ **Signature of Municipal Commissioner**

Form -IV
See [Rule (8)(3)]

Format of Annual Report to be submitted by the State Pollution Control Board / Committees to the Central Pollution Control Board

To,

 The Chairman,
 Central Pollution Control Board,
 PariveshBhawan, East Arjun Nagar,
 Delhi-110032

1. Name of the State/Union territory :
2. Name & address of the State
Pollution Control Board/Pollution
Control Committee :
3. Number of municipal authorities
responsible for management of municipal
solid wastes in the State/Union territory
under these rules :
4. A Summary Statement on progress made
by municipal authorities in respect of
implementation of **Schedule III]** : Please attach as Annexure-I
5. A Summary Statement on progress made by
municipal authorities in respect of
implementation of **Schedule IV** : Please attach as Annexure-II

Date:

Chairman or the Member Secretary

Place:

**State Pollution Control Board/
Pollution Control Committee**

Form –V
See [Rule14]
Accident reporting

1. Date and time of accident :
2. Sequence of events leading to accident :
3. The type of construction and demolition waste involved in accident :
4. Assessment of the effects of the accidents
a. on traffic, drainage system and the environment :
5. Emergency measures taken :
6. Steps taken to alleviate the effects
a. of accidents :
7. Steps taken to prevent the recurrence
a. of such an accident :
8. Regular monthly health checkup of workers at

- a. Processing / recycling site shall be made
9. Any accident during the collection,
- a. transportation and treatment including
 - b. processing and recycling should be informed
 - c. to the Competent Authority (Local Authority) or
 - d. Prescribed Authority

Date :

Place:

Authorized Signatory

Designation

[18-6/2014-HSMD]

Bishwanath Sinha, Joint Secretary

[Published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i)]

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**

NOTIFICATION

New Delhi, the 28th March, 2016

G.S.R. 343(E).-Whereas the Bio-Medical Waste (Management and Handling) Rules, 1998 was published *vide* notification number S.O. 630 (E) dated the 20th July, 1998, by the Government of India in the erstwhile Ministry of Environment and Forests, provided a regulatory frame work for management of bio-medical waste generated in the country;

And whereas, to implement these rules more effectively and to improve the collection, segregation, processing, treatment and disposal of these bio-medical wastes in an environmentally sound management thereby, reducing the bio- medical waste generation and its impact on the environment, the Central Government reviewed the existing rules;

And whereas, in exercise of the powers conferred by sections 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government published the draft rules in the Gazette *vide* number G.S.R. 450 (E), dated the 3rd June, 2015 inviting objections or suggestions from the public within sixty days from the date on which copies of the Gazette containing the said notification were made available to the public;

And whereas, the copies of the Gazette containing the said draft rules were made available to the public on the 3rd June, 2015;

And whereas, the objections or comments received within the specified period from the public in respect of the said draft rules have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by section 6, 8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Bio-Medical Waste (Management and Handling) Rules, 1998, except as respects things done or omitted to be done before such suppression, the Central Government hereby makes the following rules, namely:-

1. Short title and commencement.- (1) these rules may be called the Bio-Medical Waste Management Rules, 2016.

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

2. Application.-

(1) These rules shall apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio medical waste in any form including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks, ayush

hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first aid rooms of schools, forensic laboratories and research labs.

- (2). These rules shall not apply to,-
- (a) radioactive wastes as covered under the provisions of the Atomic Energy Act, 1962(33 of 1962) and the rules made there under;
 - (b) hazardous chemicals covered under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 made under the Act;
 - (c) solid wastes covered under the Municipal Solid Waste (Management and Handling) Rules, 2000 made under the Act;
 - (d) the lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001 made under the Act;
 - (e) hazardous wastes covered under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 made under the Act;
 - (f) waste covered under the e-Waste (Management and Handling) Rules, 2011 made under the Act; and
 - (g) hazardous micro organisms, genetically engineered micro organisms and cells covered under the Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms, Genetically Engineered Micro organisms or Cells Rules, 1989 made under the Act.

3. **Definitions.-** In these rules, unless the context otherwise requires, -

- (a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
- (b) "animal house" means a place where animals are reared or kept for the purpose of experiments or testing;
- (c) "authorisation" means permission granted by the prescribed authority for the generation, collection, reception, storage, transportation, treatment, processing, disposal or any other form of handling of bio-medical waste in accordance with these rules and guidelines issued by the Central Government or Central Pollution Control Board as the case may be;
- (d) "authorised person" means an occupier or operator authorised by the prescribed authority to generate, collect, receive, store, transport, treat, process, dispose or handle bio-medical waste in accordance with these rules and the guidelines issued by the Central Government or the Central Pollution Control Board, as the case may be;

- (e) "biological" means any preparation made from organisms or micro-organisms or product of metabolism and biochemical reactions intended for use in the diagnosis, immunisation or the treatment of human beings or animals or in research activities pertaining thereto;
- (f) "bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps, including the categories mentioned in Schedule I appended to these rules;
- (g) "bio-medical waste treatment and disposal facility" means any facility wherein treatment, disposal of bio-medical waste or processes incidental to such treatment and disposal is carried out, and includes common bio-medical waste treatment facilities;
- (h) "Form" means the Form appended to these rules;
- (i) "handling" in relation to bio-medical waste includes the generation, sorting, segregation, collection, use, storage, packaging, loading, transportation, unloading, processing, treatment, destruction, conversion, or offering for sale, transfer, disposal of such waste;
- (j) "health care facility" means a place where diagnosis, treatment or immunisation of human beings or animals is provided irrespective of type and size of health treatment system, and research activity pertaining thereto;
- (k) "major accident" means accident occurring while handling of bio-medical waste having potential to affect large masses of public and includes toppling of the truck carrying bio-medical waste, accidental release of bio-medical waste in any water body but exclude accidents like needle prick injuries, mercury spills;
- (l) "management" includes all steps required to ensure that bio- medical waste is managed in such a manner as to protect health and environment against any adverse effects due to handling of such waste;
- (m) "occupier" means a person having administrative control over the institution and the premises generating bio-medical waste, which includes a hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank, health care facility and clinical establishment, irrespective of their system of medicine and by whatever name they are called;
- (n) "operator of a common bio-medical waste treatment facility" means a person who owns or controls a Common Bio-medical Waste Treatment Facility (CBMWTF) for the collection, reception, storage, transport, treatment, disposal or any other form of handling of bio-medical waste;
- (o) "prescribed authority" means the State Pollution Control Board in respect of a State and Pollution Control Committees in respect of an Union territory;
- (p) "Schedule" means the Schedule appended to these rules.

4. **Duties of the Occupier.-** It shall be the duty of every occupier to-
- (a) take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with these rules;
 - (b) make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I;
 - (c) pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed by the World Health Organisation (WHO) or National AIDS Control Organisation (NACO) guidelines and then sent to the common bio-medical waste treatment facility for final disposal;
 - (d) phase out use of chlorinated plastic bags, gloves and blood bags within two years from the date of notification of these rules;
 - (e) dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;
 - (f) not to give treated bio-medical waste with municipal solid waste;
 - (g) provide training to all its health care workers and others, involved in handling of bio medical waste at the time of induction and thereafter at least once every year and the details of training programmes conducted, number of personnel trained and number of personnel not undergone any training shall be provided in the Annual Report;
 - (h) immunise all its health care workers and others, involved in handling of bio-medical waste for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste, in the manner as prescribed in the National Immunisation Policy or the guidelines of the Ministry of Health and Family Welfare issued from time to time;
 - (i) establish a Bar- Code System for bags or containers containing bio-medical waste to be sent out of the premises or place for any purpose within one year from the date of the notification of these rules;
 - (j) ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralisation prior to mixing with other effluent generated from health care facilities;
 - (k) ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);

- (l) ensure occupational safety of all its health care workers and others involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipments;
- (m) conduct health check up at the time of induction and at least once in a year for all its health care workers and others involved in handling of bio- medical waste and maintain the records for the same;
- (n) maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I;
- (o) report major accidents including accidents caused by fire hazards, blasts during handling of bio-medical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority **and also** along with the annual report;
- (p) make available the annual report on its web-site and all the health care facilities shall make own website within two years from the date of notification of these rules;
- (q) inform the prescribed authority immediately in case the operator of a facility does not collect the bio-medical waste within the intended time or as per the agreed time;
- (r) establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of this committee shall be submitted along with the annual report to the prescribed authority and the healthcare establishments having less than thirty beds shall designate a qualified person to review and monitor the activities relating to bio-medical waste management within that establishment and submit the annual report;
- (s) maintain all record for operation of incineration, hydro or autoclaving etc., for a period of five years;
- (t) existing incinerators to achieve the standards for treatment and disposal of bio-medical waste as specified in Schedule II for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

5. Duties of the operator of a common bio-medical waste treatment and disposal facility.-It shall be the duty of every operator to -

- (a) take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and guidelines issued by the Central Government or, as the case may be, the central pollution control board from time to time;
- (b) ensure timely collection of bio-medical waste from the occupier as prescribed under these rules;
- (c) establish bar coding and global positioning system for handling of bio- medical waste within one year;

- (d) inform the prescribed authority immediately regarding the occupiers which are not handing over the segregated bio-medical waste in accordance with these rules;
- (e) provide training for all its workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter;
- (f) assist the occupier in training conducted by them for bio-medical waste management;
- (g) undertake appropriate medical examination at the time of induction and at least once in a year and immunise all its workers involved in handling of bio-medical waste for protection against diseases, including Hepatitis B and Tetanus, that are likely to be transmitted while handling bio-medical waste and maintain the records for the same;
- (h) ensure occupational safety of all its workers involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipment;
- (i) report major accidents including accidents caused by fire hazards, blasts during handling of bio-medical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority **and also** along with the annual report;
- (i) maintain a log book for each of its treatment equipment according to weight of batch; categories of waste treated; time, date and duration of treatment cycle and total hours of operation;
- (k) allow occupier, who are giving waste for treatment to the operator, to see whether the treatment is carried out as per the rules;
- (l) shall display details of authorisation, treatment, annual report etc on its web-site;
- (m) after ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass, shall be given to recyclers having valid consent or authorisation or registration from the respective State Pollution Control Board or Pollution Control Committee;
- (n) supply non-chlorinated plastic coloured bags to the occupier on chargeable basis, if required;
- (o) common bio-medical waste treatment facility shall ensure collection of biomedical waste on holidays also;
- (p) maintain all record for operation of incineration, hydroor autoclaving for a period of five years; and
- (q) upgrade existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

6. **Duties of authorities.**-The Authority specified in column (2) of Schedule-III shall perform the duties as specified in column (3) thereof in accordance with the provisions of these rules.

7. Treatment and disposal.- (1) Bio-medical waste shall be treated and disposed of in accordance with Schedule I, and in compliance with the standards provided in Schedule-II by the health care facilities and common bio-medical waste treatment facility.

(2) Occupier shall hand over segregated waste as per the Schedule-I to common bio-medical waste treatment facility for treatment, processing and final disposal:

Provided that the lab and highly infectious bio-medical waste generated shall be pre-treated by equipment like autoclave or microwave.

(3) No occupier shall establish on-site treatment and disposal facility, if a service of common bio-medical waste treatment facility is available at a distance of seventy-five kilometer.

(4) In cases where service of the common bio-medical waste treatment facility is not available, the Occupiers shall set up requisite biomedical waste treatment equipment like incinerator, autoclave or microwave, shredder prior to commencement of its operation, as per the authorisation given by the prescribed authority.

(5) Any person including an occupier or operator of a common bio medical waste treatment facility, intending to use new technologies for treatment of bio medical waste other than those listed in Schedule I shall request the Central Government for laying down the standards or operating parameters.

(6) On receipt of a request referred to in sub-rule (5), the Central Government may determine the standards and operating parameters for new technology which may be published in Gazette by the Central Government.

(7) Every operator of common bio-medical waste treatment facility shall set up requisite biomedical waste treatment equipments like incinerator, autoclave or microwave, shredder and effluent treatment plant as a part of treatment, prior to commencement of its operation.

(8) Every occupier shall phase out use of non-chlorinated plastic bags within two years from the date of publication of these rules and after two years from such publication of these rules, the chlorinated plastic bags shall not be used for storing and transporting of bio-medical waste and the occupier or operator of a common bio-medical waste treatment facility shall not dispose of such plastics by incineration and the bags used for storing and transporting biomedical waste shall be in compliance with the Bureau of Indian Standards. Till the Standards are published, the carry bags shall be as per the Plastic Waste Management Rules, 2011.

(9) After ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass shall be given to such recyclers having valid authorisation or registration from the respective prescribed authority.

(10) The Occupier or Operator of a common bio-medical waste treatment facility shall maintain a record of recyclable wastes referred to in sub-rule (9) which are auctioned or sold and the same shall be submitted to the prescribed authority as part of its annual report. The record shall be open for inspection by the prescribed authorities.

- (11) The handling and disposal of all the mercury waste and lead waste shall be in accordance with the respective rules and regulations.

8. Segregation, packaging, transportation and storage.-(1) No untreated bio-medical waste shall be mixed with other wastes.

- (2) The bio-medical waste shall be segregated into containers or bags at the point of generation in accordance with Schedule I prior to its storage, transportation, treatment and disposal.
- (3) The containers or bags referred to in sub-rule (2) shall be labeled as specified in Schedule IV.
- (4) Bar code and global positioning system shall be added by the Occupier and common bio-medical waste treatment facility in one year time.
- (5) The operator of common bio-medical waste treatment facility shall transport the bio-medical waste from the premises of an occupier to any off-site bio-medical waste treatment facility only in the vehicles having label as provided in part 'A' of the Schedule IV along with necessary information as specified in part 'B' of the Schedule IV.
- (6) The vehicles used for transportation of bio-medical waste shall comply with the conditions if any stipulated by the State Pollution Control Board or Pollution Control Committee in addition to the requirement contained in the Motor Vehicles Act, 1988 (59 of 1988), if any or the rules made there under for transportation of such infectious waste.
- (7) Untreated human anatomical waste, animal anatomical waste, soiled waste and, biotechnology waste shall not be stored beyond a period of forty –eight hours:

Provided that in case for any reason it becomes necessary to store such waste beyond such a period, the occupier shall take appropriate measures to ensure that the waste does not adversely affect human health and the environment and inform the prescribed authority along with the reasons for doing so.

- (8) Microbiology waste and all other clinical laboratory waste shall be pre-treated by sterilisation to Log 6 or disinfection to Log 4, as per the World Health Organisation guidelines before packing and sending to the common bio-medical waste treatment facility.

9. Prescribed authority.-(1) The prescribed authority for implementation of the provisions of these rules shall be the State Pollution Control Boards in respect of States and Pollution Control Committees in respect of Union territories.

- (2) The prescribed authority for enforcement of the provisions of these rules in respect of all health care establishments including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories and blood banks of the Armed Forces under the Ministry of Defence shall be the Director General, Armed Forces Medical Services, who shall function under the supervision and control of the Ministry of Defence.

- (3) The prescribed authorities shall comply with the responsibilities as stipulated in Schedule III of these rules.

10. Procedure for authorisation.-Every occupier or operator handling bio-medical waste, irrespective of the quantity shall make an application in Form II to the prescribed authority i.e. State Pollution Control Board and Pollution Control Committee, as the case may be, for grant of authorisation and the prescribed authority shall grant the provisional authorisation in Form III and the validity of such authorisation for bedded health care facility and operator of a common facility shall be synchronised with the validity of the consents.

- (1) The authorisation shall be one time for non-bedded occupiers and the authorisation in such cases shall be deemed to have been granted, if not objected by the prescribed authority within a period of ninety days from the date of receipt of duly completed application along with such necessary documents.
- (2) In case of refusal of renewal, cancellation or suspension of the authorisation by the prescribed authority, the reasons shall be recorded in writing:

Provided that the prescribed authority shall give an opportunity of being heard to the applicant before such refusal of the authorisation.

- (3) Every application for authorisation shall be disposed of by the prescribed authority within a period of ninety days from the date of receipt of duly completed application along with such necessary documents, failing which it shall be deemed that the authorisation is granted under these rules.
- (4) In case of any change in the bio-medical waste generation, handling, treatment and disposal for which authorisation was earlier granted, the occupier or operator shall intimate to the prescribed authority about the change or variation in the activity and shall submit a fresh application in Form II for modification of the conditions of authorisation.

11. Advisory Committee.-(1) Every State Government or Union territory Administration shall constitute an Advisory Committee for the respective State or Union territory under the chairmanship of the respective health secretary to oversee the implementation of the rules in the respective state and to advice any improvements and the Advisory Committee shall include representatives from the Departments of Health, Environment, Urban Development, Animal Husbandry and Veterinary Sciences of that State Government or Union territory Administration, State Pollution Control Board or Pollution Control Committee, urban local bodies or local bodies or Municipal Corporation, representatives from Indian Medical Association, common bio-medical waste treatment facility and non-governmental organisation.

- (2) Notwithstanding anything contained in sub-rule (1), the Ministry of Defence shall constitute the Advisory Committee (Defence) under the chairmanship of Director General of Health Services of Armed Forces consisting of representatives from the Ministry of Defence, Ministry of Environment, Forest and Climate Change, Central Pollution Control Board, Ministry of Health and Family Welfare, Armed Forces Medical College or Command Hospital.

- (3) The Advisory Committee constituted under sub-rule (1) and (2) shall meet at least once in six months and review all matters related to implementation of the provisions of these rules in the State and Armed Forces Health Care Facilities, as the case may be.
- (4) The Ministry of Health and Defence may co-opt representatives from the other Governmental and non-governmental organisations having expertise in the field of bio-medical waste management.

12. **Monitoring of implementation of the rules in health care facilities.-** (1) The Ministry of Environment, Forest and Climate Change shall review the implementation of the rules in the country once in a year through the State Health Secretaries and Chairmen or Member Secretary of State Pollution Control Boards and Central Pollution Control Board and the Ministry may also invite experts in the field of bio-medical waste management, if required.

- (2) The Central Pollution Control Board shall monitor the implementation of these rules in respect of all the Armed Forces health care establishments under the Ministry of Defence.
- (3) The Central Pollution Control Board along with one or more representatives of the Advisory Committee constituted under sub-rule (2) of rule 11, may inspect any Armed Forces health care establishments after prior intimation to the Director General Armed Forces Medical Services.
- (4) Every State Government or Union territory Administration shall constitute District Level Monitoring Committee in the districts under the chairmanship of District Collector or District Magistrate or Deputy Commissioner or Additional District Magistrate to monitor the compliance of the provisions of these rules in the health care facilities generating bio-medical waste and in the common bio-medical waste treatment and disposal facilities, where the bio-medical waste is treated and disposed of.
- (5) The District Level Monitoring Committee constituted under sub-rule (4) shall submit its report once in six months to the State Advisory Committee and a copy thereof shall also be forwarded to State Pollution Control Board or Pollution Control Committee concerned for taking further necessary action.
- (6) The District Level Monitoring Committee shall comprise of District Medical Officer or District Health Officer, representatives from State Pollution Control Board or Pollution Control Committee, Public Health Engineering Department, local bodies or municipal corporation, Indian Medical Association, common bio-medical waste treatment facility and registered non-governmental organisations working in the field of bio-medical waste management and the Committee may co-opt other members and experts, if necessary and the District Medical Officer shall be the Member Secretary of this Committee.

13. **Annual report.-**(1) Every occupier or operator of common bio-medical waste treatment facility shall submit an annual report to the prescribed authority in Form-IV, on or before the 30th June of every year.

- (2) The prescribed authority shall compile, review and analyse the information received and send this information to the Central Pollution Control Board on or before the 31st July of every year.

- (3) The Central Pollution Control Board shall compile, review and analyse the information received and send this information, along with its comments or suggestions or observations to the Ministry of Environment, Forest and Climate Change on or before 31st August every year.
- (4) The Annual Reports shall also be available online on the websites of Occupiers, State Pollution Control Boards and Central Pollution Control Board.
- 14. Maintenance of records.-** (1) Every authorised person shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal or any other form of handling of bio-medical waste, for a period of five years, in accordance with these rules and guidelines issued by the Central Government or the Central Pollution Control Board or the prescribed authority as the case may be.
- (2) All records shall be subject to inspection and verification by the prescribed authority or the Ministry of Environment, Forest and Climate Change at any time.
- 15. Accident reporting.-** (1) In case of any major accident at any institution or facility or any other site while handling bio-medical waste, the authorised person shall intimate immediately to the prescribed authority about such accident and forward a report within twenty-four hours in writing regarding the remedial steps taken in Form I.
- (2) Information regarding all other accidents and remedial steps taken shall be provided in the annual report in accordance with rule 13 by the occupier.
- 16. Appeal.-**(1) Any person aggrieved by an order made by the prescribed authority under these rules may, within a period of thirty days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary (Environment) of the State Government or Union territory administration .
- (2) Any person aggrieved by an order of the Director General Armed Forces Medical Services under these rules may, within thirty days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary, Ministry of Environment, Forest and Climate Change.
- (3) The authority referred to in sub-para (1) and (2) as the case may be, may entertain the appeal after the expiry of the said period of thirty days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.
- (4) The appeal shall be disposed of within a period of ninety days from the date of its filing.
- 17. Site for common bio-medical waste treatment and disposal facility.-**(1) Without prejudice to rule 5 of these rules, the department in the business allocation of land assignment shall be responsible for providing suitable site for setting up of common biomedical waste treatment and disposal facility in the State Government or Union territory Administration.

- (2) The selection of site for setting up of such facility shall be made in consultation with the prescribed authority, other stakeholders and in accordance with guidelines published by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board.

18. **Liability of the occupier, operator of a facility.**- (1) The occupier or an operator of a common bio-medical waste treatment facility shall be liable for all the damages caused to the environment or the public due to improper handling of bio- medical wastes.

- (2) The occupier or operator of common bio-medical waste treatment facility shall be liable for action under section 5 and section 15 of the Act, in case of any violation.

SCHEDULE I

[See rules 3 (e), 4(b), 7(1), 7(2), 7(5), 7 (6) and 8(2)]

Part-1

Biomedical wastes categories and their segregation, collection, treatment, processing and disposal options

Category	Type of Waste	Type of Bag or Container to be used	Treatment and Disposal options
(1)	(2)	(3)	(4)
Yellow	(a) Human Anatomical Waste: Human tissues, organs, body parts and fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time).	Yellow coloured non-chlorinated plastic bags	Incineration or Plasma Pyrolysis or deep burial*
	(b) Animal Anatomical Waste : Experimental animal carcasses, body parts, organs, tissues, including the waste generated from animals used in experiments or testing in veterinary hospitals or colleges or animal houses.		
	(c) Soiled Waste: Items contaminated with blood, body fluids like dressings, plaster casts, cotton swabs and		

	bags containing residual or discarded blood and blood components.		hydroclaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent for energy recovery.
	(d) Expired or Discarded Medicines: Pharmaceutical waste like antibiotics, cytotoxic drugs including all items contaminated with cytotoxic drugs along with glass or plastic ampoules, vials etc.	Yellow coloured non-chlorinated plastic bags or containers	Expired cytotoxic drugs and items contaminated with cytotoxic drugs to be returned back to the manufacturer or supplier for incineration at temperature >1200 °C or to common bio-medical waste treatment facility or hazardous waste treatment, storage and disposal facility for incineration at >1200°C Or Encapsulation or Plasma Pyrolysis at >1200°C. All other discarded medicines shall be either sent back to manufacturer or disposed by incineration.
	(e) Chemical Waste: Chemicals used in production of biological and used or discarded disinfectants.	Yellow coloured containers or non-chlorinated plastic bags	Disposed of by incineration or Plasma Pyrolysis or Encapsulation in hazardous waste treatment, storage and disposal facility.
	(f) Chemical Liquid Waste : Liquid waste generated due to use of chemicals in production of biological and used or discarded disinfectants, Silver X-ray film developing liquid, discarded Formalin, infected secretions, aspirated body fluids, liquid from laboratories and floor washings, cleaning, house-keeping and disinfecting activities etc.	Separate collection system leading to effluent treatment system	After resource recovery, the chemical liquid waste shall be pre-treated before mixing with other wastewater. The combined discharge shall conform to the discharge norms given in Schedule-III.
	(g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.	Non-chlorinated yellow plastic bags or suitable packing material	Non- chlorinated chemical disinfection followed by incineration or Plazma Pyrolysis or for energy recovery. In absence of above facilities, shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent for energy recovery or incineration or Plazma Pyrolysis.

	<p>(h) Microbiology, Biotechnology and other clinical laboratory waste: Blood bags, Laboratory cultures, stocks or specimens of micro-organisms, live or attenuated vaccines, human and animal cell cultures used in research, industrial laboratories, production of biological, residual toxins, dishes and devices used for cultures.</p>	Autoclave safe plastic bags or containers	Pre-treat to sterilize with non-chlorinated chemicals on-site as per National AIDS Control Organisation or World Health Organisation guidelines thereafter for Incineration.
Red	<p>Contaminated Waste (Recyclable) (a) Wastes generated from disposable items such as tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes (without needles and <i>fixed needle syringes</i>) and vaccutainers with their needles cut) and gloves.</p>	Red coloured non-chlorinated plastic bags or containers	<p>Autoclaving or micro-waving/hydroclaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent to registered or authorized recyclers or for energy recovery or plastics to diesel or fuel oil or for road making, whichever is possible.</p> <p>Plastic waste should not be sent to landfill sites.</p>
White (Translucent)	<p>Waste sharps including Metals: Needles, syringes with fixed needles, needles from needle tip cutter or burner, scalpels, blades, or any other contaminated sharp object that may cause puncture and cuts. This includes both used, discarded and contaminated metal sharps</p>	Puncture proof, Leak proof, tamper proof containers	Autoclaving or Dry Heat Sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete; combination of shredding cum autoclaving; and sent for final disposal to iron foundries (having consent to operate from the State Pollution Control Boards or Pollution Control Committees) or sanitary landfill or designated concrete waste sharp pit.
Blue	<p>(a) Glassware: Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic wastes.</p>	Cardboard boxes with blue colored marking	Disinfection (by soaking the washed glass waste after cleaning with detergent and Sodium Hypochlorite treatment) or through autoclaving or microwaving or hydroclaving and then sent for recycling.

	(b) Metallic Body Implants	Cardboard boxes with blue colored marking	
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***Disposal by deep burial is permitted only in rural or remote areas where there is no access to common bio-medical waste treatment facility. This will be carried out with prior approval from the prescribed authority and as per the Standards specified in Schedule-III. The deep burial facility shall be located as per the provisions and guidelines issued by Central Pollution Control Board from time to time.**

Part -2

- (1) All plastic bags shall be as per BIS standards as and when published, till then the prevailing Plastic Waste Management Rules shall be applicable.
- (2) Chemical treatment using at least 10% Sodium Hypochlorite having 30% residual chlorine for twenty minutes or any other equivalent chemical reagent that should demonstrate $\text{Log}_{10}4$ reduction efficiency for microorganisms as given in Schedule- III.
- (3) Mutilation or shredding must be to an extent to prevent unauthorized reuse.
- (4) There will be no chemical pretreatment before incineration, except for microbiological, lab and highly infectious waste.
- (5) Incineration ash (ash from incineration of any bio-medical waste) shall be disposed through hazardous waste treatment, storage and disposal facility, if toxic or hazardous constituents are present beyond the prescribed limits as given in the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 or as revised from time to time.
- (6) Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time) can be considered as human anatomical waste. Such waste should be handed over to the operator of common bio-medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the Medical Superintendent of hospital or healthcare establishment.
- (7) Cytotoxic drug vials shall not be handed over to unauthorised person under any circumstances. These shall be sent back to the manufactures for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio-medical waste treatment and disposal facility or TSDFs or plasma pyrolysis at temperature $>1200^{\circ}\text{C}$.
- (8) Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such case, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio-medical waste treatment and disposal facility only.

- (9) On-site pre-treatment of laboratory waste, microbiological waste, blood samples, blood bags should be disinfected or sterilized as per the Guidelines of World Health Organisation or National AIDS Control Organisation and then given to the common bio-medical waste treatment and disposal facility.
- (10) Installation of in-house incinerator is not allowed. However in case there is no common biomedical facility nearby, the same may be installed by the occupier after taking authorisation from the State Pollution Control Board.
- (11) Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage. Wherever the occupier is not linked to a disposal facility it shall be the responsibility of the occupier to sterilize and dispose in the manner prescribed.
- (12) Bio-medical waste generated in households during healthcare activities shall be segregated as per these rules and handed over in separate bags or containers to municipal waste collectors. Urban Local Bodies shall have tie up with the common bio-medical waste treatment and disposal facility to pickup this waste from the Material Recovery Facility (MRF) or from the house hold directly, for final disposal in the manner as prescribed in this Schedule.

SCHEDULE II

[See rule 4(t), 7(1) and 7(6)]

STANDARDS FOR TREATMENT AND DISPOSAL OF BIO-MEDICAL WASTES

1. STANDARDS FOR INCINERATION.-

All incinerators shall meet the following operating and emission standards-

A. Operating Standards

- 1). Combustion efficiency (CE) shall be at least 99.00%.
- 2). The Combustion efficiency is computed as follows:

$$\text{C.E.} = \frac{\% \text{CO}_2}{\% \text{CO}_2 + \% \text{CO}} \times 100$$
- 3). The temperature of the primary chamber shall be a minimum of 800 °C and the secondary chamber shall be minimum of 1050°C + or - 50°C.
- 4). The secondary chamber gas residence time shall be at least two seconds.

B. Emission Standards

Sl. No.	Parameter	Standards	
		(3)	(4)
		Limiting concentration in mg Nm³ unless stated	Sampling Duration in minutes, unless stated
1.	Particulate matter	50	30 or 1Nm ³ of sample volume, whichever is more
2.	Nitrogen Oxides NO and NO ₂ expressed asNO ₂	400	30 for online sampling or grab sample
3.	HCl	50	30 or 1Nm ³ of sample volume, whichever is more
4.	Total Dioxins and Furans	0.1ngTEQ/Nm ³ (at 11% O ₂)	8 hours or 5Nm ³ of sample volume, whichever is more
5.	Hg and its compounds	0.05	2 hours or 1Nm ³ of sample volume, whichever is more

C. Stack Height: Minimum stack height shall be 30 meters above the ground and shall be attached with the necessary monitoring facilities as per requirement of monitoring of 'general parameters' as notified under the Environment (Protection) Act, 1986 and in accordance with the Central Pollution Control Board Guidelines of Emission Regulation Part-III.

Note:

- (a) The existing incinerators shall comply with the above within a period of two years from the date of the notification.
- (b) The existing incinerators shall comply with the standards for Dioxins and Furans of 0.1ngTEQ/Nm³, as given below within two years from the date of commencement of these rules.
- (c) All upcoming common bio-medical waste treatment facilities having incineration facility or captive incinerator shall comply with standards for Dioxins and Furans.
- (d) The existing secondary combustion chambers of the incinerator and the pollution control devices shall be suitably retrofitted, if necessary, to achieve the emission limits.
- (e) Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.
- (f) Ash from incineration of biomedical waste shall be disposed of at common hazardous waste treatment and disposal facility. However, it may be disposed of in municipal landfill, if the toxic metals in incineration ash are within the regulatory quantities as defined under the Hazardous Waste (Management and Handling and Transboundary Movement) Rules, 2008 as amended from time to time.
- (g) Only low Sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, Compressed Natural Gas, Liquefied Natural Gas or Liquefied Petroleum Gas shall be used as fuel in the incinerator.

- (h) The occupier or operator of a common bio-medical waste treatment facility shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) once in three months through a laboratory approved under the Environment (Protection) Act, 1986 and record of such analysis results shall be maintained and submitted to the prescribed authority. In case of dioxins and furans, monitoring should be done once in a year.
- (i) The occupier or operator of the common bio-medical waste treatment facility shall install continuous emission monitoring system for the parameters as stipulated by State Pollution Control Board or Pollution Control Committees in authorisation and transmit the data real time to the servers at State Pollution Control Board or Pollution Control Committees and Central Pollution Control Board.
- (j) All monitored values shall be corrected to 11% Oxygen on dry basis.
- (k) Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon content in the slag and bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.
- (l) The occupier or operator of a common bio-medical waste incinerator shall use combustion gas analyzer to measure CO₂, CO and O₂.

2. Operating and Emission Standards for Disposal by Plasma Pyrolysis or Gasification:

A. Operating Standards:

All the operators of the Plasma Pyrolysis or Gasification shall meet the following operating and emission standards:

- 1) Combustion Efficiency (CE) shall be at least 99.99%.
- 2) The Combustion Efficiency is computed as follows.

$$\frac{\% \text{ CO}_2}{(\% \text{ CO}_2 + \% \text{ CO})} \times 100 \qquad \text{C.E} =$$
- 3) The temperature of the combustion chamber after plasma gasification shall be 1050 ± 50 °C with gas residence time of at least 2(two) second, with minimum 3 % Oxygen in the stack gas.
- 4) The Stack height should be minimum of 30 m above ground level and shall be attached with the necessary monitoring facilities as per requirement of monitoring of ‘general parameters’ as notified under the Environment (Protection) Act, 1986 and in accordance with the CPCB Guidelines of Emission Regulation Part-III.

B. Air Emission Standards and Air Pollution Control Measures

- (i) Emission standards for incinerator, notified at SI No.1 above in this Schedule, and revised from time to time, shall be applicable for the Plasma Pyrolysis or Gasification also.

- (ii) Suitably designed air pollution control devices shall be installed or retrofitted with the 'Plasma Pyrolysis or Gasification to achieve the above emission limits, if necessary.
- (iii) Wastes to be treated using Plasma Pyrolysis or Gasification shall not be chemically treated with any chlorinated disinfectants and chlorinated plastics shall not be treated in the system.

C. Disposal of Ash Vitrified Material: The ash or vitrified material generated from the 'Plasma Pyrolysis or Gasification shall be disposed off in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008 and revisions made thereafter in case the constituents exceed the limits prescribed under Schedule II of the said Rules or else in accordance with the provisions of the Environment (Protection) Act, 1986, whichever is applicable.

3. STANDARDS FOR AUTOCLAVING OF BIO-MEDICAL WASTE.-

The autoclave should be dedicated for the purposes of disinfecting and treating bio-medical waste.

- (1) When operating a gravity flow autoclave, medical waste shall be subjected to:
 - (i) a temperature of not less than 121° C and pressure of 15 pounds per square inch (psi) for an autoclave residence time of not less than 60 minutes; or
 - (ii) a temperature of not less than 135° C and a pressure of 31 psi for an autoclave residence time of not less than 45 minutes; or
 - (iii) a temperature of not less than 149° C and a pressure of 52 psi for an autoclave residence time of not less than 30 minutes.
- (2) When operating a vacuum autoclave, medical waste shall be subjected to a minimum of three pre-vacuum pulse to purge the autoclave of all air. The air removed during the pre-vacuum, cycle should be decontaminated by means of HEPA and activated carbon filtration, steam treatment, or any other method to prevent release of pathogen. The waste shall be subjected to the following:
 - (i) a temperature of not less than 121°C and pressure of 15 psi per an autoclave residence time of not less than 45 minutes; or
 - (ii) a temperature of not less than 135°C and a pressure of 31 psi for an autoclave residence time of not less than 30 minutes;
- (3) Medical waste shall not be considered as properly treated unless the time, temperature and pressure indicators indicate that the required time, temperature and pressure were reached during the autoclave process. If for any reasons, time temperature or pressure indicator indicates that the required temperature, pressure or residence time was not reached, the entire load of medical waste must be autoclaved again until the proper temperature, pressure and residence time were achieved.

(4) **Recording of operational parameters:** Each autoclave shall have graphic or computer recording devices which will automatically and continuously monitor and record dates, time of day, load identification number and operating parameters throughout the entire length of the autoclave cycle.

(5) **Validation test for autoclave:** The validation test shall use four biological indicator strips, one shall be used as a control and left at room temperature, and three shall be placed in the approximate center of three containers with the waste. Personal protective equipment (gloves, face mask and coveralls) shall be used when opening containers for the purpose of placing the biological indicators. At least one of the containers with a biological indicator should be placed in the most difficult location for steam to penetrate, generally the bottom center of the waste pile. The occupier or operator shall conduct this test three consecutive times to define the minimum operating conditions. The temperature, pressure and residence time at which all biological indicator vials or strips for three consecutive tests show complete inactivation of the spores shall define the minimum operating conditions for the autoclave. After determining the minimum temperature, pressure and residence time, the occupier or operator of a common biomedical waste treatment facility shall conduct this test once in three months and records in this regard shall be maintained.

(6) **Routine Test:** A chemical indicator strip or tape that changes colour when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste package at different locations to ensure that the inner content of the package has been adequately autoclaved. The occupier or operator of a common bio medical waste treatment facility shall conduct this test during autoclaving of each batch and records in this regard shall be maintained.

(7) **Spore testing:** The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be *Geobacillusstearothermophilus* spores using vials or spore Strips; with at least 1×10^6 spores. Under no circumstances will an autoclave have minimum operating parameters less than a residence time of 30 minutes, a temperature less than 121°C or a pressure less than 15 psi. The occupier or operator of a common bio medical waste treatment and disposal facility shall conduct this test at least once in every week and records in this regard shall be maintained.

4. STANDARDS OF MICROWAVING.-

(1) Microwave treatment shall not be used for cytotoxic, hazardous or radioactive wastes, contaminated animal carcasses, body parts and large metal items.

(2) The microwave system shall comply with the efficacy test or routine tests and a performance guarantee may be provided by the supplier before operation of the limit.

(3) The microwave should completely and consistently kill the bacteria and other pathogenic organisms that are ensured by approved biological indicator at the maximum design capacity of each microwave unit. Biological indicators for microwave shall be *Bacillus atrophaeus* spores using vials or spore strips with at least 1×10^4 spores per detachable strip. The biological indicator shall be placed with waste and exposed to same conditions as the waste during a normal treatment cycle.

5. **STANDARDS FOR DEEP BURIAL.**- (1) A pit or trench should be dug about two meters deep. It should be half filled with waste, then covered with lime within 50 cm of the surface, before filling the rest of the pit with soil.

(2) It must be ensured that animals do not have any access to burial sites. Covers of galvanised iron or wire meshes may be used.

(3) On each occasion, when wastes are added to the pit, a layer of 10 cm of soil shall be added to cover the wastes.

(4) Burial must be performed under close and dedicated supervision.

(5) The deep burial site should be relatively impermeable and no shallow well should be close to the site.

(6) The pits should be distant from habitation, and located so as to ensure that no contamination occurs to surface water or ground water. The area should not be prone to flooding or erosion.

(7) The location of the deep burial site shall be authorised by the prescribed authority.

(8) The institution shall maintain a record of all pits used for deep burial.

(9) The ground water table level should be a minimum of six meters below the lower level of deep burial pit.

6. **STANDARDS FOR EFFICACY OF CHEMICAL DISINFECTION**

Microbial inactivation efficacy is equated to “Log₁₀ kill” which is defined as the difference between the logarithms of number of test microorganisms before and after chemical treatment. Chemical disinfection methods shall demonstrate a 4 Log₁₀ reduction or greater for *Bacillus Subtilis* (ATCC 19659) in chemical treatment systems.

7. **STANDARDS FOR DRY HEAT STERILIZATION**

Waste sharps can be treated by dry heat sterilization at a temperature not less than 185⁰C, at least for a residence period of 150 minutes in each cycle, which sterilization period of 90 minutes. There should be automatic recording system to monitor operating parameters.

(i) **Validation test for Sharps sterilization unit**

Waste sharps sterilization unit should completely and consistently kill the biological indicator *Geobacillus Stearothermophilus* or *Bacillus Atropheauspoers* using vials with at least log₁₀ 6 spores per ml. The test shall be carried out once in three months

(ii) **Routine test**

A chemical indicator strip or tape that changes colour when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste to ensure that the inner content of the sharps has been adequately disinfected. This test shall be performed once in week and records in this regard shall be maintained.

8. STANDARDS FOR LIQUID WASTE.-

(1) The effluent generated or treated from the premises of occupier or operator of a common bio medical waste treatment and disposal facility, before discharge into the sewer should conform to the following limits-

PARAMETERS	PERMISSIBLE LIMITS
pH	6.5-9.0
Suspended solids	100 mg/l
Oil and grease	10 mg/l
BOD	30 mg/l
COD	250 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent.

(2) Sludge from Effluent Treatment Plant shall be given to common bio-medical waste treatment facility for incineration or to hazardous waste treatment, storage and disposal facility for disposal.

Schedule III

[See rule 6 and 9(3)]

List of Prescribed Authorities and the Corresponding Duties

Sl. No (1)	Authority (2)	Corresponding Duties (3)
1	Ministry of Environment, Forest and Climate Change, Government of India	<p>(i) Making Policies concerning bio-medical waste Management in the Country including notification of Rules and amendments to the Rules as and when required.</p> <p>(ii) Providing financial assistance for training and awareness programmes on bio-medical waste management related activities to for the State Pollution Control Boards or Pollution Control Committees.</p> <p>(iii) Facilitating financial assistance for setting up or up-gradation of common bio-medical waste treatment facilities.</p> <p>(iv) Undertake or support operational research and assessment with reference to risks to environment and health due to bio-medical waste and</p>

		<p>previously unknown disposables and wastes from new types of equipment.</p> <p>(v) Constitution of Monitoring Committee for implementation of the rules.</p> <p>(vi) Hearing Appeals and give decision made in Form-V against order passed by the prescribed authorities.</p> <p>(vii) Develop Standard manual for Trainers and Training.</p> <p>(viii) Notify the standards or operating parameters for new technologies for treatment of bio medical waste other than those listed in Schedule- I.</p>
2	<p>Central or State Ministry of Health and Family Welfare, Central Ministry for Animal Husbandry and Veterinary or State Department of Animal Husbandry and Veterinary.</p>	<p>(i) Grant of license to health care facilities or nursing homes or veterinary establishments with a condition to obtain authorisation from the prescribed authority for bio-medical waste management.</p> <p>(ii) Monitoring, Refusal or Cancellation of license for health care facilities or nursing homes or veterinary establishments for violations of conditions of authorisation or provisions under these Rules.</p> <p>(iii) Publication of list of registered health care facilities with regard to bio-medical waste generation, treatment and disposal.</p> <p>(iv) Undertake or support operational research and assessment with reference to risks to environment and health due to bio-medical waste and previously unknown disposables and wastes from new types of equipment.</p> <p>(v) Coordinate with State Pollution Control Boards for organizing training programmes to staff of health care facilities and municipal workers on bio-medical waste.</p> <p>(vi) Constitution of Expert Committees at National or State level for overall review and promotion of clean or new technologies for bio-medical waste management.</p>

		<p>(vii) Organizing or Sponsoring of trainings for the regulatory authorities and health care facilities on bio-medical waste management related activities.</p> <p>(viii) Sponsoring of mass awareness campaigns in electronic media and print media.</p>
3	Ministry of Defence	<p>(i) Grant and renewal of authorisation to Armed Forces health care facilities or common bio-medical waste treatment facilities (Rule 9).</p> <p>(ii) Conduct training courses for authorities dealing with management of bio-medical wastes in Armed Forces health care facilities or treatment facilities in association with State Pollution Control Boards or Pollution Control Committees or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change.</p> <p>(iii) Publication of inventory of occupiers and bio-medical waste generation from Armed Forces health care facilities or occupiers</p> <p>(iv) Constitution of Advisory Committee for implementation of the rules.</p> <p>(v) Review of management of bio-medical waste generation in the Armed Forces health care facilities through its Advisory Committee (Rule 11).</p> <p>(vi) Submission of annual report to Central Pollution Control Board within the stipulated time period (Rule 13).</p>
4.	Central Pollution Control Board	<p>(i) Prepare Guidelines on bio-medical waste Management and submit to the Ministry of Environment, Forest and Climate Change.</p> <p>(ii) Co-ordination of activities of State Pollution Control Boards or Pollution Control Committees on bio-medical waste.</p> <p>(iii) Conduct training courses for authorities dealing with management of bio-medical waste.</p> <p>(iv) Lay down standards for new technologies for</p>

		<p>treatment and disposal of bio-medical waste (Rule 7) and prescribe specifications for treatment and disposal of bio-medical wastes (Rule 7).</p> <p>(v) Lay down Criteria for establishing common bio-medical waste treatment facilities in the Country.</p> <p>(vi) Random inspection or monitoring of health care facilities and common bio-medical waste treatment facilities.</p> <p>(vii) Review and analysis of data submitted by the State Pollution Control Boards on bio-medical waste and submission of compiled information in the form of annual report along with its observations to Ministry of Environment, Forest and Climate Change .</p> <p>(viii) Inspection and monitoring of health care facilities operated by the Director General, Armed Forces Medical Services (Rule 9).</p> <p>(ix) Undertake or support research or operational research regarding bio-medical waste.</p>
5.	State Government of Health or Union Territory Government or Administration	<p>(i) To ensure implementation of the rule in all health care facilities or occupiers.</p> <p>(ii) Allocation of adequate funds to Government health care facilities for bio-medical waste management.</p> <p>(iii) Procurement and allocation of treatment equipments and make provision for consumables for bio-medical waste management in Government health care facilities.</p> <p>(iv) Constitute State or District Level Advisory Committees under the District Magistrate or Additional District Magistrate to oversee the bio-medical waste management in the Districts.</p> <p>(v) Advise State Pollution Control Boards or Pollution Control Committees on implementation of these Rules.</p> <p>(vi) Implementation of recommendations of the Advisory Committee in all the health care facilities.</p>

6.	State Pollution Control Boards or Pollution Control Committees	<ul style="list-style-type: none"> (i) Inventorisation of Occupiers and data on bio-medical waste generation, treatment & disposal. (ii) Compilation of data and submission of the same in annual report to Central Pollution Control Board within the stipulated time period. (iii) Grant and renewal, suspension or refusal cancellation or of authorisation under these rules (Rule 7, 8 and 10). (iv) Monitoring of compliance of various provisions and conditions of authorisation. (v) Action against health care facilities or common bio-medical waste treatment facilities for violation of these rules (Rule 18). (vi) Organizing training programmes to staff of health care facilities and common bio-medical waste treatment facilities and State Pollution Control Boards or Pollution Control Committees Staff on segregation, collection, storage, transportation, treatment and disposal of bio-medical wastes. (vii) Undertake or support research or operational research regarding bio-medical waste management. (viii) Any other function under these rules assigned by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time. (ix) Implementation of recommendations of the Advisory Committee. (x) Publish the list of Registered or Authorised (or give consent) Recyclers. (xi) Undertake and support third party audits of the common bio-medical waste treatment facilities in their State.
7	Municipalities or Corporations, Urban Local Bodies and Gram Panchayats	<ul style="list-style-type: none"> (i) Provide or allocate suitable land for development of common bio-medical waste treatment facilities in their respective jurisdictions as per the guidelines of

		<p>Central Pollution Control Board.</p> <p>(ii) Collect other solid waste (other than the bio-medical waste) from the health care facilities as per the Municipal Solid Waste (Management and handling) Rules, 2000 or as amended time to time.</p> <p>(iii) Any other function stipulated under these Rules.</p>
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SCHEDULE IV
[See rule 8(3) and (5)]
Part A

LABEL FOR BIO-MEDICAL WASTE CONTAINERS or BAGS



HANDLE WITH CARE

CYTOTOXIC HAZARD SYMBOL



HANDLE WITH CARE

Part B

LABEL FOR TRANSPORTING BIO-MEDICAL WASTE BAGS OR CONTAINERS

DayMonth

Year

Date of generation

Waste category Number

Waste quantity.....

Sender's Name and Address

Phone Number

Fax Number.....

Contact Person

In case of emergency please contact :

Name and Address :

Phone No.

Note :Label shall be non-washable and prominently visible.

Receiver's Name and Address:

Phone Number

Fax Number

Contact Person

FORM – I
[(See rule 4(o), 5(i) and 15 (2))

ACCIDENT REPORTING

1. Date and time of accident :
2. Type of Accident :

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3. Sequence of events leading to accident :
4. Has the Authority been informed immediately :
5. The type of waste involved in accident :
6. Assessment of the effects of the accidents on human health and the environment:
7. Emergency measures taken :
8. Steps taken to alleviate the effects of accidents :
9. Steps taken to prevent the recurrence of such an accident :
10. Does your facility have an Emergency Control policy? If yes give details:

Date :

Signature

Place:

Designation

FORM - II

(See rule10)

APPLICATION FOR AUTHORISATION OR RENEWAL OF AUTHORISATION

(To be submitted by occupier of health care facility or common bio-medical waste treatment facility)

To

The Prescribed Authority
(Name of the State or UT Administration)
Address.

1. Particulars of Applicant:

(i) Name of the Applicant:
(In block letters & in full)

(ii) Name of the health care facility (HCF) or common bio-medical waste treatment facility (CBWTF) :

(iii) Address for correspondence:

(iv) Tele No., Fax No.:

(v) Email:

(vi) Website Address:

2. Activity for which authorisation is sought:

Activity	Please tick
Generation, segregation	
Collection,	
Storage	
packaging	
Reception	
Transportation	
Treatment or processing or conversion	
Recycling	
Disposal or destruction	
use	
offering for sale, transfer	
Any other form of handling	

3. Application for fresh or renewal of authorisation (please tick whatever is applicable):

(i) Applied for CTO/CTE Yes/No

(ii) In case of renewal previous authorisation number and date:

(iii) Status of Consents:

(a) under the Water (Prevention and Control of Pollution) Act, 1974

(b) under the Air (Prevention and Control of Pollution) Act, 1981:

4. (i) Address of the health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

(ii) GPS coordinates of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

5. Details of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

(i) Number of beds of HCF:

(ii) Number of patients treated per month by HCF:

(iii) Number healthcare facilities covered by CBMWTF: _____

(iv) No of beds covered by CBMWTF: _____

(v) Installed treatment and disposal capacity of CBMWTF: _____ Kg per day

(vi) Quantity of biomedical waste treated or disposed by CBMWTF: _____ Kg/ day

(vii) Area or distance covered by CBMWTF: _____

(pl. attach map a map with GPS locations of CBMWTF and area of coverage)

(viii) Quantity of Biomedical waste handled, treated or disposed:

Category	Type of Waste	Quantity Generated or Collected, kg/day	Method of Treatment and Disposal (Refer Schedule-I)
(1)	(2)	(3)	(4)
Yellow	(a) Human Anatomical Waste:		
	(b) Animal Anatomical Waste :		
	(c) Soiled Waste:		
	(d) Expired or Discarded Medicines:		
	(e) Chemical Solid Waste:		
	(f) Chemical Liquid Waste :		
	(g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.		
	(h) Microbiology, Biotechnology and other clinical laboratory waste:		
Red	Contaminated Waste (Recyclable)		
White (Translucent)	Waste sharps including Metals:		
Blue	Glassware:		
	Metallic Body Implants		

6. Brief description of arrangements for handling of biomedical waste (attach details):

(i) Mode of transportation (if any) of bio-medical waste:

(ii) Details of treatment equipment (please give details such as the number, type & capacity of each unit)

No of units Capacity of each unit

Incinerators :

Plasma Pyrolysis:

Autoclaves:

Microwave:

Hydroclave:

Shredder:

Needle tip cutter or
destroyer

Sharps encapsulation or
concrete pit:

Deep burial pits:

Chemical disinfection:

Any other treatment
equipment:

- 7. Contingency plan of common bio-medical waste treatment facility (CBWTF)(attach documents):
- 8. Details of directions or notices or legal actions if any during the period of earlier authorisation

9. Declaration

I do hereby declare that the statements made and information given above are true to the best of my knowledge and belief and that I have not concealed any information.

I do also hereby undertake to provide any further information sought by the prescribed authority in relation to these rules and to fulfill any conditions stipulated by the prescribed authority.

Date : Signature of the Applicant

Place : Designation of the Applicant

FORM –III
(See rule 10)

AUTHORISATION

(Authorisation for operating a facility for generation, collection, reception, treatment, storage, transport and disposal of biomedical wastes)

- 1. File number of authorisation and date of issue.....
- 2. M/s _____ an occupier or operator of the facility located at _____ is hereby granted an authorisation for;

Activity	Please tick
Generation, segregation	
Collection,	
Storage	
packaging	
Reception	
Transportation	
Treatment or processing or conversion	
Recycling	
Disposal or destruction	
use	
offering for sale, transfer	
Any other form of handling	

- 3. M/s _____ is hereby authorized for handling of biomedical waste as per the capacity given below;
 - (i) Number of beds of HCF:
 - (ii) Number healthcare facilities covered by CBMWTF: _____

(iii) Installed treatment and disposal capacity: _____ Kg per day

(iv) Area or distance covered by CBMWTF: _____

(v) Quantity of Biomedical waste handled, treated or disposed:

Type of Waste Category	Quantity permitted for Handling
Yellow	
Red	
White (Translucent)	
Blue	

3. This authorisation shall be in force for a period of Years from the date of issue.

4. This authorisation is subject to the conditions stated below and to such other conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986.

Date

Signature.....

Place:

Designation

Terms and conditions of authorisation *

1. The authorisation shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the prescribed authority.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the biomedical wastes without obtaining prior permission of the prescribed authority.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. It is the duty of the authorised person to take prior permission of the prescribed authority to close down the facility and such other terms and conditions may be stipulated by the prescribed authority.

Form - IV
(See rule 13)
ANNUAL REPORT

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

Sl. No.	Particulars		
1 .	Particulars of the Occupier	:	
	(i) Name of the authorised person (occupier or operator of facility)	:	

	(ii) Name of HCF or CBMWTF	:	
	(iii) Address for Correspondence	:	
	(iv) Address of Facility		
	(v) Tel. No, Fax. No	:	
	(vi) E-mail ID	:	
	(vii) URL of Website		
	(viii) GPS coordinates of HCF or CBMWTF		
	(ix) Ownership of HCF or CBMWTF	:	(State Government or Private or Semi Govt. or any other)
	(x). Status of Authorisation under the Bio-Medical Waste (Management and Handling) Rules	:	Authorisation No.:valid up to
	(xi). Status of Consents under Water Act and Air Act	:	Valid up to:
2.	Type of Health Care Facility	:	
	(i) Bedded Hospital	:	No. of Beds:.....
	(ii) Non-bedded hospital (Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	:	
	(iii) License number and its date of expiry		
3.	Details of CBMWTF	:	
	(i) Number healthcare facilities covered by CBMWTF	:	
	(ii) No of beds covered by CBMWTF	:	
	(iii) Installed treatment and disposal capacity of CBMWTF:	:	_____ Kg per day
	(iv) Quantity of biomedical waste treated or disposed by CBMWTF	:	_____ Kg/day
4.	Quantity of waste generated or disposed in Kg per annum (on monthly average basis)	:	Yellow Category : Red Category : White: Blue Category : General Solid waste:
5	Details of the Storage, treatment, transportation, processing and Disposal Facility		
	(i) Details of the on-site storage facility	:	Size :
		:	Capacity :
		:	Provision of on-site storage : (cold storage or any other provision)

	disposal facilities		Type of treatment equipment	No of units	Capacity Kg/day	Quantity treated or disposed in kg per annum
			Incinerators Plasma Pyrolysis Autoclaves Microwave Hydroclave Shredder Needle tip cutter or destroyer Sharps encapsulation or concrete pit Deep burial pits: Chemical disinfection: Any other treatment equipment:			- - -
	(iii) Quantity of recyclable wastes sold to authorized recyclers after treatment in kg per annum.	:	Red Category (like plastic, glass etc.)			
	(iv) No of vehicles used for collection and transportation of biomedical waste	:				
	(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum			Quantity generated	Where disposed	
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	:		Incineration Ash ETP Sludge		
	(vii) List of member HCF not handed over bio-medical waste.					
6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period					
7	Details trainings conducted on BMW					
	(i) Number of trainings conducted on BMW Management.					

	(ii) number of personnel trained		
	(iii) number of personnel trained at the time of induction		
	(iv) number of personnel not undergone any training so far		
	(v) whether standard manual for training is available?		
	(vi) any other information)		
8	Details of the accident occurred during the year		
	(i) Number of Accidents occurred		
	(ii) Number of the persons affected		
	(iii) Remedial Action taken (Please attach details if any)		
	(iv) Any Fatality occurred, details.		
9.	Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards?		
	Details of Continuous online emission monitoring systems installed		
10	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?		
11	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?		
12	Any other relevant information	:	(Air Pollution Control Devices attached with the Incinerator)

Certified that the above report is for the period from

.....

Name and Signature of the Head of the Institution

Date:

Place

FORM –V

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(See rule 16)

Application for filing appeal against order passed by the prescribed authority

1. Name and address of the person applying for appeal :
2. Number, date of order and address of the authority which passed the order, against which appeal is being made (certified copy of order to be attached):
3. Ground on which the appeal is being made:
4. List of enclosures other than the order referred in para 2 against which appeal is being filed:

Date :

Signature
Name and Address.....

[F. No. 3-1/2000-HSMD]

(Bishwanath Sinha)
Joint secretary to the Government of India



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DELHI POLLUTION CONTROL COMMITTEE
 Department of Environment, Govt. of NCT of Delhi
 3rd Floor, Delhi IT Park, Shastri Park, Delhi - 110053
 visit us at : <https://dpcc.delhigovt.nic.in>



F. No.: DPCC/ WMC-II/ 2018/ AR/ SWM/2058-2061

Dated: 10/09/2024

To,

Smt. Divya Sinha,
 Director & In-charge, UPC-II,
 Central Pollution Control Board,
 Parivesh Bhawan, East Arjun Nagar, Delhi-32.

**Sub: Annual Report in Form V in respect of NCT of Delhi for the Year 2023-2024
 on the Implementation of Solid Waste Management Rules, 2016.**

Madam,

Please find enclosed herewith, Annual Report in Form V in respect of NCT of Delhi for the Year 2023-2024, on the Implementation of Solid Waste Management Rules, 2016.

This issues with the approval of the Member Secretary, Delhi Pollution Control Committee.

Yours Sincerely,

D. K. Singh
(D. K. Singh)

Addl. Director (WMC-II)

Enclosure: As Above

Copy to:

1. The Secretary, Ministry of Housing and Urban Affairs, Govt. of India, Nirman Bhawan, C Wing, Maulana Azad Road, New Delhi-110011.
2. The Addl. Chief Secretary, Urban Development Department, Govt of NCT of Delhi, 9th Level, Delhi Secretariat, I.P. Estate, Delhi -110002.
3. PS to Chairman, DPCC – For kind information to Chairman, please.

D. K. Singh
(D. K. Singh)

Addl. Director (WMC-II)

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FORM V

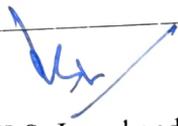
[See rule 24(3)]

**Annual Report in respect of NCT of Delhi for the Year 2023-2024
on the Implementation of Solid Waste Management Rules, 2016.**

PART A

To,

The Chairman,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi – 110032.

1	Name of the State / Union territory	NCT of Delhi
2	Name & address of the State Pollution Control Board / Committee	Delhi Pollution Control Committee, 3 rd Floor, Delhi IT Park, Shastri Park, New Delhi-110053.
3	Number of local bodies responsible for management of solid waste in the State / Union territory under these rules	3 [MCD, NDMC & DCB]
4	No. of authorization application received	1
5	A Summary Statement on progress made by local bodies in respect of Solid Waste Management.	<u>Annexure - I</u> attached.
6	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal	<u>Annexure- II</u> attached
7	A Summary Statement on progress made by local bodies in respect of implementation of Schedule II	<u>Annexure- III</u> attached
	Date : 10.09.2024 Place : Delhi.	 (Dr. K.S. Jayachandran) Member Secretary Delhi Pollution Control Committee

PART B

Towns / Cities	
Total number of towns/cities	1
Total number of ULBs	3
Number of class I & class II cities/towns	1
Authorisation Status (Names/ Number)	
• Number of applications received	1
• Number of authorisations granted	1
• Authorisations under scrutiny	Nil
Solid Waste Generation Status Solid waste generation in the state (TPD)	<p>11342 TPD of Solid Waste is generated in NCT of Delhi as per the Annual Reports submitted by the Local Bodies.</p> <ul style="list-style-type: none"> • 11342 TPD is collected [100 %] • 7542 TPD is processed / treated [66.5%] • 3800 TPD waste is dumped [33.5 %] <p>[Excluding about 336 TPD rejects landfilled at Engineered SLF at Bawana].</p>
Compliance to Schedule I of SWM Rules (Number/Names of Towns/Capacity)	<p>Local Bodies are implementing waste segregation at source, door to door collection, intermediate storage and transport facility with GPS for the transportation of the collected solid waste to the operational Solid Waste Processing / Treatment Facilities or at the 3 existing Landfill / Dumpsites at Bhalaswa, Ghazipur & Okhla in Delhi.</p> <p>New Delhi Municipal Council (NDMC) & Delhi Cantonment Board (DCB) are implementing the provisions of the SWM Rules, 2016 in their areas in a better way. However MCD is also making efforts and taking measures to implement the provisions of the SWM Rules, 2016 in their areas.</p> <p>About 100% collection of Solid Waste including Door to Door Collection and Transportation of Solid Waste in covered vehicles have been reported by the Local Bodies in their Annual Reports.</p> <p>NDMC has reported that 100% Premises in the area are segregating the waste at source.</p> <p>Delhi Cantonment Board (DCB) has reported that 90% Premises in Civil Pockets & 60% in Army Area are segregating the waste at source. Timeline for 100 % segregation at source by Sept, 2024).</p> <p>MCD has reported that 56 % (Average) Premises in the area are segregating the waste at source.</p> <p>Timeline for 100 % segregation at source by December, 2024.</p>
<ul style="list-style-type: none"> • Good practices in cities/towns • House-to-house collection • Segregation • Storage • Covered transportation 	

Processing of MSW (Number/Names of Treatment Capacity)

Solid Waste Processing Facilities Setup:

Sl. No.	Composting	Vermi-Composting	Bio-gas/Bio-methanation Plant	RDF / Pelletization
1.	DCB - Composting - 20.175 TPD [One Sorting Cum Composter of 20 TPD (Presently not operational to be shifted to new location at Kirby Place) and 2 Food Waste Composters of 0.175 TPD (0.125+0.05TPD)]	Nil	Nil	Nil
2.	MCD- (Composting – Total 1263 TPD) <ul style="list-style-type: none"> One Centralized Compost Plant of 700 TPD in the integrated Facility at Bawana. 20 Composters of 1 TPD each- 20 TPD. 211 Compost Pits of 543 TPD. 	Nil	08 Bio-Methanation Plants of 05 TPD each at various locations (Total capacity 40 TPD. (Not Operational))	1300 TPD (Ghazipur WTE) 1300 TPD (Bawana WTE) 1950 TPD (at Okhla WTE) 2000 TPD (at Tehkhand WTE)
3.	NDMC- (Composting- 31.32 TPD) <ul style="list-style-type: none"> 25 Organic Waste Convertors (10 TPD) 46 Compost Pits of (16.32 TPD) 4 Community Composters (5TPD) 		05 Bio-Gas Plant of 7.0 TPD	Nil

Operational Processing Facilities:

Sl. No.	Composting Including Compost Pits & Organic Waste Convertors	Vermi-Composting	Bio-gas/Bio-methanation Plant	RDF/ Pelletization
	309	Nil	05	4 (with WTEs)

Processing facility under installation / planned:

S. No.	Composting	Vermi Composting	Bio-gas/Bio-methanation Plant	RDF / Pelletization (WtEs)
	One Sorting cum Composter Plant of 20 TPD capacity at Tigris Road, Delhi Cantt presently not operational is proposed to be shifted to New Location (Kirby Place)	-	Proposed Bio CNG / Bio CBG/ Bio-Gas Plants of MCD : (i) Bio-CNG Plant of 300 TPD in place of closed Compost Plant of 200 TPD at Okhla by March, 2025 (Under Construction) (ii) Compressed Bio Gas (CBG) Plant of 350 TPD at Ghazipur by December, 2026 (ii) Compressed Bio Gas (CBG) Plant of 100 TPD at Ghogha Dairy by March, 2025.	Proposed WtEs of MCD : (i) New Waste to Energy Plant at Narela –Bawana (For 3 Zones City SP, Karol Bagh & Narela Zone) of 3000 TPD by June, 2027 (ii) New Waste to Energy Plant at Ghazipur of 2000 TPD by December, 2027 (ii) Expansion of Existing Waste to Energy Plant at Okhla from 1950 TPD to 2950 TPD by March, 2026 (Addition of 1000 TPD).

		<p>254</p> <p>(iv) Bio-Plant at Nangli Dairy (215 TPD for Dairy Waste) by Sept, 2024.</p> <p>(v) Goyla Dairy (215 TPD for Dairy Waste) by March, 2025</p> <p>(vi) Ghogha Dairy (290 TPD for Dairy Waste) by March, 2025</p> <p>[(iv), (v) & (vi) are mainly for the Waste generated from Dairies and not included in total MSW Generation of 11342TPD)</p>	(v) Expansion of Existing Waste to Energy Plant at Tehkhand from 2000 TPD to 3000 TPD by December, 2026 (Addition of 1000 TPD)
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Waste-to-Energy Plants: (Number/Names of Towns/Capacity)

Sl. No.	Plant Location	Status of Operation	Power Generation (MW)	Remarks
1.	Okhla	Operational	23	Expansion Proposed (From 1950 TPD to 2950 TPD)
2.	Ghazipur	Operational	12	-
3.	Bawana	Operational	24	-
4.	Tehkhand	Operational	25	Expansion Proposed (From 2000 TPD to 3000 TPD)

Disposal of Solid Waste (Number/Names of Towns/ Capacity):

<ul style="list-style-type: none"> • Landfill sites identified • Landfill constructed • Landfill under construction • Landfill in operation • Landfill exhausted • Landfill capped 	<p>02 Existing Operational Engineered SLF at Bawana and Tehkhand.</p> <p>02 Engineered SLF at Bawana and Tehkhand already constructed & operational.</p> <p>Nil.</p> <p>02 Engineered SLF at Bawana and Tehkhand.</p> <p>None</p> <p>However, all 3 Non-Engineered and Unscientific MSW Dumpsites at Ghazipur , Bhalswa & Okhla have already been exhausted.</p> <p>Nil</p>
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Solid Waste Dumpsites (Number/Names of Towns/Capacity):

<ul style="list-style-type: none"> • Total number of existing dumpsites • Dumpsites reclaimed/ capped 	<p>03</p> <p>Remediation of Legacy Waste at Ghazipur , Bhalswa & Okhla Dumpsites is being carried out as per the directions of the Hon'ble National Green Tribunal in the orders including order dated 17.07.2019 in OA No. 519 / 2019 in the matter of News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and OA No. 386/2019</p>
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<ul style="list-style-type: none"> • Dumpsites converted to sanitary landfill 	the matter of "Centre for Wildlife and Environment Litigation" Vs Union of India & Ors." Nil
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Monitoring at Waste Processing / Landfill Sites

Sl. No.	Name of Facilities	Ambient Air	Ground Water	Leachate Quality	Compost Quality	VOCs
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Monitoring of 04 Operational Waste to Energy Plants (WTE Plants) in Delhi :

Online Continuous Emission Monitoring System (OCEMS) has been installed by all the above mentioned 04 operational Waste to Energy Plants in Delhi and the same are also connected to the server of CPCB & DPCC. Inspections of the Waste to Energy Plants are carried out by DPCC from time to time.

Ground Water Quality nearby Ghazipur Dumpsite , Bhalswa Dumpsite, Okhla Dumpsite & Bawana Engineered Landfill was monitored by DPCC Laboratory on 1st / 2nd May, 2024 and Copy of the Analysis Reports are at **Annexure- IV.**

Status of Action Plan prepared by Municipalities <ul style="list-style-type: none"> • Total number of municipalities • Number of Action Plan submitted 	3 Action Plans submitted by the Local Bodies in Delhi. Separate Action Plan for Bio-mining of Legacy Waste at 3 Dumpsites (Ghazipur, Bhalaswa & Okhla) were submitted by MCD).
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MCD has to operationalize the proposed Waste Processing Facilities including Waste to Energy Plants and close down open dhalaos at the earliest. Also, MCD has to expedite and complete the Bio-Mining at the three Dumpsites as per stipulated timelines of December, 2027.

A Summary Statement on Progress made by Local Bodies in respect of Solid Waste Management

1. Municipal Corporation of Delhi (MCD)

A. General Information

- Area – 1366.89 sq. km
- Population – 192 lakh (2011 Census)
- No. of wards – 250
- No. of Households – 43 lakh Approx.
- No. of Dhalaos – 517
- No. of FCTS -- 301
- Segregation at Source -- 56 % (Average)

Timeline for 100 % segregation at source by December, 2024.

- Mobile Transfer Stations / Refuse - 138
- Refuse Collectors/ Compactors - 440
- No. of Bins placed - 7969
(Green Bins-2570, Blue Bins-1858 & Black Bins-471)
- Motorised Vehicles - 74% (Approx.)
- Containerised Tricycle Handcart - 26% (Approx.)
- Lifting of MSW - 100% Mechanical lifting (Through Front End Loaders/ Top Loaders/ Refused Compactors)
- Method of Primary Collection – Auto Tipper, Manual Rickshaw, E- Rickshaw, 3 Wheelers.
- Sweeping of Streets - Manual Sweeping of Roads through 57500 No. of Safai Karamcharis (84%). Mechanised Street Sweeping of 60 feet above ROW by Private Agency through 52 Nos. of Mechanised Road Sweeping Machines (16%).
- Length of Roads/ Streets/ Lanes/ By-lanes to be cleaned - 15582 Kilometers (in terms of 12 feet width).
- Means Used for Collection & Transportation of MSW - Tractors – 21, JCB /Loader- 23, Hook Loaders- 222, Auto Tippers - 2527, Bins Washer - 60, Wheel Barrows- 4076, Cycle Rickshaw/ Tricycle- 1331, E- Rickshaw- 396, 3 Wheelers - 87.

B. Solid Waste Generation

- 11000 TPD (0.5 kg/day/capita)
- (100% Collection & Transportation of MSW on daily basis)

C. Existing Processing/Treatment Facilities

- Total Waste Processed/Treated – 7200 TPD (65.45% of total solid waste generated)
- Centralised Compost Plant – One No. Compost Plant of 700 TPD Capacity in the Integrated MSW Facility at Bawana.
- Existing Waste to Energy Plants – 04 Nos. of Total 6550 TPD Capacity at Okhla (1950 TPD), Bawana (1300 TPD), Ghazipur (1300 TPD) & Tehkhand (2000 TPD)
- Engineered Sanitary Landfill (SLF) – 02 Nos [One at Integrated MSW Facility at Bawana. and Another One at Tehkhand.
- Bio- Methanation Plants – 8 Nos of 5 TPD capacity each at Roshanara Bagh, MVID Hospital, Sarita Vihar, Dwarka Sector 14, Punjabi Bagh Nursery, Masood Pur in Vasant Kunj, Geeta Colony & Shastri Park (These Plants installed but not functional / Operational since long.)

- **Local Composting Units**

– 211 Nos. (Compost Pits) of Total 543 TPD Capacity

- **Material Recovery Facilities (MRFs)** – 157 Nos. of Total 260 TPD Capacity
(Manual and Semi Automatic)

D. Proposed Waste Processing / Treatment Facilities of MCD

S. No.	MSW Facility	No	Location	Capacity Addition(in TPD)	Expected Timeline for Completion
1	New Waste to Energy Plant at Narela –Bawana (For 3 Zones City SP, Karol Bagh & Narela Zone)	1	Narela-Bawana	3000	June, 2027
2	New Waste to Energy Plant at Ghazipur	1	Ghazipur	2000	December, 2027
3	Expansion of Existing Waste to Energy Plant at Okhla	1	Okhla	1000 (From 1950 TPD to 2950 TPD)	March, 2026 Environmental Clearance for expansion accorded.
4	Expansion of Existing Waste to Energy Plant at Tehkhand	1	Tehkhand	1000 (From 2000 TPD to 3000 TPD)	December, 2026
5	Bio CNG Plant	1	Okhla	300 (In place of existing Closed Compost plant of 200 TPD)	March, 2025
6	Compressed Bio Gas (CBG) Plant	1	Ghogha Dairy	100	March, 2025
7	Compressed Bio Gas (CBG) Plant	1	Ghazipur	350	December, 2026
	Total	7		7750 TPD	
8	Bio Gas Plants for Dairies Waste* Management	1	Nangli Dairy	215	September, 2024
		1	Goyla Dairy	215	March, 2025
		1	Ghogha Dairy	290	March, 2025
8.	Engineered Sanitary Landfill (SLF)	1	Tehkhand		Works completed & commissioned on 12.03.2024

*These Plants are mainly for waste generated from Dairies & not included in total MSW Generation of 11000 TPD of MCD.

E. Remediation of Legacy Waste (Old Dumped Solid Waste)

S. No	Particulars	Okhla Dumpsite	Bhalaswa Dumpsite	Ghazipur Dumpsite
1.	Year of Establishment	1996	1994	1984
2.	Area of Dumpsite Site	62 Acre	70 Acre	70 Acre
3.	Age (years of operation)	27	29	39

In OA No. 519/2019 and 386/2019 being heard by Hon'ble NGT various directions have been passed from time to time. Vide its order dated 17.07.2019, Hon'ble NGT had directed the three Erstwhile Municipal Corporations to carry out bio-remediation of the existing dumpsites sites at Bhalswa, Ghazipur and Okhla by installation of trommeling machines for screening of the legacy waste. The status of Bio-mining of Legacy Waste at 3 Dumpsites at Okhla, Ghazipur & Bhalswa in Delhi as on 03.04.2024 is given in following table:

Status of Bio-Mining of Legacy Waste at 3 Dumpsites at Okhla, Ghazipur & Bhalswa (As on 03.04.2024)

Dumpsite	Quantity of Legacy Waste Dumped (July, 2019) (Lakh Ton)	Total Quantity of Legacy Waste Bio-mined (Since Oct, 2019 to 03.04.2024) (Lakh Ton)	Legacy Waste (Volumetric Assessment through Drone Survey in June, 2022) (Above Ground) (Lakh Ton)	Quantity of Fresh MSW Dumped from July, 2022 to 03.04.2024 (Lakh Ton)	Total Quantity of Legacy Waste Bio-mined from July, 22 to 03.04.2024 (Lakh Ton)	Balance Quantity of Waste at Dumpsite (Lakh Ton)	No. of Trommels Operational	Revised Timeline for 100% Remediation (Earlier Timeline – May, 2024)
Bhalswa	80	63.42 (79.3 %)	73	16.46	37.58	51.88	22	Dec. 2027
Ghazipur	140	25.00 (17.9 %)	85	11.21	13.30	82.91	25	Dec. 2027
Okhla	60	43.12 (71.9 %)	45	11.31	24.46	31.85	11	Dec. 2027
Total	280	131.54 (47 %)	203	38.98	75.34	166.64	58	

*Subject to the stoppage of incoming fresh waste and formation of Standing Committee in MCD.

2. New Delhi Municipal Council (NDMC)

A. General Information

- **Area** - 42.67 sq. km
- **Population** - 2.57 lakh
- **No. of Circles** - 14 (Circles)
- **No. of Households** - 47401
- **No. of Dhalaos** - Nil
- **No. of Non-Residential Premises** - 4532 [Including 4349 Commercial Shops & 34 Hotels & Restaurants]
- **Segregation at Source** - 100% (in all 14 Circles)
- **Motorised Vehicle** - 100%
- **No. of Bins placed** - Nil [Bin less Area, No secondary storage facilities]
- **Lifting of MSW** - 100% Mechanical lifting (From Iron Bin Trolleys of Underground Bins . 60 % of Road side Horticulture waste is lifted mechanically into open Trucks..
- **Sweeping of Streets / Roads** - 1298 Kilometers through Mechanised Road Sweeping Machines.
- **Means Used for Collection & Transportation of MSW** - Auto Tippers – 36 for D2D & 8 for C&D, Open Tipper Trucks for Horticulture Waste - 10, Compactors- 19, Wheel Barrows Tricycle- 790,

B. Solid Waste Generation

- 280 TPD (100% Collection, Transportation & Processing of MSW)

C. Existing Processing/Treatment Facilities

- **Total Waste Processed/Treated** - 280 TPD (100 % of total solid waste generated).
- **Through Existing Waste to Energy Plant** at Okhla having capacity of 1950 TPD

[NDMC & DCB share is 400 TPD] & Other Decentralised Processing Facilities in NDMC A164

- Bio- Gas Plants - 5 (Total capacity 7 TPD)
- Local Composting Units - 50 Nos. (46 Compost Pits & 4 Community Composters. Total Capacity - 21.32 TPD).
- Organic Waste Composter - 25 Nos. (Total Capacity 10 TPD)
- Material Recover Facilities (MRFs) - 08 Nos. (Total Capacity 12 TPD)

Proposed Waste Processing / Treatment Facilities : (Nil)

Presently Having Sufficient MSW Processing Capacity at Okhla Waste to Energy Plant for the MSW generated from NDMC & also having Decentralised MSW Facilities in NDMC Area.

3. Delhi Cantonment Board (DCB)

A. General Information

- Area - 42.8 sq. km
- Population - 1.10351 lakh
- No. of wards - 08
- No. of Households - 10060
- No. of Dhalaos - Nil
- No. of Non-Residential Premises - 460
- Segregation at Source - 90% Premises in Civil Pockets & 60% in Army Area
- Lifting of MSW - 73 % (Manual) & 27% (Mechanical),
Front End Loaders & Refuse Compactors (8 Nos),
Tippers (21 Nos), Tractors (04 Nos) and JCB /
Loader (04 Nos).
- Sweeping of Streets/ Roads - 62 Kilometers [Manual & through 2 Mechanised
Road Sweeping Machines].
Sweeping in Commercial Areas - Twice a day (Night
Sweeping also in Shastri Bazar & Sadar Bazar Areas)
Sweeping on Public Roads & Streets - Daily.
- Regular Manpower Deployed - Safai Karmcharis (93), Drivers (11) &
Sanitary Guides (03). Besides above Regular Manpower
1153 Contractual Manpower also engaged by DCB.

B. Solid Waste Generation

- 62 TPD (0.6 kg / day / capita).

(Daily 100% Collection, Transportation & Processing of MSW)

C. Existing Processing/Treatment Facilities

- Total Waste Processed/Treated - 62 TPD (100% of total solid waste generated).
(60 TPD processed through Waste to Energy Plant at
Okhla & 2 TPD of Plastic waste is processed through Recycling).
- Food Waste Composters - 2 Nos. of 0.175 TPD Capacity (0.125 TPD + 0.05 TPD
at Tigris Road)
- Material Recover Facilities (MRFs) - 11 Nos. (Total Capacity 50 TPD)

D. Proposed Waste Processing/Treatment Facilities :

One Sorting cum Composter Plant of 20 TPD capacity at Tigris Road , Delhi Cantt presently not operational is proposed to be shifted to New Location (Kirby Place).

A Summary Statement on Progress made by Local Bodies in respect of Waste Collection, Segregation, Transportation and Disposal.

1. Municipal Corporation of Delhi (MCD)

- **Collection of Solid Waste** - 11000 TPD (100% of Total Solid Waste generated)
- **Premises Segregating Waste at Source** - 56 % (Average) (100 % by December, 2024).
- **Transportation of Collected Waste** - Collected Solid Waste is transported by Tractors, Non-tipping Truck, Tipping truck, Dumper placers, Refuse collector, Compactors, JCB/loader, MRS and others.
- **Disposal of Solid Waste in Landfill/Dumpsite** - 3800 TPD (Average).

2. New Delhi Municipal Council (NDMC)

- **Collection of Solid Waste** - 280 TPD (100% of Total Solid Waste generated)
- **Premises Segregating Waste at Source** - 100%
- **Transportation of Collected Waste-** Collected Solid Waste is transported by Motorized Vehicles.
- **Disposal of Solid Waste in Landfill / Dumpsite** - Nil
- 280 TPD of waste generated from NDMC areas is being processed / treated at WtE Plant at Okhla & Decentralised MSW Facilities (Bio-Gas Plants / Organic Waste Convertors / Compost Pits etc) in NDMC area.

3. Delhi Cantonment Board (DCB)

- **Collection of Solid Waste** - 62 TPD (100% of Total Solid Waste generated)
- **Premises Segregating Waste at Source** - 90% in Civil Pockets and 60% in Army Area.
(100 % Segregation by Sept, 2024)
- **Transportation of Collected Waste** - Collected Solid Waste is transported by motorized vehicles.
- **Disposal of Solid Waste in Landfill / Dumpsite** - Nil
- 62 TPD of waste generated from Delhi Cantonment Area is being 100 % processed. 60 TPD processed through Waste to Energy Plant at Okhla & 2 TPD of Plastic waste is processed through Recycling.

Status of Solid Waste Management in NCT of Delhi including Summary Statement on Progress made by Local Bodies in respect of implementation of Schedule II of Solid Waste Management Rules, 2016.

1. Solid Waste Generation, Processing/Treatment and Disposal

S.No.	Particulars	MCD	NDMC	DCB	Total
1.	Area (in Sq. Km)	1366.89	42.67	42.8	1452.36
2.	Population (in Lakh)	192 (2011 Census)	2.57	1.10351	195.673
3.	No. of Wards	250	14 Circles	08	272
4.	No. of Households (in Lakh)	43	0.47401	0.10060	43.5746
5.	Solid Waste Generation (in TPD)	11000	280	62	11342
6.	Collection of MSW in TPD (in %)	11000 (100%)	280 (100%)	62 (100%)	11342 (100%)
7.	Premises Segregating the waste at Source (in %)	56 % (Average)	100%	90% in Civil Pockets & 60% in Army Area	---
8.	Processing / Treatment of Solid Waste in TPD (in %)	7200 (65.45%)	280 (100%)	62 (100%)	7542 (66.5 %)
9.	Disposal of Solid Waste in Landfill/ Dumpsite Sites (at Bhalaswa, Ghazipur & Okhla)	3800 (34.55%)	Nil	Nil	3800* (33.5%)
10.	Engineered Sanitary Land Fill (SLF)	Two (Operational at Bawana & Tehkhand)	-	-	02
11.	Operational Waste to Energy Plants	04 (6550 TPD)	-	-	04 (6550 TPD)
12.	Operational Centralized Compost Plants	One (at Bawana)	-	-	01
13.	Operational Bio-methanation Plants	-	5 (Bio-Gas Plant)	-	5
14.	Decentralised Compost Plants / Organic Waste Convertors	20	25	2 (Food Waste Composters)	47
15.	Compost Pits	211 (Compost Pits)	50 (46 Compost Pits + 4 Community Composters)	-	261
16.	Recycling through MRFs	157	08	11	176

*Excluding about 336 TPD (Average) rejects landfilled at Engineered SLF at Bawana.

(a) Collection, Segregation & Transportation of Municipal Solid Waste:

There are 03 Local Bodies in Delhi responsible for implementation of the Solid Waste Management Rules, 2016. Total Municipal Solid Waste generation in Delhi is 11342 Tonnes per day (TPD). Local Bodies are implementing waste segregation at source, door to door collection, intermediate storage and transport facility with GPS for the transportation of the collected solid waste to the operational Solid Waste Processing / Treatment Facilities or at the 3 existing Dumpsites at Bhalaswa, Ghazipur & Okhla in Delhi.

New Delhi Municipal Council (NDMC), Delhi Cantonment Board (DCB) & Municipal Corporation Delhi (MCD) are making all efforts to implement the provisions of the SWM Rules, 2016 in their areas.

About 100 % collection of Solid Waste, Door to Door collection and Transportation of Solid Waste in covered vehicles have been reported by the Local Bodies in their Annual Reports.

NDMC has reported that 100% Premises in the area are segregating the waste at source. DCB has reported that 90% Premises in Civil Pockets & 60% Premises in Army Area are segregating the waste at source. MCD has reported that 56 % (Average) Premises in the area are segregating the waste at source.

(b) Municipal Solid Waste Processing and Disposal Facilities:

There is one Integrated Solid Waste Management Facility at Bawana for processing of 2000 TPD of municipal solid waste having Waste to Energy Plant, Compost Plant and Engineered Sanitary Landfill.

(c) Waste to Energy Plants:

Delhi has 04 Waste to Energy Plants (WTE Plants) of capacity 6550 TPD at 4 different locations in Delhi namely Okhla, Bawana, Ghazipur & Tehkhand. One new Waste to Energy Plant of capacity of 3000 TPD is proposed at Narela-Bawana and timeline for completion of the project is June, 2027. Another new WTE Plant of 2000 TPD Capacity is proposed at Ghazipur and timeline for completion of project is December, 2027. Expansion of existing WtEs at Okhla from 1950 TPD to 2950 TPD (from 23 to 40 MW Capacity) by March, 2026 & at Tehkhand from 2000 TPD to 3000 TPD by December, 2026 are also proposed. After commissioning of the above mentioned projects, the capacity of WtE Plants will enhance from 6550 TPD to 13550 TPD by December, 2027.

Operational Waste to Energy Plants in Delhi

S. No	Name of Waste to Energy Plant	Existing Capacity	
		Waste Processing (in TPD)	Electricity Generation(in MW)
1.	Timarpur Okhla Waste management Company Ltd., Old NDMC Compost Site, Okhla.	1950	23
2.	East Delhi Waste Processing Company Ltd., Ghazipur	1300	12
3.	Delhi MSW Solutions Ltd Narela Bawana Road, Bawana	1300	24
4.	Tehkhand Waste to Electricity Project Limited at Tehkhand, Okhla	2000	25
	Total	6550	84

2. Implementation of Schedule II of Solid Waste Management Rules, 2016

(A) Waste to Energy Plants

Waste Handling Concepts in WTE Plants in Delhi:

Okhla WTE Plant : MCD provides waste at its door step. Processes waste for production of RDF for electricity production

Tehkhand WTE Plant : MCD provides waste at its door step. Processes waste for production of RDF for electricity production

Bawana WTE Plant : The plant has provision for collection, transportation, processing in the Integrated MSW Facility having Composting Plant, WTE Plant and Engineered Sanitary Landfill.

Ghazipur WTE Plant : MCD provides waste at its door step. processes waste for production of electricity production. 168

(i) Waste to Energy Plant at Okhla

Waste-to-Energy Plant at Okhla receives approx. 1950 MTD of Mixed Municipal Waste from MCD, New Delhi Municipal Council and Delhi Cantonment Board (DCB). The waste is transferred through tippers and is dumped in a storage pit where microbial culture (solid and/or aqueous form) is mixed with MSW and kept for nearly 5 days. The storage pit is equipped with 02 grab cranes and keeps on mixing the waste for homogenization. After 5 days MSW is sent to pre-processing section (covered under shed), which consist of two segregation channels. Each segregation channel has the following system:

Manual segregation on moving belt conveyor – to sort out large size recognizable wastes such as Construction & Demolition waste, sanitary hardware, fibre, plastic materials, etc.

Ballistic Separator, Shredder and Vibratory screen – A two deck density separation system where heavier and lighter fractions are separated. The heavier fractions are disposed into Okhla Landfill. The lighter fractions are separated into three sizes viz., (+) 100mm; (-) 100 mm to (+)10mm and (-) 10mm. (+) 100mm size is passed through a shredder and shredded material directly goes to storage pit for feed into the Boilers. (-) 100 mm to (+) 10mm size material from the Ballistic Separator directly goes to storage pit for feed into the Boilers. 10mm size from both the Ballistic Separator are being send to sieve of 6mm size, (+) 6mm is sent to RDF storage and (-) 6mm is sent to the compost section.

Magnetic Separator – An electromagnet with moving belt to trap ferrous metals is installed on the line transporting -100 mm material and +10 mm material to RDF storage Pit. Two magnetic separators have been installed on the conveyer belt carrying the bottom ash.

Plant has constructed a pit (50 meters x 28 meters) under a covered shed for storage of RDF equipped with Grab Cranes. The pre-processed waste from the RDF storage pit is fed into the Boilers (three Nos.) using grab crane to run turbine to generate electricity of up to 23 MW.

The temperature in the boilers are maintained above 950°C as per Solid Waste Management Rules, 2016. Bottom Ash along with inert from pre-processing section was earlier sent to Tajpur Pahari and now in the Engineered Sanitary Landfill at Tehkhand which has been developed by MCD for Disposal of Ash from the Waste to Energy Plants at Okhla & Tehkhand.

There are 03 flue gas cleaning units 01 for every boiler consisting of Lime spray reactor (lime slurry is added by atomizing), Activated Carbon Injection, Bag House filter followed by dispersion into the atmosphere through a common stack of height about 60 meters from the ground. Unit has installed brick manufacturing unit for utilization of fly ash.

The (-) 6mm material from pre-processing section is stacked and composted for 30-35 days as windrow. After completion of 30-35 days the decomposed material is passed through 4mm trammel (+)4mm is sent to RDF storage and (-) 4mm is sent to another sieve of 2mm. (+)2mm is sent to RDF storage and (-)2mm is the composted material which is being used for in house horticulture process.

The leachate generated in the storage pits is treated in Multi Effect Evaporator (MEE). The wet sludge from MEE is incinerated along with RDF in the boilers and treated water is reused.

(ii) Waste to Energy Plant at Ghazipur

Waste-to-Energy plant at Ghazipur is having capacity of 12 MW electricity generation from burning of waste. The Plant is being run by M/s Indo Enviro Integrated Solutions Limited. The facility receives mixed Municipal Solid Waste (MSW) in a covered pit (Size 62 meter X 20 meters and 13 meters high).

The waste from the pit is subjected to pre-processing in two lines and each line has provision of manual segregation on moving conveyor belts, two trommels for segregation of various sized viz. (+) 200mm, (0) 200mm to (+) 50 mm and (-) 50 mm, magnetic separator and Shredder (100mm Size). The flue gases are diluted with atmospheric air to bring down the temperature to the level of about 200-300 °C. The flue gas is subjected to air pollution control devices viz. Multicyclone, Venturi Scrubber with lime injection, demister (to remove moisture), and Activated Carbon Bed followed by dispersion into the atmosphere. The temperature in the boiler is maintained above 950°C as per Solid Waste Management Rules, 2016.

The flue gas from the boiler passes through air pollution control devices viz. Selective Non-catalytic reactor where urea is injected (for NO_x reduction), Semi-wet reactor where lime slurry is atomised, Activated Carbon Injection, Bag House (8 chamber and each having 14*14 bags) followed by dispersion into the atmosphere through a stack of height about 60 meters from ground.

Manual segregation on moving belt conveyor – to sort out large size recognizable wastes such as Construction & Demolition waste, sanitary hardware, fibre, plastic materials, etc. For the treatment of leachate an Effluent Treatment Plant (ETP) has been installed at Ghazipur site. It has provision to collect leachate generated from the mixed MSW and the leachate collected is thereafter treated at Effluent Treatment Plant.

(iii) Waste to Energy Plant at Bawana

The Waste-to-Energy Plant at Bawana is being operated by M/s Delhi MSW Solutions Ltd, having capacity of 1300 TPD & Electricity generation capacity is 24 MW. The plant is located within the premises of Integrated MSW Facility having Composting Plant, WtE Plant and Engineered Sanitary Land fill .The WTE Plant receives mixed Municipal Solid Waste (MSW) on covered tipping floor (of size 150 meters x 25 meters and 7.5 meters high), which is made of RCC and covered under shed. The tipping floor has provision to collect leachate generated from the mixed Solid Waste into storage tank. The pre-processing system has five trommels (cylindrical rotary equipment with a screen) to sort out (+) 50 mm size material which is stored separately in the said tipping floor and is used as Refuse Derived Fuel (RDF) and is conveyed to a storage pit to feed into Boilers.

Segregation on moving belt conveyor is carried out to sort out large sized recognizable wastes such as Construction & Demolition waste, sanitary hardware, fibre, plastic materials, etc. The waste is then processed and disposed into composting facility, RDF for Waste-to-Energy facility and rejects are sent to Secured Landfill Site. The temperature in the boilers are maintained above 950°C as per Solid Waste Management Rules, 2016. Bottom ash along with inert from pre-processing section is sent to Engineered landfill existing in the plant site at Bawana. Some portion of the Bottom Ash is processed for making various products (Aggregates etc.). About 336 TPD of rejects on an average was sent to Engineered landfill in the same premises.

There are flue gas cleaning units for boilers consisting of Lime spray reactor (lime slurry is added by atomizing), Activated Carbon Injection, Bag House filter followed by dispersion into the atmosphere through a common stack of height about 60 meters from the ground.

The leachate collected is treated in Mechanical Vapor Recompression (MVR) System within the Integrated MSW Facility and there is no discharge of untreated leachate. Leachate generated from Waste Storage Pit, Compost Facility and other sources including SLF is collected in three Leachate Collection Ponds of 3500 KL, 1100 KL & 800 KL. Collected Leachate is pumped to Mechanical Vapor Recompression (MVR) System of 200 KLD capacity installed at the facility. MVR is based on evaporation without use of steam and works on principle of heat recycling without any addition or

down of heat. MVR raises the vapour temperature and pressure, recirculate it as heating medium making it an energy recovery process. There is maximum output of clean water (up to 95%). The treated leachate is recirculated and used in boilers of Waste to Energy Plant. Sludge from treatment of leachate is incinerated in Waste to Energy Plant due to its high calorific value (CV).

The Waste to Energy Plant also has Bottom Ash Recycling Facility. Bottom ash is screened twice for segregation of coarse and fine segregates. > 400 mm segregates are manually crushed while < 40 mm Segregates are crushed through cone crushing. The cone crushed segregates are then log washed creating a slurry. The slurry having < 0.75 mm particles is treated in Waste Water Treatment Plant and the settled sediments are used as Landfill Daily Soil Cover. The recycled water is reused. The > 0.75 mm aggregates after log-washing are screened into different fractions for processing them into products like paver blocks, kerbs, tiles, etc. As reported final product are being sold to private parties for construction purposes.

(iv) Waste to Energy Plant at Tehkhand

Tehkhand Waste to Electricity Project Limited (WtE) Plant at Tehkhand receives about 2000 TPD of Municipal Solid Waste from the MCD, the waste is transferred through Compactors in MSW storage pit where microbial culture (solid and/or aqueous form) is mixed with MSW and kept for nearly 5 days. The storage pit is equipped with 02 grab cranes and keeps on mixing the waste for homogenization. After 5 days MSW is sent to MRF section (under covered shed) for its segregation.

MRF system has been installed – to sort-out large size recognizable wastes such as Construction & Demolition Waste, Fibres & Plastic Materials etc. Ballistic Separator (04 Nos), Shredder (01 No) and Vibratory screen (01 No) – A two deck density separation system where heavier and lighter fractions are separated. The heavier fractions are disposed into Okhla Landfill. The lighter fractions are separated into three sizes viz., (+) 100mm; (-) 100 mm to (+)10mm and (-) 10mm. (+) 100mm size is passed through a shredder and shredded material directly goes to storage pit for feed into the Boilers. (-) 100 mm to (+) 10mm size material from the Ballistic Separator directly goes to storage pit for feed into the Boilers. 10mm size from both the Ballistic Separator are being send to sieve of 6mm size, (+) 6mm is sent to RDF storage and (-) 6mm is sent to compost plant Okhla.

Magnetic Separator – An electromagnet with moving belt to trap ferrous metals is installed on the line transporting -100 mm material and +10 mm material to RDF storage Pit. Two magnetic separators have been installed on the conveyer belt carrying the bottom ash.

Plant has constructed a pit (108.5 X 21.25 metres) under a covered shed for storage of RDF equipped with Grab Cranes. The pre-processed waste from the RDF storage pit is fed into the Boilers (02 Nos.) using grab crane to run turbine to generate electricity of 25 MW.

The temperature in the boilers is maintained at 950°C and above as per the Solid Waste Management Rules, 2016.

There are 02 Flue Gas Cleaning units 01 for every boiler consisting of Lime spray reactor (lime slurry is added by atomizing), Activated Carbon Injection, Bag House filter followed by dispersion into the atmosphere through a common stack of height- 60 meters from the ground.

The leachate generated in the storage pits is being used as supplementary fuel along with RDF in Boilers Furnace. Adequate storage facilities are provided for the leachate management.

(B) Engineered Sanitary Landfill (SLF) at Tehkhand

The Engineered Sanitary Landfill (SLF) at Tehkhand has been developed over an area of 32.346 Acres. Environmental Clearance was granted by MoEF&CC, Govt. of India on 29.10.2018. The Engineered Sanitary Landfill commissioned in March, 2024.

3. Gap Analysis on Solid Waste Management

Generation (in TPD) (1)	Total Capacity of Existing MSW Processing Facilities + MRF (in TPD) (2)	Processing of Fresh MSW+MRF (in TPD) (3)	Gap in Processing Capacity (in TPD) (4) = (1)-(2)	Gap in Processing (in TPD) (5) = (1)-(3)	Additional Proposed Capacity of Facilities (in TPD)			Total Capacity of MSW Processing Facilities + MRFs (in TPD)		
					By 2025	By 2026	By 2027	By 2025	By 2026	By 2027
11342	8173 (72.06 %)	7542 (66.5 %)	3169 (27.94%)	3800 (33.5 %)	400	2750	7750	8573 (75.6 %)	10923 (96.3 %)	15923 (140.4 %)

4. Proposed MSW Processing Facilities to fill the Gap:

- One New Waste to Energy Plant of MCD at Narela-Bawana of 3000 TPD capacity by June, 2027.
- One New Waste to Energy Plant of MCD Ghazipur of 2000 TPD by December, 2027
- Expansion of Waste to Energy Plant at Okhla from 1950 TPD to 2950 TPD by March, 2026.
- Expansion of Waste to Energy Plant at Tehkhand from 2000 TPD to 3000 TPD by December, 2026.
- One Bio-CNG Plant of 300 TPD at Okhla by March, 2025.
- One Compressed Bio-Gas (CBG) Plant of 350 TPD of MCD at Ghazipur by December, 2026.
- One Compressed Bio-Gas (CBG) Plant of 100 TPD of MCD at Ghogha Dairy by March, 2025.

Besides above, Following Bio-Gas Plants for Dairy Waste are also proposed & under construction :

- Nangli Dairy (215 TPD) by Sept, 2024
- Goyla Dairy (215 TPD) by March, 2025
- Ghogha Dairy (290 TPD) by March, 2025,

These are mainly for the Waste generated from Dairies and not included in total MSW Generation of 11000 TPD.

Total Additional Capacity of Proposed MSW Processing Facilities- after commissioning of above-mentioned facilities will be 7750 TPD by December, 2027 which will be sufficient to fill the gap of 3800 TPD (excluding abovementioned Bio-Gas Plants of Dairies)

5. NGT Case OA No. 606 / 2018 regarding Compliance of Municipal Solid Waste Management Rules, 2016.

Meetings were taken by the Chief Secretary, GNCTD from time to time and compiled Information / Action Taken Reports of Govt. of NCT of Delhi are being submitted to CPCB through the Monthly Progress Reports of Govt. of NCT of Delhi.

Solid Waste Monitoring Committee (SWMC) headed by Hon'ble Lt. Governor, Delhi has been constituted by the Hon'ble National Green Tribunal vide order dated 16.02.2023 in OA No. 606/2018 in the matter of "Compliance of Municipal Solid Waste Management Rules, 2016, and Other Environmental issues." Chief Secretary, Delhi is Convener and Secretaries/HODs of various Ministries / Departments of Govt. of India / Delhi are members of the said Committee.

An Action Plan for Solid Waste Management in Delhi has been prepared and an order dated 06.04.2023 has also been issued by Chief Secretary, Delhi. Copy of the said Action plan and order dated 06.04.2023b has been sent to concerned departments including CPCB and MoEF&CC.

6: Remediation of Legacy Waste (Old MSW):

There are 3 Dumpsites at Ghazipur, Bhalaswa and Okhla in Delhi where Municipal Solid Waste have been dumped and there was legacy waste of 28 Million Tons as mentioned in the orders dated 17.07.2019 of Hon'ble National Green Tribunal in OA No. 519 / 2019 in the matter of News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and OA No. 386/2019 in the matter of "Centre for Wildlife and Environment Litigation" Vs Union of India & Ors."

In the said case Hon'ble National Green Tribunal has passed detailed order regarding Disposal of 'Legacy' Waste dumped at Bhalswa, Ghazipur and Okhla Dumpsites and given various directions. Hon'ble NGT has directed the Municipal Corporations to go for bio mining using trommels instead of capping of the dump sites at Bhalaswa, Ghazipur and Okhla.

The Project (Bio-mining of Legacy Waste at 3 Dumpsites in Delhi) started w.e.f. 01.10.2019. Inert material generated during the process is about 60% to 70% by weight or 40% by volume of the waste being processed.

Status of Bio-Mining of Legacy Waste at 3 Dumpsites at Okhla, Ghazipur & Bhalaswa (As on 03.04.2024)

Dumpsite	Quantity of Legacy Waste Dumped (July, 2019) (Lakh Ton)	Total Quantity of Legacy Waste Bio-mined (Since Oct, 2019 to 03.04.2024) (Lakh Ton)	Legacy Waste (Volumetric Assessment through Drone Survey in June, 2022) (Above Ground) (Lakh Ton)	Quantity of Fresh MSW Dumped from July, 2022 to 03.04.2024 (Lakh Ton)	Total Quantity of Legacy Waste Bio-mined from July, 22 to 03.04.2024 (Lakh Ton)	Balance Quantity of Waste at Dumpsite (Lakh Ton)	No. of Trommels Operational	Revised Timeline for 100% Remediation (Earlier Timeline – May, 2024)
Bhalaswa	80	63.42 (79.3 %)	73	16.46	37.58	51.88	22	Dec. 2027
Ghazipur	140	25.00 (17.9 %)	85	11.21	13.30	82.91	25	Dec. 2027
Okhla	60	43.12 (71.9 %)	45	11.31	24.46	31.85	11	Dec. 2027
Total	280	131.54 (47 %)	203	38.98	75.34	166.64	58	

*Subject to the stoppage of incoming fresh waste and formation of Standing Committee in MCD.

7. Action taken by DPCC for Improvement in the Solid Waste Management in Delhi:

(a) Coordinated the works related to Solid Waste Monitoring Committee (SWMC) headed by Hon'ble Lt. Governor, Delhi constituted by the Hon'ble National Green Tribunal vide order dated 16.02.2023 in OA. No. 606/2018 in the matter of "Compliance of Municipal Solid Waste Management Rules, 2016 and other Environmental Issues".

Prepared Action Plan for Solid Waste Management in Delhi for SWMC after coordination with concerned Departments/Authorities. An order dated 06.04.2023 has also been issued by Chief Secretary, Delhi for implementation of the said Action Plan and compliance with the directions of the Hon'ble NGT in said order.

Progress of various projects and Action Points mentioned in the said order and Action Plan were reviewed / monitored through the meetings of SWMC held on 25.04.2023 & 12.12.2023 and also through E-Samiksha Portal of Govt. of NCT of Delhi.

Review of Solid Waste Management in Delhi by SWMC resulted in :

- Improvement in Segregation of Waste at Source
- Improvement in Bio-mining of Legacy Waste at 3 Dumpsites at Ghazipur, Bhalaswa & Okhla [79.21 Lakh ton on 04.04.2023 to 131.54 Lakh Ton on 03.04.2024 (130.5% increase)]

- Utilization of Inert Generated from Bio-mining increased manifold due to use by NHAI in its various projects in and around Delhi.
- Utilization of RDF Generated from Bio-mining also increased.

(b) Commissioning of New Waste to Energy Plant of 2000TPD at Tehkhand

Consent to operate under Air & Water Acts and Authorization under the Solid Waste Management Rules, 2016 was granted to M/s Tehkhand Waste to Electricity Project limited on 07.10.2023 for New Waste to Energy Plant of 2000TPD at Tehkhand. The plant commissioned in October 2022 and in operation.

(c) Commissioning of New Engineered Sanitary Landfill (SLF) at Tehkhand

Consent to operate under Air & Water Acts and Authorization under the Solid Waste Management Rules, 2016 were issued to Engineered Sanitary Landfill (SLF) at Tehkhand. The Facility commissioned on 12.03.2024. This facility has been developed by MCD for the disposal of the Ash generated from the Waste to Energy Plants at Okhla & Tehkhand.

(d) Monitoring of Waste to Energy Plants:

Inspection of Waste to Energy Plants in Delhi were carried out from time to time. Online Continuous Emission Monitoring System (OCEMS) has been installed by all the 04 operational Waste to Energy Plants in Delhi and the same are also connected to the server of CPCB & DPCC.

(e) Prevention of Fire Incidents at the Dumpsites:

Dumpsites at Ghazipur and Bhalaswa were inspected from time to time. By the action taken by DPCC in the past including imposition of Environmental Compensation & issuance of directions for prevention of Fire Incidents at the Dumpsites, Fire Incidents reduced drastically at the Dumpsites particularly at Ghazipur & Bhalaswa.



DELHI POLLUTION CONTROL COMMITTEE
 (Government of N.C.T. of Delhi) 4th & 5th Floor, ISBT Building
 Kashmere Gate, Delhi 110006
 (Visit us at <https://www.dpccomms.nic.in>)



ANALYSIS REPORT OF GROUND WATER NEARBY GAZIPUR LAND FILL SITE

Report No.: DPCC/W/LF/2024/ 1036

Dated 25/6/2024

Date of monitoring: - 01.05.2024

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (mg/l)	Fluoride (mg/l)	Nitrate (mg/l)	Mg (mg/l)
General Standards (as per IS 10500:2012)		6.5 8.5	500	250	200	75	200	1.0	45	30
1.	Gazipur Dairy Farm, Gali No.-4	7.5	2700	691.6	340	65.6	119.4	1.1	0.28	66.7
2.	Gazipur Dairy near Masjid	7.7	2780	711.6	256	49.6	123.4	1.1	0.18	50.17
3.	Landfill side Near Dairy House No. 48	7.3	5020	1661.2	1436	224	183.9	1.4	0.25	294.63
4.	Fish Market Landfill site Gazipur	7.4	2620	581.7	276	64	96.7	1.3	0.37	51.5

N. Mishra
 I/C Water Laboratory
 Dr. Nandita Mishra
 Scientist 'D'

Shruti
 SSA/Analyst/SLA



ANALYSIS REPORT OF GROUND WATER NEARBY BHALSWA LAND FILL SITE

Report No.: DPCC/W/LF/2024/ 1037

Dated 25/6/2024

Date of monitoring: 02.05.2024

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (mg/l)	Fluoride	Nitrate (mg/l)	Mg (mg/l)
General Standards (as per IS 10500:2012)		6.5 8.5	500	250	200	75	200	1.0	45	30
1	Bhalswa Sanjay Gandhi Transport	7.3	2450	641.8	1076	80	56.3	0.9	0.89	242.1
2	Bhalswa Dairy	7.4	4100	1691.4	1536	120	78.4	1.6	0.72	344.2
3	Bhalswa landfill site	Location was found dry								
4	Bhalswa Janta Colony	7.3	4040	1241.6	1336	136	88.7	1.6	0.63	291.7

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DELHI POLLUTION CONTROL COMMITTEE

 (Government of N.C.T. of Delhi) 4th & 5th Floor, ISBT Building
 Kashmere Gate, Delhi 110006
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ANALYSIS REPORT OF GROUND WATER NEARBY OKHLA LAND FILL SITE

Report No.: DPCC/W/LF/2024/ 1038

Dated 25/6/24

Date of monitoring: - 01.05.2024

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (mg/l)	Fluoride	Nitrate (mg/l)	Mg (mg/l)
General Standards (as per IS 10500:2012)		6.5 8.5	500	250	200	75	200	1.0	45	30
1.	Okhla Landfill Site	6.6	2760	811.5	796	168	20.8	0.7	0.25	152.6
2.	Booster Pumping Station Okhla	7.2	332	131.9	416	57.6	1.19	0.9	0.03	87.1
3.	Okhla Bus Depot	Location was found dry								
4.	B.P. Singh Camp Colony, Near Shiv Mandir	6.6	3680	1491.3	1476	192	26.7	1.0	0.38	312.1

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SSA/Analyst/SLA



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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/Email

File No CM-13011/224/2024-LAW-HO-CPCB-HO

Date: 23/12/2024

To,

The Member Secretary
Delhi Pollution Control committee
Building, 4th & 5th Floor ISBT, GT Karnal Rd,
Kashmere Gate, New Delhi, Delhi 110006

Subject: Compliance of Hon'ble NGT(PB) order dated 02.08.2024 in OA No. 781/2024 in the matter of Manish Jain Verses Union of India & Ors

Sir,

This is in reference to the above-mentioned orders issued by Hon'ble National Green Tribunal (NGT) wherein notice has been issued to respondents for filling response. A Copy of the order is enclosed.

In the original application, the applicant has raised a grievance regarding dumping of domestic dry and wet garbage, commercial waste and other types of waste as well as debris on the bank of river Yamuna near Pusta Road and its ghats near Wazirababd and Jagatpur village. Further, it is also refereed by the applicant that in spite of efforts made by him no steps have been taken by the authorities.

In view of the above, it is requested to kindly coordinate with the concerned authorities and furnish status cum action taken report at the earliest via email at swm.cpcb@gov.in latest by 03/01/2025.

This may kindly be treated as 'URGENT' as the matter is listed on 6.3.2025 for hearing.

Yours faithfully'

(Divya Sinha)
Director and Divisional Head, UPC-II

Encl: As above

‘परिवेश भवन’ पूर्वी अर्जुन नगर, दिल्ली - 110032.

Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.

दूरभाष /Tel : 43102030, 22305792, वेबसाइट /Website: www.cpcb.nic.in



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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.

REMINDER

Speed Post/Email

File No CM-13011/224/2024-LAW-HO-CPCB-HO

Date: 07/01/2025

To,

The Member Secretary
Delhi Pollution Control committee
Building, 4th & 5th Floor ISBT, GT Karnal Rd,
Kashmere Gate, New Delhi, Delhi 110006

Subject: Compliance of Hon'ble NGT(PB) order dated 02.08.2024 & 13.11.2024 in OA No. 781/2024 in the matter of Manish Jain Verses Union of India & Ors

Sir,

This is in reference to the above-mentioned order issued by Hon'ble National Green Tribunal (NGT) wherein notice has been issued to respondents for filling response.

In compliance to the said order of Hon'ble NGT, CPCB requested vide letter dated 23.12.2024 to coordinate with concerned authorities and furnish a status cum action taken report which is still awaited.

In this regard, it is requested please provide status cum action taken report at the earliest via email at swm.cpcb@gov.in

This may kindly be treated as 'URGENT'

Yours faithfully

(Divya Sinha)
Director and Divisional Head, UPC-II

‘परिवेश भवन’ पूर्वी अर्जुन नगर, दिल्ली - 110032.

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