

I/132704/2022

HARYANA STATE POLLUTION CONTROL BOARD
C-11, SECTOR-6, PANCHKULA
Ph-0172-577870-73, Fax No. 2581201
E-mail – hspcbhazardouswaste@gmail.com

Office Order

Whereas, the Hon'ble National Green Tribunal (NGT) issued directions in several cases to impose the Environmental Compensation for violation of Hazardous & Other Wastes (Management & Tranboundary Movement) Rules, 2016 on non-complying polluting units and has been directing CPCB, all PCBs, including Haryana, to implement "Polluter Pays" principle in right spirit and to recover environmental compensation from polluting units and to use the same for restoration of environmental damages caused to the public;;

Whereas, as per the orders of the Hon'ble Tribunal dated 12.04.2019 in the matter of OA No. 804/2017; Rajiv Narayan & Anr. Vs. Union of India & Ors. various recommendations of the Monitoring Committee are to be complied with and one of the recommendation is as below:-

"4. [4(5)] There is need to have an enforcement framework for effective enforcement of Rules based on principle of proportionality and also, precautionary principle. Such framework will remove ambiguity in regulatory actions and bring transparency, predictability and consistency in enforcement for actions."

Whereas, the Hon'ble NGT in the matter of OA No. 804/2017; Rajiv Narayan & Anr. Vs. Union of India & Ors. has directed the Central Pollution Control Board to determine the scale of compensation to be recovered for violation of the Rules within one month and the CPCB on 11.05.2019 has filed a report regarding determination of environmental compensation to be recovered for violation of Hazardous & Other Wastes (Management & Trans-boundary Movement) Rules, 2016 in compliance of Hon'ble NGT order dated 12.04.2019 and the Hon'ble Tribunal vide order dated 26.08.2019 stated that the recommendations of the CPCB with regard to the compensation regime on the subject may be adopted, subject to further consideration of orders.

Whereas, the Central Pollution Control Board vide it's letter dated 18.07.2019 has forwarded "Enforcement Framework for Effective implementation of Hazardous & Other Waste (Management & Trans-boundary Movement) Rules, 2016".

Whereas, the Technical Advisory Committee (TAC) of the Board, in its meeting held on 23.06.2020, has recommended to adopt methodology/modalities issued by the CPCB for determination of environmental compensation to be recovered for violation of Hazardous & Other Wastes (Management& Trans-boundary Movement) Rules, 2016 and the necessary approval for implementation of the above said methodology/modalities may also be taken from the Board/Government.

Whereas, the said methodology/modalities issued by the CPCB for determination of environmental compensation to be recovered for violation of Hazardous & Other Wastes (Management& Tranboundary

Movement) Rules, 2016 was placed before the Board in its 192nd meeting vide agenda item no. 192.8 (S) for consideration and approval and the same has been approved by the Board.

In view of above, it is hereby ordered to adopt the said methodology/modalities issued by the CPCB for determination of environmental compensation to be recovered for violation of Hazardous & Other Wastes (Management& Trans-boundary Movement) Rules, 2016.

These orders shall come into force with immediate effect

**Dated Panchkula, the
07/09/2022
HSPCB**

Chairman,

**Endst. No. HSPCB/HWM/2022
07/09/2022**

Dated:

A copy of the above is forwarded to the following for information and necessary action:-

1. The Additional Chief Secretary to Govt. of Haryana, Department of Environment & Climate Change, Chandigarh.
2. The Director General, Department of Environment & Climate Change, Haryana, Chandigarh
3. All the Branch In-charges dealing with Consent Management in Head Office of the Board.
4. All the Regional Officers in field.
5. Nodal Officer (IT) for uploading the orders on the website of the Board.
6. P.S. to the Chairman, HSPCB.
7. P.A to the Member Secretary, HSPCB.

**Signed by Naveen Gulia
Date: 08-09-2022 10:28:10
Reason: Approved**

**Sr. Environmental Engineer (HQ)
For Chairman, HSPCB**



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Attachment: Guidelines CPCB.pdf
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)
(MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

F.No. B-29016/C-08 /2019/WM-II Div./ 4055

SPEED POST

M-5

July 18, 2019

To

The Member Secretary
Haryana Pollution Control Board
C-11, Sector-6 Panchkula
Haryana-134 109 Chandigarh

ms
5.10
2019
Sub.: **Enforcement framework for effective enforcement of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016- in compliance with orders dated 12/04/2019 of the Hon'ble NGT in the matter of O.A. No. 804/2017 with M.A. No. 1302/2018 in Interlocutory Application No. 63 in W.P. (C) No. 657/1995 — reg.**

Sr. Secy-II
Rajiv
2017
EF
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action and
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guidelines as
mentioned at
Sno. 3(b)(c), 7
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Received on
19.08.2019.
19/8/19

Sir,
This has reference to the orders dated 12/04/2019 of the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in the matter of O A No 804/2017: Rajiv Narayan & Anr. Vs Union of India & Ors wherein various recommendations of the Monitoring Committee need to be complied with and where one of the recommendation is as below:

"There is need to have an enforcement framework for effective enforcement of Rules based on principle of proportionality and also, precautionary principle. Such framework will remove ambiguity in regularity actions and bring transparency, predictability and consistency in enforcement for actions."

In compliance of aforesaid order, CPCB has prepared "Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" to be followed in CPCB. The framework includes Background; Salient features of the Rules, Various enforcement tools, Tracking/Monitoring of non-compliances, Categorisation of violations, approach for application of enforcement tool as well as Financial penalty & environmental compensation calculation methodology. Copy of the said framework is available at CPCB website i.e https://cpcb.nic.in/uploads/hwmd/Guidelines_HW_1.pdf which may be helpful in preparing the required enforcement framework for your Haryana Pollution Control Board.

Yours faithfully,

(Abhey Singh Soni)
Additional Director & Head
Waste Management-II Division

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032

'Parivesh Bhawan', East Arjun Nagar, Delhi - 110032

दूरभाष / Tel. : 43102030, फैक्स / Fax : 22305793, 22307078, 22307079, 22301932, 22304948
ई-मेल / e-mail : cpcb@nic.in वेबसाइट / Website : www.cpcb.nic.in

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

July 2019



Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change, Government of India)

**Parivesh Bhawan, East Arjun Nagar,
Shahdara, Delhi – 110032**

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Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

1. Background

The Govt. of India has notified Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended thereof, (herein after called as HOWM Rules, 2016) for the safe and environmentally sound management of hazardous and other wastes. The Rules lay down provisions for storage, packaging, transportation, recycling, utilization, pre-processing, co-processing, treatment, import, export, offering for sale, transfer or disposal, etc. of the hazardous and other wastes (“hazardous waste” and “other wastes” have been defined under the said Rules).

Enforcement of the HOWM Rules, 2016, would ensure safe and environmentally sound handling and management of hazardous and other wastes. The State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) have been entrusted with duty to ensure compliance of the various provisions stipulated under the Rules through monitoring and taking of actions against defaulters as per Rule 21 of the Rules.

In order to remove ambiguity in regulatory actions as well as bring transparency, predictability and consistency in enforcement for actions, it is felt to develop an enforcement framework for effective implementation of these Rules based on principle of proportionality and precautionary principle. These guidelines have, therefore, been prepared with the said objectives.

This framework includes various enforcement tools, tracking of Non-compliances, categorization of non-compliances and approach for application of the said enforcement tools in cases of non-compliances of the HOWM Rules, 2016.

2. Salient Features of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 Pertaining to Occupiers

Occupier of any factory or premises as defined under Rule 3(1)(21) of the Rules, *means a person who has, control over the affairs of the factory or the premises and includes in relation to any hazardous and other wastes, the person in possession of the hazardous or other waste.*” It is responsibility of the occupier for safe and environmentally sound management of hazardous and other wastes as stipulated under Rule 4 of the HOWM Rules, 2016.

The occupier is required to obtain authorisation from the concerned SPCB/PCC for handling, generation, collection, storage, packaging, transportation, use, treatment, processing, recycling, recovery, pre-processing, co-processing, utilisation, offering for sale, transfer or disposal of the hazardous and other wastes and shall carry out the same as per the authorisation granted and provisions stipulated under the HOWM Rules, 2016. The occupier is also required to maintain records and manifests and submit annual returns as stipulated under the Rules. The Rules also lays down provisions for import and export of hazardous and other wastes for the purpose of recycling/recovery/reuse/utilisation.

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

3. Enforcement tools

(a) Issuance of directions for closure or stoppage of electricity or water supply or any other services

HOWM Rules, 2016, have been notified under the Environment (Protection) Act, 1986, and section 5 of the Act empowers Central Government to issue directions to any person, officer or any authority for closure, prohibition or regulation of any industry, operation or process; or stoppage or regulation of the supply of electricity or water or any other service and such person, officer or authority shall be bound to comply with such directions.

The Central Government in exercise of powers conferred under section 23 of the Environment (Protection) Act, 1986, has delegated the above powers under section 5 of the said Act to the Chairmen of SPCBs/PCCs and CPCB, vide various notifications by. Copies of such notifications of delegation of powers to Chairman of SPCBs/PCCs is given at **Annexure I** for ready reference. Therefore, SPCBs/PCCs and CPCB too have the powers conferred under the aforesaid section 5 of the Act.

Procedures of issuing the aforesaid directions under section 5 of the Environment (Protection) Act, 1986, including opportunity or no opportunity of being heard, have been laid down under Rule 4 of the Environment (Protection) Rules, 1986, notified by the Central Government under the Environment (Protection) Act, 1986.

(b) Imposition of liability for damages caused to the environment or third party including financial penalty for violation of provisions under HOWM Rules, 2016

The HOWM Rules, 2016, lays down provisions with regard to liability for damages caused to the environment or third party including financial penalty for violation of provisions of the Rules under Rule 23 of the said Rules.

CPCB has issued “Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty” for implementing the aforesaid provisions of Rule 23. The guidelines include description of liabilities, approach for valuation of the same, methodology for levying financial penalty, role of SPCB/PCC and other stakeholders etc. SPCBs/PCCs are required to follow procedures laid down under these guidelines while enforcing the aforesaid provisions of Rule 23. Copy of the said guidelines is available at CPCB website i.e https://cpcb.nic.in/uploads/hwmd/Guidelines_Environmental_Damages_Costs_200116.pdf.

(c) Imposition of Environmental Compensation

The Hon’ble National Green Tribunal, Principal Bench, New Delhi through its various orders has directed the regulatory authorities (i.e CPCB/SPCBs/PCCs) to assess and recover the environmental compensation for the damages caused

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to the environment apart from prohibiting the polluting activities or prosecution so as to render polluting activities to be unprofitable.

Relevant text of various orders of the Hon'ble National Green Tribunal in this regard is given at **Annexure II** for ready references.

CPCB in compliance with orders dated 12/4/2019 of the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in the matter of Original Application No. 804/2017 (Earlier O.A. No. 36/2012) With M.A. No. 1302/2018 in Interlocutory Application No. 63 in W. P. (C) No. 657/199 (Rajiv Narayan & Anr Versus Union of India & Ors. With The Research Foundation for Science, Technology and Natural Resource Policy Versus Union of India & Ors.), has prepared and submitted document on "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016". Copy of the same is available at <https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf>

(d) Prosecution for imprisonment with fine

Section 15 of the Environment (Protection) Act, 1986, lays provisions of punishment with imprisonment including fine in case of failure to comply with or contravenes any of the provisions of the Act, or the rules made or orders or directions issued thereunder.

Section 19 of the Environment (Protection) Act, 1986, stipulates about cognizance of the offence to be taken by the Hon'ble Court on complaint made by Central Government or any authority or officer authorised in this behalf by that Government. The said section 19 is reproduced as below:

The Central Government has authorised various authorities and officers for the purpose along with the jurisdiction vide notifications under the said Act and compiled copy of the same is given at **Annexure III**. The authorised authorities and officers require to file complaint for the said offence in the District Court.

*Relevant abstract of the Environment (Protection) Act, 1986; Environment (Protection) Rules, 1986 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 is given at **Annexure-IV** for ready reference.*

4. Monitoring/Tracking of Non-compliances

(a) Through technology interventions:

Most of the provisions stipulated under the HOWM Rules 2016 applicable to hazardous and other wastes handlers (such as quantity of wastes generation, day wise record maintenance of waste generation & its storage, wastes sent to authorised recyclers/utilizers/pre-processors/co-processors/disposal facility operators, waste movement manifest documents & their reconciliation, etc.) can be tracked with application of information technology.

A suitable software with features of entering the data by waste handlers w.r.t. day wise record maintenance, manifest document, etc. as stipulated under the

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

HOWM Rules 2016, may be developed which can easily trace non-compliances so as to enable SPCBs/PCCs in identifying/tracking and acting upon the same. Further, camera at the facility and GPS based movement of hazardous or other wastes linked to the said software may also be very helpful in identifying violations.

Central Pollution Control Board is in process of developing such software. However, till such software is developed, SPCBs/PCCs may develop their own system with suitable information technology based application for identifying non-compliances and enforcing provisions stipulated under the regulations.

(b) Through Filed Investigation

Inspection of hazardous and other waste handling units is important tool to verify if such units are practicing environmentally safe waste management practices, complying with various conditions laid down under the authorization granted by SPCBs/PCCs and the HOWM Rules 2016, etc. Verification of various documents like manifest documents, annual returns, etc. submitted by the units shall also be taken into account while enforcing HOWM Rules. Following may be adopted for monitoring the compliances of HOWM Rules, 2016, in case of hazardous and other waste handling units:

(i) Periodic inspections

The hazardous and other waste generating units shall be inspected periodically and actions shall immediately be taken for violations, if any.

Selection of hazardous and other waste handling units for the aforesaid inspection may be carried out with the help of technology for fair selection. In this regard, a simple software may be developed featuring list of all the waste generators.

(ii) Frequent monitoring of units engaged in waste collection/ recycling/ utilization/ pre-processing/ co-processing/ disposal and import of wastes

Units engaged in recycling/utilization/pre-processing/ co-processing/disposal, are involved in handling of wide range of wastes from different industries and therefore needs to be closely monitored through frequent inspection of such units.

Such waste collection/recycling/utilization/pre-processing/ co-processing/ and importer of hazardous and other wastes may require inspection/ monitoring by SPCBs/PCCs preferably once in 03 months, whereas, common TSDFs may be inspected once in a month.

(iii) Random verification in case of interstate movement of hazardous and other wastes

Hazardous and other wastes are often transported to other State/UT for recycling/ utilization/ pre-processing/ co-processing/disposal. Random verification of waste reaching to such facilities in other State/UT shall be

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

carried out by both the SPCBs/PCCs (sender and receiver State/UT). Further, SPCB/PCC (of receiving waste) shall also check accounting of wastes received by such facilities and also ensure they do not exceed their authorised waste handling capacity.

(iv) Investigation of Complaints

Any complaint related to hazardous and other waste shall be examined properly and depending upon nature of complaint a thorough investigation shall be done so as to identify non-compliances, if any.

(v) Sampling & Monitoring in case of accidental or illegal discharge/disposal or fire of hazardous and other wastes for fixing liability and financial penalty

Accidental or illegal discharge/disposal or fire of hazardous and other wastes may often lead to air/water (surface or ground water)/soil contamination. In such incidences, proper sampling & analysis are required to be carried out by SPCBs/PCCs, as outlined in the aforesaid “Guidelines for Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty” published by CPCB, which would be helpful in imposing appropriate liability and financial penalty, as applicable.

5. Categorization of Violations

For the purpose of imposing financial penalty and environmental compensation, various violations of HOWM Rules, 2016, can be broadly classified into the following two categories:

A. Category A: Only procedural violations of HOWM Rules, 2016, which has not caused damage to environment or third party

Certain violations of HOWM Rules, 2016, are procedural violations in nature and do not cause any damage to environmental or third party.

For instance, non-submission of annual return within the stipulated time period to SPCB/PCC (as required under Rule 20(2) of the Rules), non-maintenance of records (as required under Rule 20 (1) of the Rules) no prior intimation to SPCB of the States of transit in case of inter-state movement (as required under Rule 18(5) of the Rules, 2016), etc. by the authorised occupier. In such cases, though there have been violations of provisions of the Rules which are procedural requirements in nature but has not caused damaged to the environment. However, financial penalty would be applicable in such cases for violations of each and every relevant provision of the HOWM Rules, 2016, as outlined under section 7 of this document.

B. Category B: Violations causing environmental damage including procedural violations

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

These are violations of the HOWM Rules, 2016, causing environmental damages including procedural violations of the Rules. The same may further be classified into two categories as below:

- (i) Category B1:** Cases where mismanagement of hazardous or other waste has resulted or resulting into environmental damage and such damages liability including assessment of remediation required can be assessed in terms of cost also by applying provisions laid down under CPCB's "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty".

For example, disposal of hazardous or other waste on land or surface/ground water by an occupier, operator, transporter, importer, exporter, etc. as the case may be, has been identified by SPCB/PCC and damages to the environment and remediation work as well as cost thereof can also be assessed by SPCB/PCC in accordance with the said guidelines.

In such cases, liability of the responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) can be fixed in terms of various required activities and amount of money required in such activities (i.e. taking up immediate Emergency Response Plan Measures such as containment of hazardous or other waste; assessment of contamination and required remediation work, and; execution of selected remediation plan) in accordance with provisions laid down under the said CPCB's "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty"¹. The responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) is required to pay bank guarantee to SPCB/PCC and compensation liability (loss of property, loss of crop, loss of life, treatment cost towards human health impacts, etc.) as suggested in the guidelines.

Besides above liability, financial penalty would also be imposed as given under section 7 of this document.

¹ https://cpcb.nic.in/uploads/hwmd/Guidelines_Environment_Damages_Costs_200116.pdf

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

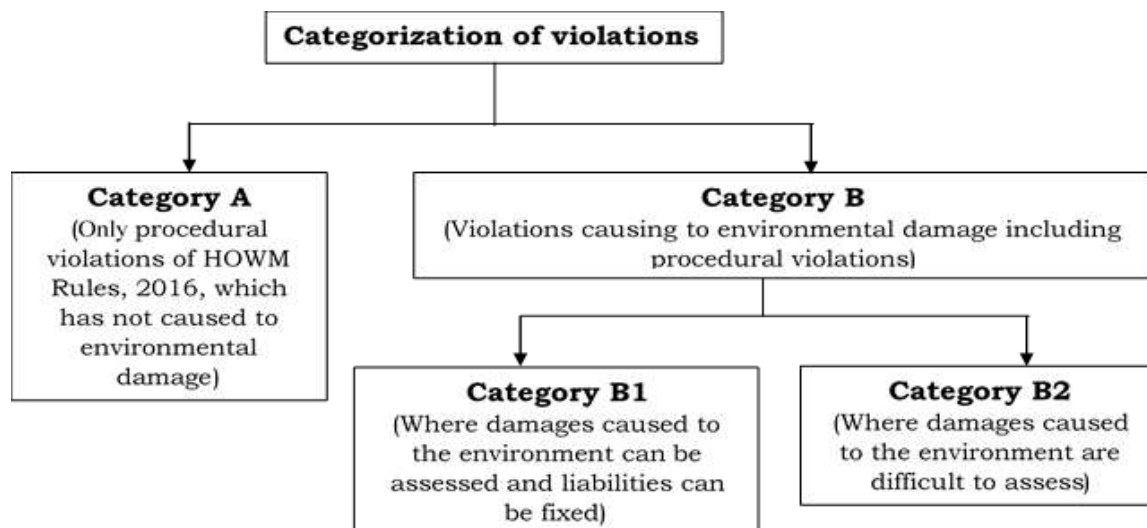


Figure1: Categorization of violations

- (ii) **Category B2:** Cases where mismanagement of hazardous or other waste may have caused environmental damage and such damages & remediation required including cost thereof are difficult to assess.

For example, an authorised occupier, operator, transporter, importer, exporter, etc., as the case may be, of hazardous or other wastes has illegally disposed hazardous or other waste on place which is unidentifiable or even if identified, damages to the environment and remediation work as well as cost thereof is difficult to be assessed by SPCB/PCC. Such difficulty may arise due to very small quantity of wastes involved in such acts, wastes disposed along with municipal solid waste, wastes may have been washed off with runoff water, etc. In such cases, it may be difficult to assess damages caused to the environment and liability of the responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) as well as cost thereof.

Under such circumstances, methodology for imposing financial penalty and environmental compensation may be followed as outlined in section 7 of this document.

6. Approach for Application of Enforcement Tools

Approach for application of enforcement tool among the available tools (as outlined in section 3 of this document) may be linked to nature of violations. Accordingly, the following approach for application of enforcement tools may be used:

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

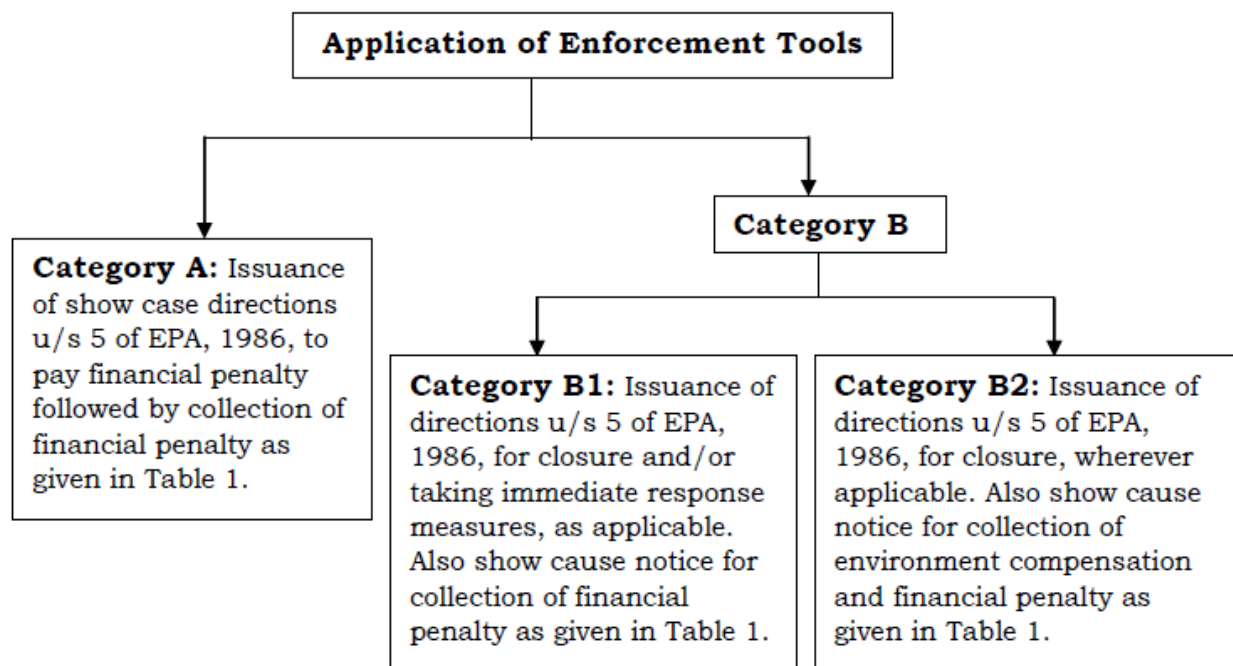


Figure 2: Approach for application of enforcement tools in brief

Detailed approach for application of various enforcement tools (as given in section 3 of this document) vis-à-vis category of violations has been given in Table 1 below:

Table 1: Category of violations and Enforcement Tools

Sl. No.	Category of Violations	Enforcement Tools
1.	Category A (as described in section 5 of this document)- Only procedural violations of HOWM Rules, 2016, which has not caused to environmental damage or third party.	Directions to show-cause u/s 5 of the EPA, 1986, about why financial penalty be not levied outlining various procedural violations observed by SPCB/PCC/CPCB. This shall be followed by directions to pay financial penalty on each of such violations after considering objections, if any, in response of such notice. The penalty amount be derived as outlined in the guidelines ² prepared by CPCB in this regard. In case of non-submission of financial penalty within stipulated

² "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" which has been circulated to all SPCBs/PCCs and copy is also available at CPCB website https://cpcb.nic.in/uploads/hwmd/Guidelines_Environmental_Damages_Costs_200116.pdf

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Sl. No.	Category of Violations		Enforcement Tools
			time period, deterrent amount to be imposed and action be initiated as per the CPCB document ³ .
2.	<p>Category B (as described in section 5 of this document) - Violations causing to environmental damage including procedural violations</p>	<p>Category B1: Cases where mismanagement of hazardous or other waste has resulted or resulting into environmental damage and such damages including assessment of remediation required can be assessed.</p>	<p>The unit may be directed u/s 5 of the EPA, 1986, without any opportunity of being heard to:</p> <p>(i) take up immediate Emergency Response Plan Measures such as containment of hazardous or other waste, assess damages and execute remediation plan along with submission of bank guarantee, as outlined in CPCB guidelines¹, as the case may be, and;</p> <p>(ii) close industrial or other activities, in cases where there is likelihood of a grave injury to the environment due to continued industrial or other activities.</p> <p>Besides above, collection and imposition of financial penalty for violation of various provisions of the HOWM Rules, 2016, as outlined above for Category A violation shall be followed including imposition of deterrent amount in case of non-timely submission of financial penalty.</p> <p>In case unit fails to comply with the directions, the unit shall be closed and cases be filed u/s 15 of the EPA, 1986, wherever applicable.</p>
		<p>Category B2: Cases where mismanagement of hazardous or other</p>	<p>In cases where there is likelihood of a grave injury to the environment due to continued industrial or other activities, the unit may be directed</p>

³ "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", and copy of the same is available at <https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf>

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Sl. No.	Category of Violations	Enforcement Tools
	waste may have caused or causing environmental damage and such damages & remediation required is difficult to assess	<p>u/s 5 of the EPA, 1986, to close such industrial or other activities without any opportunity of being heard.</p> <p>For imposing and collecting financial penalty for violation of various provisions of the HOWM Rules, 2016, similar procedure as outlined above for Category A violation shall be followed.</p> <p>In addition to the above financial penalty, Environment Compensation (EC) towards the damages caused to the environment shall also be imposed as per the CPCB document³ including deterrent amount for non-timely submission of the EC as per the said document.</p> <p>In case unit fails to comply with the directions, the unit shall be closed.</p>
3.	Repeated Violations despite imposing liability/environmental compensation and financial penalty or directions or both	<p>Authorisation of the habitual and repeated violators of Category A be cancelled and the unit be closed u/s 5 of the EPA. Whereas in addition to the said actions, case be filed u/s 15 of the EPA, 1986, in case of habitual and repeated Category B violators.</p> <p>Further, the deterrent amount of EC and financial penalty be imposed in case of such repeated violators as per the CPCB document³</p>

³ "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", and copy of the same is available at <https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf>

³ "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", and copy of the same is available at <https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf>

Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Apart from above category of violations vis-à-vis enforcement tools, following scenarios may also be considered alongwith enforcement tools to be adopted:

- The occupiers not displaying relevant information about hazardous waste outside their factory gate (as directed by the Hon'ble Supreme Court vide orders dated 14/10/2003 in the matter of WP NO. 657/1995; Research Foundation for Science Technology and National Resource Policy Versus Union of India & Anr) - Issue show cause or be close down under section 5 of the Environment (Protection) Act, 1986,
- The occupier handling significant quantity of hazardous waste and has not applied for authorization for such wastes- Issue closure directions along with environmental compensation for damages caused to the environment. In case such unit does not close its unit or does not deposit the environmental compensation, as directed, proceedings under section 15 of the Environment (Protection) Act, 1986, be initiated.

7. Assessment of Financial Penalty and Environmental Compensation

In compliance with orders dard 12/4/2019 of the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in the matter of Original Application No. 804/2017 (Earlier O.A. No. 36/2012) With M.A. No. 1302/2018 in Interlocutory Application No. 63 in W. P. (C) No. 657/199 (Rajiv Narayan & Anr Versus Union of India & Ors. With The Research Foundation for Science, Technology And Natural Resource Policy Versus Union of India & Ors.), CPCB has prepared and submitted document on "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", Copy of the same is available at <https://cpcb.nic.in/NGTMC/HW/Deter-EnvComp-Recovered-Vio-HOWMRules-2016.pdf>

For calculating environmental compensation pertaining to Category B2 violations (as described in section 5 of this document), methodology as outlined in aforesaid CPCB document shall be followed. Further, the financial penalty as outlined in the aforesaid document may be followed including the imposition of deterrent amount for non-timely submission of Environmental Compensation and Financial Penalty.

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ANNEXURE-I

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*Notifications under the Environment (Protection) Act, 1986***DELEGATION OF POWERS TO THE STATE POLLUTION CONTROL BOARDS/POLLUTION CONTROL COMMITTEES****MINISTRY OF ENVIRONMENT AND FORESTS****NOTIFICATION**New Delhi, the 8th January, 1997

S.O. 23(E).- In exercise of the powers conferred by Section 23 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby delegates the powers vested in it under Section 5 of the said Act to the Chairman, State Pollution Control Boards/Committees as given in the Table below, to issue directions to any industry or any local or other authority for the violations of the standards and rules relating to hazardous wastes notified under the Environment (Protection) Act, 1986, subject to the conditions that the Central Government may revoke such delegation of powers or may itself invoke the provisions of Section 5 of the said Act, if in the opinion of the Central Government such a course of action is necessary in the public interest:-

TABLE

Sl. No.	Name of Board/Committee	Jurisdiction
1	2	3
1.	Andhra Pradesh State Pollution Control Board	Whole of State
2.	Arunanchal Pradesh State Pollution Control Board	Whole of State
3.	Assam State Pollution Control Board	Whole of State
4.	Bihar State Pollution Control Board	Whole of State
5.	Goa State Pollution Control Board	Whole of State
6.	Gujarat State Pollution Control Board	Whole of State
7.	Haryana State Pollution Control Board	Whole of State
8.	Himachal Pradesh State Pollution Control Board	Whole of State
9.	Jammu & Kashmir State Pollution Control Board	Whole of State
10.	Karnataka State Pollution Control Board	Whole of State
11.	Kerala State Pollution Control Board	Whole of State
12.	Maharashtra State Pollution Control Board	Whole of State

Notifications under the Environment (Protection) Act, 1986

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13.	Madhya Pradesh State Pollution Control Board	Whole of State
14.	Manipur State Pollution Control Board	Whole of State
15.	Meghalaya State Pollution Control Board	Whole of State
16.	Mizoram State Pollution Control Board	Whole of State
17.	Nagaland State Pollution Control Board	Whole of State
18.	Orissa State Pollution Control Board	Whole of State
19.	Punjab State Pollution Control Board	Whole of State
20.	Rajasthan State Pollution Control Board	Whole of State
21.	Sikkim State Pollution Control Board	Whole of State
22.	Tamil Nadu State Pollution Control Board	Whole of State
23.	Tripura State Pollution Control Board	Whole of State
24.	Uttar Pradesh State Pollution Control Board	Whole of State
25.	West Bengal State Pollution Control Board	Whole of State
26.	Committee, Andaman & Nicobar Union Territory	Whole of U.T.
27.	Committee, Chandigarh Union Territory	Whole of U.T.
28.	Committee, Dadra & Nagar Haveli Union Territory	Whole of U.T.
29.	Committee, Daman & Diu Union Territory	Whole of U.T.
30.	Committee, National Capital Territory of Delhi	Whole of N.C.T.
31.	Committee, Lakshadweep Union Territory	Whole of U.T.
32.	Committee, Pondicherry Union Territory	Whole of U.T.

[No.1(35)/96-PL]
VIJAY SHARMA, Jt. Secy.

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D.L.-33004/99



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 और वन मंत्रालय

अधिसूचना

नई दिल्ली, 2 नवम्बर, 2004

का.आ. 1211(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 23 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, उक्त अधिनियम की धारा 5 के अधीन उसमें निहित शक्तियों को पर्यावरण (संरक्षण) अधिनियम, 1986 के अधीन अधिसूचित परिसंकटमय अपशिष्ट से संबंधित मानकों और नियमों के अतिक्रमण के लिए किसी उद्योग या किसी स्थानीय या अन्य प्राधिकरण को निर्देश जारी करने की शक्ति, इन शर्तों के अधीन रहते हुए नीचे सारणी में दिए गए अनुसार अध्यक्ष, राज्य प्रदूषण नियंत्रण बोर्डों को, प्रत्यायोजित करती है कि यदि केन्द्रीय सरकार की यह राय है कि इस प्रकार की कार्यवाही करना लोकहित में आवश्यक है, केन्द्रीय सरकार शक्तियों के ऐसे प्रत्यायोजन को प्रतिसंहत कर सकेगी या वह स्वयं उक्त अधिनियम की धारा 5 के उपबंधों का अवलंब ले सकेगी :—

सारणी

क्रम सं.	बोर्डों के नाम	अधिकारिता
1	2	3
1.	छत्तीसगढ़ पर्यावरण संरक्षण बोर्ड	सम्पूर्ण राज्य
2.	झारखंड प्रदूषण नियंत्रण बोर्ड	सम्पूर्ण राज्य
3.	उत्तरांचल पर्यावरण संरक्षण और प्रदूषण नियंत्रण बोर्ड	सम्पूर्ण राज्य

[सं. 1(35)/96-पी.एल.]

सुधीर मित्तल, संयुक्त सचिव

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 2nd November, 2004.

S.O. 1211(E).—In exercise of the powers conferred by Section 23 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby delegates the powers vested in it under Section 5 of the said Act to the Chairman,

3289 GI/2004

(1)

2

THE GAZETTE OF INDIA: EXTRAORDINARY

[PART II—Sec. 3(ii)]

State Pollution Control Boards, as given in the Table below, to issue directions to any industry or any local or other authorities for the violations of the standards and rules relating to hazardous wastes notified under the Environment (Protection) Act, 1986, subject to the conditions that the Central Government may revoke such delegation of powers or may itself invoke the provisions of Section 5 of the said Act, if in the opinion of the Central Government, such a course of action is necessary in the public interest:—

TABLE

S.No.	Name of the Boards	Jurisdiction
1	2	3
1.	Chhattisgarh Environment Conservation Board	Whole of State
2.	Jharkhand Pollution Control Board	Whole of State
3.	Uttaranchal Environment Protection and Pollution Control Board	Whole of State

[No. 1(35)/96-PL]

SUDHIR MITAL, Jt. Secy.

Annexure II**Various orders of the Hon'ble National Green Tribunal to the regulatory authorities (i.e CPCB/SPCBs/PCCs) to assess and recover the environmental compensation for the damages caused to the environment**

- (i) In the matter of OA No. 95/2018 (M.A. Vo. 1029/2018): Aryavart Foundation Vs. M/s Vapi Green Enviro Ltd. & Ors, vide orders dated 11/01/2019 has passed the following orders:

"... (25) This was considered in the recent order of the Tribunal (by four Member Bench) in Paryavaran Suraksha Samiti and Anr. Vs. Union of India & Ors.⁴, Parveen Kakar & Ors. Vs. Ministry of Environment & Forests & Ors.⁵ and in News Item published in "The Asian Age" Authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution levels"⁶ wherein this Tribunal held that:

"11. Needless to say that it will be open to the SPCBs/Committees and CPCB to take coercive measures including recovery of compensation for the damage to the environment on 'Polluter Pays' principle as well as also to direct taking of such precautionary measures as may be necessary on the basis of 'Precautionary principle'."

- (ii) In the matter of OA No. 593/2017 (WP (Civil) No. 375/2012): Parayavaran Suraksha Samiti & Anr. Vs. Union of India & Ors., vide orders dated 03/08/2018 has passed the following orders:

"... (vi) The Central Pollution Control Board may take penal action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs Central Pollution Control Board may also assess and recover compensation for damage to the environment and the said fund be kept in a separate account and utilized in terms of an action plan for protection of the environment. Such action plan may be prepared by the Central Pollution Control Board within three months from today..."

- (iii) In the matter of OA No. 807/2018 and OA No. 996/2018: News item published in "The Times of India" Authored by Paras Singh Titled "Ignoring NGT orders, Mayapuri 'graveyard' spews toxic fumes" and News item published in "The Times of India" Authored by Paras Singh Titled "In factory setting, Mayapuri's scraping through" vide orders dated 29/01/2019 has passed the following orders:

"...Thus, strong precautionary and remedial measures are required, as earlier observed by this Tribunal in some cases⁷. Heavy amounts of damages must be recovered for any illegal polluting activities found. In the present case, despite severely polluting activities, the statutory authorities are consistently failing to perform their duties of recovering damages caused to the public health and to environment and have chosen to shut their eyes in breach of trust reposed by law..."

- (iv) In the matter of OA No 739/2018: Residents of Gram Panchayat Varahiya versus State of M.P, the Hon'ble National Green Tribunal, Principal Bench, New Delhi, in its order dated 21.02.2019

⁴ O.A. No. 593/2017 Order dated 03.08.2018: The Tribunal directed CPCB to take penal action against those accountable for failure in setting up CETPs/ETPs/STPs and to recover compensation for damage to the environment.

⁵ O.A. No. 661/2018, Order dated 08.01.2019: The Tribunal stated that the Pollution Control Board had failed to perform its duties in taking statutorily mandated coercive measures under Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 and 33B of the Water (Prevention and Control of Pollution) Act, 1974 or initiating prosecution. This Tribunal directed CPCB to exercise its statutory powers to determine and recover damages for violation of environmental norms by the respondent therein.

⁶ O.A. No. 1038/2018, Order dated 13.12.2018.

⁷ O.A. No. 681/2018, O.A.No. 400/2017, order dated 02.11.2018: wherein the Tribunal directed the authorities to take immediate steps to stop activities that are contributing to the pollution and prepare action plan.

has referred to the various orders of the Hon'ble Tribunal pertaining to recover compensation for the damages caused to the environment. The same is reproduced as below:

"...7) Form the above, it is clear that inspite of fact that the stone crushers have been found to be operating illegally, no compensation has been assessed and recovered for causing damage to the environment by illegally activities. As laid down by this Tribunal repeatedly⁸, the Regulatory Authorities are not only required to prohibit illegal polluting activities but they are also required to recover compensation for the damage caused apart from prosecution or other steps so as to render polluting activities to be unprofitable. Failure to do so many call for action against the regulatory authorities themselves..."

"...7) the Regulatory Authorities are not only required to prohibit illegal polluting activities but they are also required to recover compensation for the damage caused apart from prosecution or other steps so as to render polluting activities to be unprofitable. Failure to do so many call for action against the regulatory authorities themselves..."

⁸ Order dated 04.01.2019 in Threat to life arising out of coal mining in south garo hills district v. State of Meghalaya & Ors., OA No. 110(THC)/2012, Order dated 11.01.2019 in Aryavrat Foundation Vs M/s Vapi Green Enviro Ltd. & Ors., O.A. No. 95/2018, Order dated 16.01.2019 in Compliance of Municipal Solid Waste Management Rules, 2016, OA No. 606/2018, Order dated 24.01.2019 in Mayank Manohar & Paras Singh, Reporter Times of India v. Govt. of NCT of Delhi & Ors., OA No. 601/2018.



Annexure-III*Notifications under the Environment (Protection) Act, 1986*

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**OFFICERS AUTHORISED FOR TAKING COGNIZANCE OF OFFENCES
NOTIFICATION**

S.O. 394(E).-In exercise of the powers conferred under clause (a) of section 19 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby authorises the officers and authorities listed in column (2) of the Table hereto for the purpose of the said section with the jurisdiction mentioned against each of them in column (3) of that Table:

TABLE

Serial No	Officer	Jurisdiction
(1)	(2)	(3)
1.	Any Director, Joint Secretary, Adviser or Additional Secretary to the Government of India in the Department of Environment, Forests and Wildlife,	Whole of India
2.	The Chairman or Member-Secretary of the Central Pollution Control Board constituted under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974).	Whole of India
3.	The Government of the State (represented by the Secretary to the State Government incharge) of environment.	Whole of State
4.	The Chairman or Member-Secretary of the State Pollution Control Board constituted under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or a State Pollution Control Board constituted under section 5 of the Air (Prevention and Control of Pollution) Act, 1981(14 of 1981).	Whole of State
5.	Collector.	Whole of Revenue District
6.	Zonal Officers of the Central Pollution Control Board who have been delegated powers under sections 20,21,23 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and section 24 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981).	Area as laid down by the Central Board

- | | | |
|-------------------|---|---|
| 7. | Regional Officers of the State Pollution Control Board who have been delegated powers under section 20, 21 and 23 of the Water (Prevention and Control of Pollution) Act, 1974. | Area as laid down by the State Board |
| 8. | Regional Officers of the State Pollution Control Board who have been delegated powers under section 24 of the Air (Prevention and Control of Pollution) Act, 1981. | Area as laid down by the State Board |
| ¹ [9. | Any Regional/Zonal Officers or a Director in charge of a Region/Zone of the Ganga Project Directorate. | Zonal/Regional area as laid down by the Ganga Project Directorate |
| 10 | Any Deputy Secretary, Director, Joint Secretary or Additional Secretary to the Government of India in the Ganga Project Directorate. | Whole of the State in which the Ganga Action Plan is under implementation] |
| ² [11. | Joint Secretary (:Legal) in the Department of Environment., Forests and Wildlife, Ministry of Environment & Forests, New Delhi – 110003. | Whole of India] |
| ³ [12 | Chairman or Member Secretary of the Committee notified under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 in respect of Union Territories. | Whole of Union Territory] |
| ⁴ [13 | Seed Inspector(s) | Area(s) as laid down by the respective State Govts. in the Notification issued under Clause 12 of the Seeds Controller Order, 1983] |

Note : Principal Notification No. S.O. 394(E), published in Gazette No. 185, dt.16.4.1987. Nos. 9 and 10 and entries relating thereto inserted vide S.O.237(E), dt.29.3.89 published in the Gazette No. 171, dt.29.3.89. S.N. 11 and entries relating thereto inserted vide S.O.656(E), dt.24.8.1989 published in the Gazette No.519, dt. 21.8.1989

¹ Inserted by S.O.237(E), dated 29.3.1989.

² Inserted by S.O.656(E), dated 21.8.1989.

³ Inserted by Notification S.O.624(E), dated 3.9.1996.

⁴ Inserted by Notification G.S.R.587(E), dated 1.9.2006

Annexure-IV**Relevant Abstract of Environment (Protection) Act, 1986; Environment (Protection) Rules, 1986 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016****➤ Environment (Protection) Act, 1986 –****"Section 5. POWER TO GIVE DIRECTIONS**

Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions.³

Explanation--For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct--

- (a) the closure, prohibition or regulation of any industry, operation or process; or*
- (b) stoppage or regulation of the supply of electricity or water or any other service".*

"15. PENALTY FOR CONTRAVENTION OF THE PROVISIONS OF THE ACT AND THE RULES, ORDERS AND DIRECTIONS

- (1) Whoever fails to comply with or contravenes any of the provisions of this Act, or the rules made or orders or directions issued thereunder, shall, in respect of each such failure or contravention, be punishable with imprisonment for a term which may extend to five years with fine which may extend to one lakh rupees, or with both, and in case the failure or contravention continues, with additional fine which may extend to five thousand rupees for every day during which such failure or contravention continues after the conviction for the first such failure or contravention.*
- (2) If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to seven years."*

"19. COGNIZANCE OF OFFENCES

No court shall take cognizance of any offence under this Act except on a complaint made by:

- (a) the Central Government or any authority or officer authorised in this behalf by that Government,²⁰ or*
- (b) any person who has given notice of not less than sixty days, in the manner prescribed, of the alleged offence and of his intention to make a complaint, to the Central Government or the authority or officer authorised as aforesaid."*

➤ Environment (Protection) Rules, 1986**"4. Directions**

- (1) Any direction issued under section 5 shall be in writing.*
 - (2) The direction shall specify the nature of action to be taken and the time within which it shall be complied with by the person, officer or the authority to whom such direction is given.*
-

(3) (a) *The person, officer or authority to whom any direction is sought to be issued shall be served with a copy of the proposed direction and shall be given an opportunity of not less than fifteen days from the date of service of a notice to file with an officer designated in this behalf the objections, if any, to the issue of the proposed direction.*

(b) *Where the proposed direction is for the stoppage or regulation of electricity or water or any other service affecting the carrying on any industry, operation or process and is sought to be issued to an officer or an authority, a copy of the proposed direction shall also be endorsed to the occupier of the industry, operation or process, as the case may be and objections, if any, filed by the occupier with an officer designated in this behalf shall be dealt with in accordance with the procedures under sub-rules (3a) and (4) of this rule:*

Provided that no opportunity of being heard shall be given to the occupier if he had already been heard earlier and the proposed direction referred to in sub-rule (3b) above for the stoppage or regulation of electricity or water or any other service was the resultant decision of the Central Government after such earlier hearing.⁹

(4) *The Central Government shall within a period of 45 days from the date of receipt of the objections, if any or from the date up to which an opportunity is given to the person, officer or authority to file objections whichever is earlier, after considering the objections, if any, received from the person, officer or authority sought to be directed and for reasons to be recorded in writing, confirm, modify or decide not to issue the proposed direction.*

(5) *In case where the Central Government is of the opinion that in view of the likelihood of a grave injury to the environment it is not expedient to provide an opportunity to file objections against the proposed direction, it may, for reasons to be recorded in writing, issue directions without providing such an opportunity.*

(6) *Every notice or direction required to be issued under this rule shall be deemed to be duly served*

- (a) *where the person to be served is a company, if the document is addressed in the name of the company at its registered office or at its principal office or place of business and is either-*
 - (i) *sent by registered post, or*
 - (ii) *delivered at its registered office or at the principal office or place of business;*
- (b) *where the person to be served is an officer serving Government, if the document is addressed to the person and a copy thereof is endorsed to this Head of the Department and also to the Secretary to the Government, as the case may be, in-charge of the Department in which for the time being the business relating to the Department in which the officer is employed is transacted and is either-*
 - (i) *sent by registered post, or*
 - (ii) *given or tendered to him;*
- (c) *in any other case, if the document is addressed to the person to be served and-*
 - (i) *is given or tendered to him, or*
 - (ii) *if such person cannot be found, is affixed on some conspicuous part of his last known place of residence or business or is given or tendered to some adult*

member of his family or is affixed on some conspicuous part of the land or building, if any, to which it relates, or

(iii) is sent by registered post to that person;

Explanation.-For the purpose of this sub-rule,-

(a) "company" means any body corporate and includes a firm or other association of individuals;

(b) "a servant" is not a member of the family.

➤ ***Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016***

"23. Liability of occupier, importer or exporter and operator of a disposal facility.-

(1) The occupier, importer or exporter and operator of the disposal facility shall be liable for all damages caused to the environment or third party due to improper handling and management of the hazardous and other waste.

(2) The occupier and the operator of the disposal facility shall be liable to pay financial penalties as levied for any violation of the provisions under these rules by the State Pollution Control Board with the prior approval of the Central Pollution Control Board."

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BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 804/2017
(Earlier O.A No. 36/2012)

IN THE MATTER OF:-

RAJIV NARAYAN & ANR.

APPLICANT

VS.

UOI & ORS.

RESPONDENTS

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3.	ANNEXURE-B HON'BLE NGT ORDER DATED 12.04.2019	



BHARAT K. SHARMA
SCIENTIST-E
CENTRAL POLLUTION CONTROL BOARD,
PARIVESH BHAWAN, EAST ARJUN NAGAR,
DELHI-110032.

DATE: 10.05.2019
PLACE: DELHI

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Compliance Report in the matter of OA No. 804 of 2017 (Earlier OA No.36/2012) titled Rajiv Narayan & Anr. Vs Union of India & Ors. in compliance of Hon'ble National Green Tribunal Order dated 12.04.2019

(1) The Hon'ble National Green Tribunal, Principal Bench, New Delhi, vide orders dated 12.04.2019 in the matter of O.A. No. 804/2017 (Earlier O.A. No. 36/2012) with M.A. No. 1302/2018 in Interlocutory Application No. 63 in W.P. (C) No. 657/1995; Rajiv Narayan & Anr Versus Union of India & Ors. with The Research Foundation for Science, Technology And Natural Resource Policy Versus Union of India & Ors. passed the following orders:

"... 9. CPCB may determine the scale of compensation to be recovered for violation of the Rules within one month from today and furnish a report to this Tribunal by e-mail at ngt.filing@gmail.com..."

(2) In compliance with above orders of the Hon'ble Tribunal, "Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016", has been prepared by CPCB and is given at Annexure A.

(3) The above document given at Annexure A is submitted herewith to the Hon'ble Tribunal in compliance of aforesaid order of the Hon'ble Tribunal, as at paras 1 above, for passing appropriate orders.

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**Determination of Environmental
Compensation to be recovered for
violation of Hazardous and Other Wastes
(Management and Transboundary
Movement) Rules, 2016**

May 2019



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

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**Determination of Environmental Compensation to be recovered for violation of
Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016**

1. Background

Hazardous wastes are wastes which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger or is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances. Such wastes are generated from most of the industries engaged in manufacturing process and require to be managed without having impact on human health and environment.

The Govt. of India has notified Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended thereof, (herein after called as HOWM Rules, 2016) for the safe and environmentally sound management of hazardous wastes. The Rules lay down provisions for storage, packaging, transportation, recycling, utilization, pre-processing, co-processing, treatment, import, export, offering for sale, transfer or disposal, etc. of the hazardous and other wastes ("other wastes" has been defined under the said Rules).

In the matter of Original Application No. 804/2017 (Earlier O.A. No. 36/2012) With M.A. No. 1302/2018 in Interlocutory Application No. 63 in W. P. (C) No. 657/199; Rajiv Narayan & Anr Versus Union of India & Ors. With The Research Foundation for Science, Technology And Natural Resource Policy Versus Union of India & Ors., the Hon'ble National Green Tribunal, Principal Bench, New Delhi directed CPCB, vide orders dated 12/4/2019, to determine within one month the scale of compensation to be recovered for violation of the Rules. These guidelines have been prepared in compliance of the same and include methodology for calculating financial penalty and compensation for various violations of provisions of the HOWM Rules, 2016, in cases of the facilities requiring authorisation under the said Rules, 2016.

2. Salient features of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 pertaining to occupiers

The occupier of any factory or premises as defined under Rule 3(1)(21) of the Rules, *means a person who has, control over the affairs of the factory or the premises and includes in relation to any hazardous and other wastes, the person in possession of the hazardous or other waste.*"

The salient features of the HOWM Rules, 2016, applicable to the occupiers are as follow:

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Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

A. Responsibilities of the occupier

Responsibility for safe and environmentally sound management of hazardous and other wastes remains with occupier as per Rule 4 of the HOWM Rules, 2016.

The Rule also stipulates waste management hierarchy that an occupier is required to follow i.e. prevention, minimization, reuse, recycling, recovery, utilisation including co-processing as preferential steps over disposal of hazardous and other waste. Sending/ selling/ transportation/ recycling/ disposing of the hazardous wastes shall be in accordance with the provisions laid down under the Rules. Further, occupier shall take all the steps while managing hazardous and other wastes to contain contaminants and prevent accidents and limit their consequences on human beings and the environment and provide persons working in the site with appropriate training, equipment and the information necessary to ensure their safety.

B. Requirement of authorization

Handling, generation, storage, packaging, transportation, use, treatment, processing, recycling, recovery, pre-processing, co-processing, utilisation, offering for sale, transfer or disposal of the hazardous and other wastes are to be carried out by every occupier (requiring Consent to Establish or Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981) after obtaining authorization from the concerned SPCB/PCC. Further, the SPCBs/PCCs are required to grant the same after such enquiry as it considers necessary, and on being satisfied that the applicant possesses appropriate facilities as stipulated under Rule 6.

C. Storage of hazardous or other wastes

Hazardous and other wastes are not to be stored for more than ninety days in the premises and a record of such wastes should be maintained and made available for the inspection. SPCBs/PCCs can extend the said period of ninety days in cases of small generators (up to 10 Tonnes/Annum), actual users and disposal facility operators, occupiers not having access to any common treatment, storage, disposal facility in the concerned State, etc., which have also been laid down under Rule 8 of the HOWM Rules, 2018.

D. Utilisation of hazardous or other wastes

Procedures for utilisation of hazardous and other wastes as a resource or after pre-processing either for co-processing or for any other use have been laid down under Rule 9 of the HOWM Rules, 2016, and the same are to be carried

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out only after obtaining authorization from the concerned SPCB/PCC on the basis of standard operating procedures or guidelines provided by CPCB.

E. Import and Export (Transboundary Movement) of hazardous and other wastes

Import of hazardous and other wastes from any country is permitted only for recycling/reuse/recovery and utilisation including co-processing and list of wastes which are prohibited for import to the country has also been stipulated. Ministry of Environment, Forest and Climate Change (MoEF&CC) has been stipulated as the nodal Ministry to deal with the transboundary movement of the hazardous and other wastes.

Procedures for import and export of hazardous and other wastes have been prescribed such as making an application to MoEF&CC, furnishing information to custom department, etc. It also lays down conditions where Import/Export shall be deemed illegal and the role of Customs authority and SPCB/PCC in such cases. Rule 11 to Rule 14 of the HOWM Rules, 2016, lays down provisions with regard to the said import and export.

F. Treatment, storage and disposal facility for hazardous waste

State government, occupier, operator of facility or any association of occupiers are individually or jointly or severally be responsible for identification of sites for establishment of facility for treatment, storage and disposal of hazardous and other wastes in the State.

Operator of common facility or occupier of captive facility is required to set up the same as per technical guidelines issued by CPCB and obtain approval for design and layout from the SPCB/PCC. Occupier/Operator of facility is also responsible for maintaining records, safe and environmentally sound operation of facility and its closure and post-closure phases as per CPCB guidelines. SPCB/PCC is required to monitor setting up and operation of the common facility, regularly. Such provisions have been stipulated under Rule 16 of the HOWM Rules, 2016.

G. Packaging, Labelling and Transportation of hazardous waste

Procedures for packaging have been prescribed for safe handling, packaging, storage and transportation of hazardous wastes under Rule 17 of the HOWM Rules, 2016. Procedures for transportation of hazardous wastes such as in accordance with Motor Vehicles Act, 1988; providing relevant information regarding hazardous nature of wastes, emergency measures, labelling, obtaining no objection certificate from SPCB/PCC in case of transportation

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for final disposal to other State, transportation by sender or receiver, etc. have been laid down under Rule 18 of the HOWM Rules, 2016.

H. Manifest System (Movement Document) for movement of hazardous waste

The Rule 19 lays down provisions of Manifest System (Movement Document) in various colour-coded manifest (07 colour codes) prescribed as Form 10 which travels with hazardous waste from the point of generation, through transportation, to the final recycling, utilization or disposal facility, as the case may be, as well as intimation of the same to the sender, transporter, receiver and the concerned SPCB/PCC at various stages such as at the time of handing over the waste to transporter and transporter to the receiver.

I. Records and returns

Occupier/Operator is required to maintain date wise records of handling and management of hazardous wastes and send annual returns to SPCB/PCC by 30th June of every financial year about hazardous wastes generation, storage, recycling, utilisation, disposal, etc. Based on which SPCBs/PCCs are required to prepare annual inventory of the waste generated, recycled, utilized, disposed, etc. for the respective State/UT and submit the same to CPCB by 30th September of every financial year. CPCB is required to prepare consolidated report on management of hazardous wastes and submit the same to the Ministry of Environment, Forest and Climate Change before 30th December once in every year. The SPCBs/PCCs shall prepare an annual inventory of the waste generated, recycled, recovered, utilised including co-processed; re-exported, disposed, etc. and submit by 30th day of September every year along with the inventory of hazardous waste generators, actual users, and common and captive disposal facilities to CPCB every two years. CPCB shall prepare the consolidated review report on management of hazardous and other wastes and forward it to the Ministry of Environment, Forest and Climate Change along with its recommendations before 30th day of December once in every year. Provisions in these regards have been stipulated under Rule 20 of the HOWM Rules, 2016.

J. Liability of occupier, importer or exporter and operator of a disposal facility and Financial Penalty

The occupier, importer or exporter and operator of the disposal facility is liable for all damages caused to the environment or third party due to improper handling and management of hazardous and other wastes. Further, occupier and operator of a disposal facility are also liable to pay financial penalty levied

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by SPCBs/PCC for violation of provisions under these Rules with prior approval of CPCB, as laid down under Rule 23.

K. Accident reporting

Occupier/Operator of facility is required to immediately intimate the SPCB/PCC through telephone/ e-mail/ about the accident and subsequently send a report as stipulated under Rule 22 of the HOWM Rules, 2016.

3. Provisions about financial penalty and liability for damages caused to the environment under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Rule 23 of the HOWM Rules, 2016, lays down provisions with regard to liability for damages caused to the environment or third party including financial penalty for violation of provisions of the Rules and the same is reproduced as below:

"23. Liability of occupier, importer or exporter and operator of a disposal facility.-

(1) The occupier, importer or exporter and operator of the disposal facility shall be liable for all damages caused to the environment or third party due to improper handling and management of the hazardous and other waste.

(2) The occupier and the operator of the disposal facility shall be liable to pay financial penalties as levied for any violation of the provisions under these rules by the State Pollution Control Board with the prior approval of the Central Pollution Control Board."

CPCB has issued "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" for implementing the aforesaid provisions of Rule 23. The guidelines include description of liabilities, approach for valuation of the same, methodology for levying financial penalty, role of SPCB/PCC and other stakeholders etc. SPCBs/PCCs are required to follow procedures laid down under these guidelines while enforcing the aforesaid provisions of Rule 23. Copy of the said guidelines is given at **Annexure I** and is also available at CPCB website [http://cpcb.nic.in/uploads/hwmd/Guidelines Environmental Damages Costs 200116.pdf](http://cpcb.nic.in/uploads/hwmd/Guidelines_Environmental_Damages_Costs_200116.pdf)

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4. Categorization of violations and financial penalty & environmental compensation thereof

For the purpose of imposing financial penalty and environmental compensation, various violations of HOWM Rules, 2016, can be broadly classified into the following two categories:

A. Category A: Only procedural violations of HOWM Rules, 2016, which has not caused damage to environment or third party

Certain violations of HOWM Rules, 2016, are procedural violations in nature and do not cause any damage to environmental or third party.

For instance, an authorised occupier has collected, stored, packaged, transported and handed over all his hazardous or other wastes generated to authorised recyclers/utilizers in environmentally safe manner but has not sent annual return within the stipulated time period to SPCB/PCC (as required under Rule 20(2) of the HOWM Rules, 2016) or has not given prior intimation to SPCB of the States of transit in case of inter-state movement (as required under Rule 18(5) of the HOWM Rules, 2016), etc. In such cases, though there have been violations of provisions of the Rules which are procedural requirements in nature but has not caused damaged to the environment. However, financial penalty would be applicable in such cases for violations of each and every relevant provision of the HOWM Rules, 2016, as outlined under section 5 of this document.

B. Category B: violations causing environmental damage including procedural violations

These are violations of the HOWM Rules, 2016, causing environmental damages including procedural violations of the Rules. The same may further be classified into two categories as below:

(i) Category B1: Cases where mismanagement of hazardous or other waste has resulted or resulting into environmental damage and such damages liability including assessment of remediation required can be assessed in terms of cost also by applying provisions laid down under CPCB's "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty".

For example, disposal of hazardous or other waste on land or surface/ground water by an occupier, operator, transporter, importer, exporter, etc. as the case may be, has been identified by SPCB/PCC and damages to the environment and remediation work as well as cost thereof can also be assessed by SPCB/PCC in accordance with the said

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guidelines. In such cases, liability of the responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) can be fixed in terms of various required activities and amount of money required in such activities (i.e. taking up immediate Emergency Response Plan Measures such as containment of hazardous or other waste; assessment of contamination and required remediation work, and; execution of selected remediation plan) in accordance with provisions laid down under the said CPCB's "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty". The responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) is required to pay bank guarantee to SPCB/PCC and compensation liability (loss of property, loss of crop, loss of life, treatment cost towards human health impacts, etc.) as suggested in the guidelines. Copy of the said guidelines is given at **Annexure I**.

Besides, financial penalty would also be imposed as given under section 5 of this document

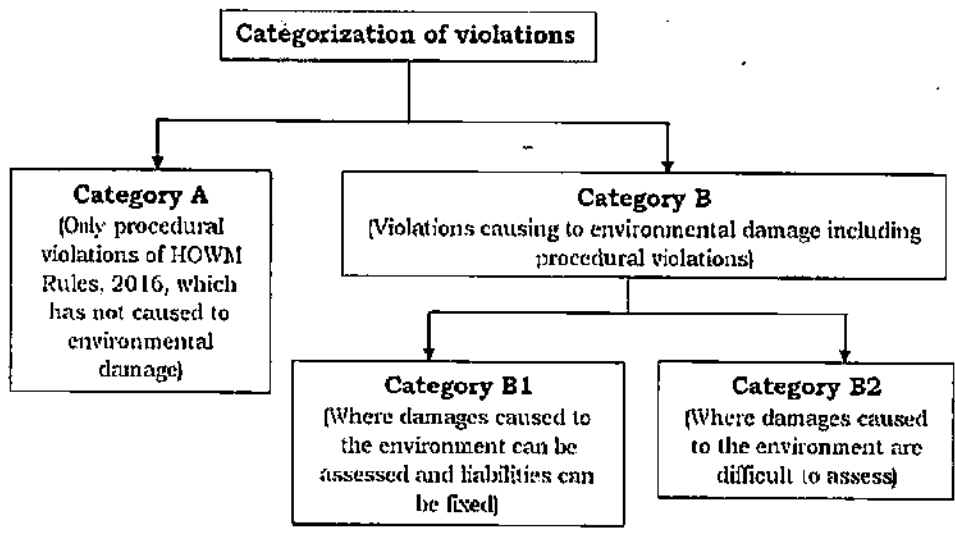


Figure 1: Categorization of violations

(ii) Category B2: Cases where mismanagement of hazardous or other waste may have caused environmental damage and such damages & remediation required including cost thereof are difficult to assess.

For example, an authorised occupier, operator, transporter, importer, exporter, etc., as the case may be, of hazardous or other wastes has illegally disposed hazardous or other waste on place which is unidentifiable or even if identified, damages to the environment and

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remediation work as well as cost thereof is difficult to be assessed by SPCB/PCC. Such difficulty may arise due to very small quantity of wastes involved in such acts, wastes disposed along with municipal solid waste, wastes may have been washed off with runoff water, etc. In such cases, it may be difficult to assess damages caused to the environment and liability of the responsible party (occupier, operator, transporter, importer, exporter, etc., as the case may be) as well as cost thereof.

Under such circumstances, methodology for imposing financial penalty and environmental compensation are given under section 5 of this document.

5. Methodology for Assessing Financial Penalty and Environmental Compensation

A. Financial Penalty

In accordance with provisions under Rule 23(2) of HOWM Rules, 2016 and section 15 of the Environment (Protection) Act, 1986, CPCB guidelines on "Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" (given at **Annexure I**) stipulate that financial penalty to be levied by the concerned SPCB/PCC for any violation may be limited to maximum of one lakh rupees per provision violated so as to ensure that levying of financial penalty remain within the brief of the Environment (Protection) Act, 1986, since the said Rules have been notified under the Environment (Protection) Act, 1986. However, non-compliance may attract violation of one or several provisions of the said Rules and thus the total financial penalty amount may be arrived by adding up number of provisions violated. Further, additional fine up to Rupees five thousand rupees for every day may also be imposed in case of failure continues by the responsible party beyond period by which remedial/corrective measures would have been implemented as suggested by the SPCB/PCC.

Therefore, financial penalty requires to be imposed and collected from the violators as maximum of Rs. 1 lakh for violation of each provision stipulated under HOWM Rules, 2016 (in addition to the environmental compensation which has been discussed in section B below). List of various violations vis-à-vis provisions of HOWM Rules, 2016 is given at **Appendix A** for ready reference.

Total numbers of violation will vary on case to case basis. For instance (indicative only), unit found generating any hazardous or other waste

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and disposing or handing over their waste to unauthorized person/places without complying any provisions of the HOWM Rules, 2016, may attract violation of 25 numbers of provisions (at S. No. 1, 2, 3, 4, 5(a), 5(b), 6 number of violations at 6(A), 6(D), 8, 31, 32, 33, 34, 39, 40, 41, 42, 49, 47 and 50 of Appendix A). There could be other several scenarios, therefore, total financial penalty amount be derived using the said approach.

B) Environmental Compensation-

For category B1 violations, steps as suggested in the above section 4(B)(i) may be followed in accordance with provisions laid down under the said CPCB's "Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty" (given at **Annexure I**). For category B2 violations, environmental compensation as suggested below may be considered.

Quantity of hazardous or other wastes, which may have caused environmental damages, may be proportionate to extent of damages thereof. Environmental compensation may, therefore, be directly correlated with the quantity of hazardous or other waste under reference. It may be difficult to assess extent of damages which may have been caused elsewhere or the damages which have been assimilated by nature. At the same time, sometimes it may not be practically feasible to know quantity of hazardous or other wastes which have been disposed illegally. For instance, a facility, particularly unauthorised unit, is operating for certain years who has never assessed or documented hazardous or other wastes generated by them and has no document to support that the same have been disposed in environmentally sound manner in compliance with the regulations existing since 1989. Further, such facility may have changed their industrial process or raw materials or products, thereby variation in quantity of the wastes generated during such period. Whereas a facility possessing authorization under the Rules is granted the authorisation specifying categories and quantity of the hazardous or other wastes based on declarations made by the unit while making application for the same.

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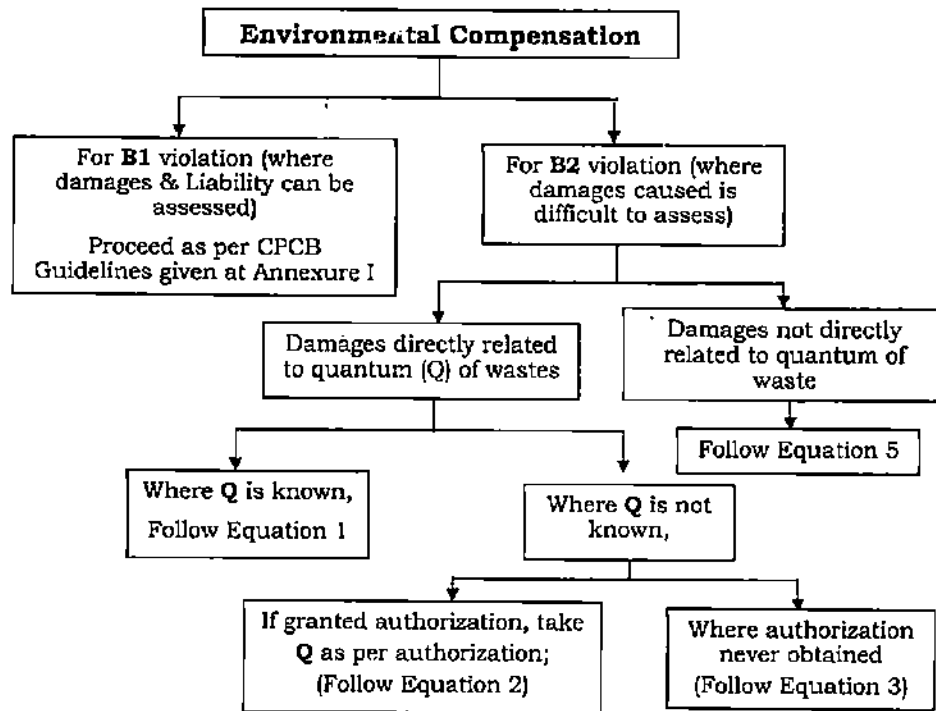


Figure 2. Approach for calculating environmental compensation in brief

Under such wide variables, the following quantity based environmental compensation calculation in Rupees may be used and be imposed on violating facility operator:

$$\text{Environmental Compensation (EC)} = Q \times \text{ERF} \times R \quad [\dots\dots\text{Equation 1}]$$

Where,

Q is noticed¹ or observed¹ quantity (in tonne) of hazardous or other wastes which have not been managed in compliance with various provisions of the Acts/Rules/Guidelines/conditions of the

¹ Noticed or observed quantity is the reported quantity or that has come to the notice of SPCB/PCC/CPCB/MOEF&CC. For instance, an authorised utilizer has authorisation to utilise 100 tonnes of certain hazardous waste/annum from which 200 tonnes of product is derived whose use has been specified in SOP issued by CPCB for industrial use only. He may have produced say 150 tonnes of product but it has come to the notice (through inspection or complain verification) of SPCB/PCC/CPCB that he has sold 10 tonnes of the product in open market and not to any industry. Here, Q would be 5 tonnes. Similarly, an authorised industrial unit authorised for 100 tonne of per annum generation of waste has not sent such waste to common TSDF or any other authorised facility nor is found stored in his premise. Here Q would be 100 tonne.

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authorisation/directions issued by CPCB/SPCB/PCC/MoEF&CC (barring procedural violations which have not caused environmental damage)

ERF = Environmental Risk Factor which is a number (as given in Table 1 below) denoting the increasing degree of risk to the environment and human health due to the scenarios as given in the Table 1.

Table 1: Environmental Risk factor (ERF)

S. No.	Violation	ERF	
		For Hazardous Waste	For Other* Waste
1.	When hazardous and other wastes is disposed at unauthorised place or handed over or sold to unauthorised party	1.5	0.3
2.	When treatment has not been imparted , as required, but only partial treatment has been given (by TSDF/Actual user)	1.0	0.2
3.	When product (derived from hazardous or other waste) is not conforming to prescribed specification or is specified for restricted use but sold in open market against (in case of actual user)	1.0	0.2
4.	Wastes found stored beyond the stipulated period (refer Rule 8 of the HOWM Rules, 2008)	0.1	0.05

**Applicable to waste generated indigenously only.*

R= Environmental Compensation factor, which may be taken as Rs. 30,000.

Note:

- (i) For facility engaged in generation/ recycling/ utilizing/ disposing of hazardous or other waste and such wastes have never been handed over to common TSDF/ actual user:

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Case I: If authorisation has been taken at any point of time, in such cases, Q may be taken as below:

$$Q = \text{Quantity in terms of tone/per year, as specified in authorisation (one year = 300 days)} \times Y$$

[.....Equation 2]

Where, Y is Number of years of operation of the facility and may be considered as given in Table 6 below. In case authorisation is given in quantity/day, then convert in tone/year by multiplying the same with 300 days.

Case II: If authorisation has not been taken at any point of time for all or any given category of hazardous or other waste being generated/utilized

When above scenario comes to the notice of SPCB/PCC/CPCB, it may be difficult to find Q as records pertaining to quantity of generation/utilization of hazardous or other waste may not be available. In such case, a generalised way of calculating Environmental Compensation (EC) in Rupees may be used as below:

$$EC \text{ (in Rupees)} = T \times S \times C \times ECF \times Y$$

[.....Equation 3]

Where,

T = Type of facility factor and may be taken as below from Table 2 below:

Table 2: Type of facility factor

Sl. No.	Scale of operation	Factor
1.	(i) Actual user procuring hazardous waste from outside their premises including importing hazardous or other waste from other country	1.5
2.	(i) Actual user engaged in utilizing/ recycling of only other wastes which are generated indigenously, and; (ii) All facility other than at Sl. No. (1) and 2(i) above	1

S = Scale of Operation factor of the facility and may be taken from Table 3 as below:

Table 3: Scale of operation of the facility

Scale of operation	Scale Factor
Large	1.5
Medium	1
Small or Micro	0.5

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ECF = Environmental Compensation Factor, which is summation of one or more ECF, as applicable, as given in Table 4 below:

Table 4: Environmental Compensation Factor

S. No	Type of operations from where waste is generated	ECF
1.	Main Process (when significant quantity of waste generation like spent acid, process sludge, spent solvent, etc.)	45,00,000
2	Pollution control equipment like ETP, APCDs, etc. such as ETP sludge, incineration bottom residues, cyclone residue, etc.	35,00,000
3	Ancillary equipment used for supporting the industrial process such as DG set, etc.	10,00,000
4	Handling of hazardous chemicals and wastes (waste packaging materials like emptied drums/bags/etc. contaminated with hazardous chemicals/wastes) and Cleaning activities like cotton/cloth waste contaminated with oil/grease/grease, hazardous chemical storage tank, etc.	20,00,000
5.	Other operations not listed above	10,00,000

C = Category of Facility factor and be taken from Table 5 as given below;

Table 5: Category of Facility Factor

Type of Facility	T Factor
Red Category	1
Orange Category	0.2
Green Category	0.05

Y = Number of years of operation of the facility and may be considered from Table 6 as below:

Table 6: Number of days of operation of the facility

S.No	Years of Operations	Factor to be taken
1.	More than 03 years	5
2.	Equal to less than 03 years	Actual duration of operation in months/12

(ii) In cases where non-compliances have been observed for known period wherein quantity (Q) of hazardous or other waste correlated to such violations is also known - e.g. in-adequate storage facility in cases of authorised facility or failure to comply with any directions of SPCB/PCC/CPCB (say directions issued w.r.t. non-compliance of incinerator emission standards and facility continued to

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operate). Amount of EC for such cases may be calculated based on Q associated with such violations period and number of days for which violation took place. Such number of days for which violation took place is the period between the day of violation observed/ due date of compliance of directions and the day of compliance verified by CPCB/ SPCB/ PCC.

EC = EC (as derived from Equation 1) + (Rs. 5000 x Nos. of days for which violation took place]

[.....Equation 4]

(iii) Apart from the above cases, there could be following violations or other similar type violations (which are not covered in the various above mentioned scenarios) in hazardous waste TSDF or actual user facility:

- a. The leachate is illegally disposed or send to unauthorised party
- b. Violations in leachate management or the leachate management facility requires upgradation as per direction of CPCB/ SPCB/ MoEF&CC
- c. Waste Water generated during the process is disposed illegally or not as per the consent conditions
- d. Effluent Treatment Plant is not meeting the norms stipulated under EPA, 1986 or CTO issued by SPCB/PCC
- e. Effluent Treatment Plant exist but requires upgradation so as to meet the conditions specified under CTO or CPCB' guidelines/SoP
- f. Treated effluent not managed as per the conditions specified under CTO or CPCB' guidelines/SoP

Under such circumstances, the environment compensation may be calculated as below:

Environmental Compensation (EC) = PI×N×R×S×LF

.....Equation 5]

Where,

PI is Pollution index (based on the CPCB guidelines on Revised Classification of Industrial Sectors under Red, Orange, Green and White Categories) and to be taken from Table 7 below:

Table 7: Classification of industrial sector

Category	Pollution Index
Red	80
Orange	50
Green	30

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N is Number of days for which violation took place is the period between the day of violation observed/ due date of compliance of directions and the day of compliance verified by CPCB/ SPCB/ PCC.

R is Environmental Compensation factor in Rupees R to be taken as 250

S = Scale of Operation of the facility and may be taken from Table 8 below;

Table 8: Scale of operation

Scale of operation	Factor
Micro or small	0.5
Medium	1.0
Large	1.5

LF could be based on population of the city/town and location of the industrial unit. For the industrial unit located within municipal boundary or up to 10 km distance from the municipal boundary of the city/town, following factors (LF) may be taken from Table 9 below:

Table 9: Location factor based on population

S. No.	Population* (million)	Location Factor#
1	Less than 1	1.0
2	1 to < 5	1.25
3	5 to <10	1.5
4	10 and above	2.0

*population of the city/town as per the latest Census of India

LF will be 1.0 in case unit is located > 10km from municipal boundary

For critically populated areas/Ecologically sensitive areas, the scope of LF may be examined further.

C. Deterrent Factor

(a) In case of non-timely submission of Environmental Compensation and Financial Penalty

The Environmental Compensation Charges and Financial Penalty shall be deposited by the violating facility within the stipulated time period specified under directions issued by CPCB/SPCB/PCC. In case, such facility does not submit the same within the stipulated time frame the amount will be exponentially increased. The details of exponential increase are given below:

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Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016**

**Table 10: Environmental Compensation Charges and Financial
Penalty w.r.t. non-timely submission**

Sl. No.	Amount Deposition time period	Environmental Compensation and Financial Penalty Amount
1.	Within 15 days from the stipulated time period as directed by CPCB/SPCB/PCC	Original amount with interest @ 12% per annum for number of days delayed after the stipulated date of amount deposition
2.	After 15 days but within 03 months after the stipulated time period as directed by CPCB/SPCB/PCC	Two times the original amount with interest @ 12% per annum for number of days delayed after 15 days of the stipulated date of
3.	After 03 months and up to 06 months from the stipulated time period	Four times the original amount with interest @ 12% per annum for number of days delayed after three months of the stipulated date of amount deposition
4.	After 06 month	Closure of unit/facility and court

(b) In case of repeated violations

In case the violators found repeatedly non-complying with previous violations or new violations, the amount of Environmental Compensation and Financial Penalty be exponentially increased. The details of exponential increase in such cases are given below:

**Table 11: Environmental Compensation Charges in case of
repeated violation**

Sl. No.	Time Period for compliance	Environmental Compensation and Financial Penalty Amount
1.	First time violation	Original amount
2.	Second time violation	Two times the original amount
3.	Third time violation	Four times the original amount
4.	Fourth time violation	Closer of unit and Court case

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HARYANA STATE POLLUTION CONTROL BOARD
C-11, SECTOR-6, PANCHKULA

Website - www.hspcb.gov.in E-Mail : hspcb-solidwaste@gmail.com

Ph:0172-2577870-873

NO.HSPCB/WMC/SWM/2020/ 881

Dated: 20/02/2020

To

Senior Environment Engineer,
Hazardous Waste Management Cell,
HSPCB

Sub: Information desired by CPCB for forthcoming appearance of Worthy Chief Secretary before Hon'ble NGT and information on Gap analysis observed by the CPCB in status report submitted to Hon'ble NGT in matter of OA No. 606/2018 titled as "Compliance of Solid Waste Management Rules."

Kindly refer to this office letter No. 8105 dated 07.02.2020 on the subject noted above.

In this connection, you were requested vide above referred letter to submit the information suggestive format regarding control of river pollution in State supplied by CPCB for the forthcoming appearance of Chief Secretary before Hon'ble NGT and information on gap analysis report submitted by CPCB in Hon'ble NGT in matter of OA No. 606/2018 titled as "Compliance of Solid Waste Management Rules" within 07 days, but no reply has been received till date.

The detail of gap analysis observed by the CPCB with respect to Hazardous Waste Management & E-Waste Management with reference to the State of Haryana is as under:

A. Hazardous Waste Management Rules

1. CPCB has given the remark i.e., relevant information not submitted for point no. 1 (at page no. 54) and 4 (at page no. 55) in status report

B. E-waste Management Rules

1. CPCB has given the remark i.e., no information provided by state of Haryana for point no. 3 (at page no. 47) in status report.

In view of the above, it is requested to provide the information in suggestive formats enclosed herewith for the forthcoming appearance of Chief Secretary before Hon'ble NGT and information's on gaps observed by CPCB in its status reports submitted to Hon'ble NGT in the matter of OA No. 606/2018 titled as "Compliance of Solid Waste Management Rules" immediately, so that the report could be submitted to the Chief Secretary, Govt. of Haryana.

DA/As above.

Senior Environmental Engineer
For HSPCB

FTMO-
12014

July
25/02

AB/R
25/02

Put up
immediately
written
all relevant
information

CLERK

(10) SC4

154

(688)

Format for State wise review of compliance to Hon'ble NGT Directions for control of Air Pollution in Non-attainment cities

1. Name of the State/UT : _____
2. Number of cities identified as Non-attainment cities : _____
3. Detail on Air quality monitoring infrastructure with regard to Manual, real time station: _____
4. Whether city action plans prepared for all Non-attainment Cities : Yes/No
5. Whether the assessment and installation of the requisite number of monitoring stations in the non-attainment cities completed : Yes/No
if yes , please provide details in table 1, if not time for completion?
6. Have polluting sources identified : Yes/No
(Source Apportionment/Emission Inventory) If yes, please provide details if not, has any Source Apportionment/Emission Inventory initiated in the city? (Table 2)
7. Does short term actions to control dust emissions as per city action plan, regularly implemented & monitored? : Yes/No
If yes please provide details
8. Does short term actions to control emissions from waste burning and dumping as per city action plan, regularly implemented & monitored? : Yes/No
If yes, please provide details
9. Micro level planning for each of actions in the city plan framed? : Yes/No
If yes, please provide details in Table 3
10. Implementation status of city plans in % Please provided details in Table 4
11. Status of Emergency Response System developed including GRAP : Yes/No
If yes, please provide Details
12. Public Grievance Redressal Portal status : Yes/No
If yes, complain redressal status, so far
13. Progress in line with the timelines mentioned in the approved plan : Yes/No
14. Constitution of District level Committee covering each Non-Attainment city : Yes/No

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Table 1: Status of Monitoring Station

Name of the State	City Name (with population)	CAAQMS		Manual Stations		Remark
		Existing Stations	Required Stations	Existing Stations	Required Stations	
Total						

Table 2: Status of Source Apportionment (SA)/Emission Inventory (EI)

Name of the State	City Name	Status of SA/EI	Study conducted by	Year	Expected time for completion of the study	Remark

Table 3: Status of Micro-level planning of city action plan

City Name	Source	Action Point	Micro-level planning	Time Target	Implementation agencies	Target Reduction

Table 4: Format for progress of implementation of action plan

S.No	Action Point	Unit of Measurement of Progress	Implementation status		Action Completion Date as per city plan	Deviation from targeted timelines, if any	Expected date of completion	Total Cost	Remarks
			% Completed	Details					
Implementation period : Immediate action – 6 months									
Implementation period : 01 to 03 years									
Implementation period : 03 to 05 years									
Implementation period Above 05 years									

*The highlighted portions will be as per the approved city action plans.

• Date of direction for ground implementation of action plan (Zero Date)

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Format for State wise review of compliance to Hon'ble NGT Directions for Control of River Pollution

1. Name of State/ UT
2. No of identified Polluted River Stretches P-I to P-V
3. Water Quality

A. Polluted River Stretch (Range in Year 2019)

BOD (mg/l)	Min	
	Max	
Fecal Coliform (MPN/100ml)	Min	
	Max	

In absence of FC, TC may be given

- B. Has the State identified all pollution contributing drains : Yes/ No
If yes, please provide details in table 1

4. Action plan addressing the gaps
 - A. Gap assessment in sewage treatment completed : Yes/ No
If yes, please provide details in table 2

 - B. Gap assessment for industrial pollution completed : Yes/ No
If yes, please provide details in table 3

 - C. Solid waste management addressed : Yes/ No
If yes, please provide details in table 4

 - D. Other Wastes : Yes/ No
If yes, please provide details in table 5

5. Measures taken for
 - A. Control of Illegal Ground Water Abstraction : Yes/ No
 - B. River catchment/ Basin Management : Yes/ No
 - C. Flood Plain Zone Protection : Yes/ No
 - D. E Flow maintenance & Watershed Management : Yes/ No
 - E. Ground water recharge/ Rain water harvesting : Yes/ No
 - F. Setting up of Biodiversity Parks, Greenery/ plantation along the banks of river stretch : Yes/ No
 - G. Removal of encroachments : Yes/ No

6. Progress in line with target dates of March 2021 : Yes/ No

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Table 1: Details of drains contributing to pollution in polluted river stretch

River Stretch:			Priority:	
Drain	Type Domestic/ industrial/ mixed	Quantity (MLD)	BOD (mg/l)	FC (MPN/100ml)
1				
2				
3				

In absence of FC, TC may be given

Table 2: Details for sewage management (in MLD)

Generated	Processed/ Treated	Gap

Table 3: Details for industrial effluent management (in MLD)

Generated	Processed/ Treated	Gap

Table 4: Details for MSW (in TPD)

Generated	Processed/ Treated	Gap

Table 5: Details for other wastes (in TPD)

Type of Waste	Generated	Processed/ Treated	Gap
BMW			
HW			
Plastic Waste			
E Waste			
C& D waste			

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Sl. No		Issue	Remarks
1	a	What is the quantity of MSW generated in the state	
2	a	What is the quantity of MSW processed in the state	
3	a	What is the quantity of MSW sent to the landfills	
4	a	Is door-to-door collection /segregation & transportation of segregated waste being done in the entire State	
	b	If not, please provide percentage coverage of the State as per "4a" above	
	c	If not, please provide timeframe for coverage of entire state as per "4a" above	
	d	If not, has destination of disposal for mixed waste been identified for areas in which segregation of waste is not being done	
5	a	Is all waste generated in the state processed in the waste processing facilities	
	b	If not, please provide percentage coverage of the State as per "5a" above	
	c	If not, please provide timeframe for above for coverage of entire state for "5a" above	
6	a	Have all dumpsites in the state been cleared	
	b	If not, please indicate the number of dumpsites in which work has commenced and percentage of waste cleared	
	c	If not, please provide timeframe for clearing of all dumpsites	
7	a	Have rates for procurement of services/equipment (to do away with the tendering process) required for solid waste management been standardized	
	b	If not, please provide timeframe for standardizing of the same	
5	a	What action has been initiated against the defaulting officers/ organization (financial penalty, Entry in ACR,etc) responsible for Solid Waste Management	
	b	If yes, please provide the details	
	c	If, no ,please provide the details of action proposed to be taken against the defaulting officers/organizations (financial penalty, Entry in ACR,EC, Prosecution etc)	
	a	Has environmental management cell been created in the state for monitoring key environmental issues	

Sl.No	Issue	Remarks
1	a	Quantity of Sewage generated in the State
2	a	Quantity of Sewage treated in the State
3	a	Existing Coverage of Sewerage Network
4	a	Has Sewage generation (town / City wise) been estimated for present and future population? Please provide details of the
5	a	Has adequate treatment capacity been developed for treatment
	b	If not, then what is present percentage of sewage being
	c	If not, please provide the the timeframe by which all sewage generated in the State shall be treated
6	a	Please provide details of STPs (Town/ City Wise) along with details on compliance status and treatment capacity
7	a	Is entire sewage generated from each town being linked with sewerage network in the state?
	b	If not, then what is the present current percentage of sewage being collected through the existing sewerage network?
	c	If not, then please provide the the timeframe by which all sewage generated in the State shall be collected through sewerage
8	a	Have all drains carrying waste water in each town / city been
	b	Provide details on the pollution load due to these drains
	c	Has in-situ treatment of wastewater being carried out in all such drains for reduction of pollution load?
	d	If not, then please indicate the number of drains in which in-situ treatment of waste water has commenced
	e	If not, then please provide the the timeframe within which in-situ treatment of wastewater shall be carried out in all such drains for reduction of pollution load
6	a	Have all bulk users for reuse of wastewater been identified ?
	b	Is all treated wastewater from the STPs being reused for different
	c	If not, then what is current percentage of wastewater being
	d	If not, then please provide the the timeframe within which all treated wastewater from STP shall be reused for different

BEFORE THE NATIONAL GREEN TRIBUNAL
 PRINCIPAL BENCH NEW DELHI
 O.A. No. 606/2018

8/11

IN THE MATTER OF:

COMPLIANCE OF MUNICIPAL SOLID WASTE MANAGEMENT RULES, 2016.

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D
DIVYA SINHA
SCIENTIST - B

CENTRAL POLLUTION CONTROL BOARD
PARIVESH BHAWAN, EAST ARJUN NAGAR
DELHI-110032

DATE: 27.12.2019
PLACE: DELHI

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**STATUS REPORT ON ACTION PLAN
ON 14 THEMATIC AREAS
IN
O.A NO. 606 OF 2018;
TITLED COMPLIANCE OF MUNICIPAL
SOLID WASTE MANAGEMENT RULES,
2016.**



(November, 2019)

CENTRAL POLLUTION CONTROL BOARD
Ministry of Environment, Forest and Climate Change, Govt. of
India Parivesh Bhawan, East Arjun Nagar
Delhi-110032

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CENTRAL POLLUTION CONTROL BOARD, DELHI

December 27, 2019

STATUS REPORT ON ACTION PLAN ON 14 THEMATIC AREAS

REFERENCE: O.A NO. 606 OF 2018; TITLED COMPLIANCE OF MUNICIPAL SOLID WASTE MANAGEMENT RULES, 2016.

1.0 BACKGROUND

Hon'ble National Green Tribunal in the matter of O.A No. 606 of 2018; titled Compliance of Municipal Solid Waste Management Rules, 2016 vide order dated 12.09.2019 directed as follows:

"The information with regard to above thematic areas needs to be submitted to CPCB by the Chief Secretaries of all the States and Union Territories in terms of following:

- Current status
- Desirable level of compliance in terms of statutes.
- Gap between current status and desired levels.
- Proposal of attending the gap with time lines.
- Name and designation of designated officer for ensuring compliance to provisions under statute.

CPCB is permitted to file revised updated reports on the subject after collecting information from concerned States/UTs by 15.11.2019"

2.0 ACTION TAKEN BY CPCB

In compliance to direction issued, CPCB has taken following actions:

- (i) CPCB formulated templates for 06 thematic areas to facilitate submission of information
- a. Municipal Solid Waste
 - b. E-Waste
 - c. Bio-Medical Waste
 - d. Noise Pollution
 - e. Hazardous Waste
 - f. Sewage Treatment Plant

Copy of the templates is enclosed at Annexure-I.

- (ii) CPCB communicated the directions of Hon'ble NGT to all Chief Secretaries of all States / Union Territories for timely submission of information vide letter dated 27.09.2019. Copy of letter is enclosed at Annexure-II. The templates prepared by CPCB were forwarded to all States/UTs

- (iii) As per Hon'ble NGT Directions, information has been received from 24 States /UTs (Assam, Andhra Pradesh, Andaman and Nicobar Island,

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Chandigarh, Daman and Diu, Delhi, Chhattisgarh, Gujarat, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Dadar and Nagar Haveli, Lakshadweep, Puducherry, Goa & Karnataka,) and information from remaining 11 States / UTs (Arunachal Pradesh, Bihar, Jammu & Kashmir, Jharkhand Meghalaya, Nagaland, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal) had not been received till 18.11.2019. Reports from Bihar, Jammu & Kashmir, Himachal Pradesh, Meghalaya and Telangana have been received late and the same have not been analysed by CPCB.

- (iv) Nine States/UTs have provided information on all 14 thematic areas, their names are mentioned at Annexure-III.
- (v) CPCB again informed the concerned States/UTs to provide the information for all thematic areas vide email dated 14.11.2019 (Annexure-IV).

3.0 GAP ANALYSIS :-

Information received from above mentioned 24 States/UTs has been analysed and CPCB's observations on the same have been detailed in the subsequent sections

3.1 Municipal Solid Waste Management

3.1.1 Information Status

Information for compliance of Solid Waste Management has been received from 22 States/UTs (Andhra Pradesh, Assam, Andaman and Nicobar Island, Chandigarh, Goa, Gujarat*, Chhattisgarh, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Daman and Diu, Delhi, Lakshadweep, Puducherry & Rajasthan) State/UTs wise details as per the format provided by CPCB is enclosed at Annexure-V.

*Gujarat has submitted report in compliance of Order dated 09th April, 2019 in OA 606/2018.

3.1.2 OBSERVATIONS:

The States/UTs were required to provide information against 60 parameters as per CPCB format. However, few States /UTs have not provided information against all these sixty parameters, the details are given in the table below:

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
1	Percentage of Districts in which Special Task Force (Four members nominated by DM, SP, RO SPCB & District Legal Services Authority) for Awareness has been created.	<u>Information provided by 19 States/UTs</u> (Assam, Chhattisgarh, Gujarat, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa & Madhya Pradesh,
2	Percentage of ULBs which have framed byelaws incorporating provisions of SWM Rules (15e)?	<u>Information provided by 20 States/UTs</u> (Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh & Madhya Pradesh
3	Percentage of operators of Solid Waste processing facility who have submitted Annual report.	<u>Information provided by 19 States/UTs</u> (Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Madhya Pradesh & Rajasthan

New

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
4	Percentage of ULBs which have appointed nodal officer/committee.	<u>Information provided by 18 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Lakshadweep & Puducherry)	Daman & Diu, Delhi, Gujarat & Madhya Pradesh
5	Percentage of ULBs which have submitted Annual Report in Form IV to Secy. UD and SPCB.	<u>Information provided by 19 States/UTs</u> (Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep, & Puducherry)	Andhra Pradesh, Gujarat & Madhya Pradesh.
6	Percentage of ULBs in which Sweeping is carried out twice or more in public areas	<u>Information provided by 20 States/UTs</u> (Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh & Madhya Pradesh
7	Percentage of ULBs in which Sweeping is carried out once or more in residential areas	<u>Information provided by 19 States/UTs</u> (Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil	Andhra Pradesh, Gujarat & Madhya Pradesh

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
8	Percentage of ULBs in which user fees has been incorporated in Byelaws	<u>Information provided by 17 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Haryana, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Goa, Gujarat, Kerala, Madhya Pradesh & Rajasthan
9	Percentage of ULBs having Door to door collection system	<u>Information provided by 22 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
10	Percentage of ULBs transporting wastes in covered vehicles	<u>Information provided by 20 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Gujarat & Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
11	Percentage of ULBs having GPS installed on garbage collection vans (> 5 lakh population)	<u>Information provided by 18 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andaman and Nicobar Island, Goa, Gujarat & Rajasthan
12	Percentage of ULBs using Compartmentalized vehicles for collection of different fractions of waste	<u>Information provided by 16 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi & Puducherry)	Andhra Pradesh, Goa, Gujarat, Lakshadweep, Madhya Pradesh & Rajasthan
13	Percentage of ULBs having Computerized weighing machine for weighing solid waste	<u>Information provided by 17 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Goa, Gujarat, Haryana , Madhya Pradesh & Rajasthan
14	Percentage of ULBs having tipping fee based on quantum of waste generated/ processed	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		and Diu, Delhi, Lakshadweep & Puducherry	
15	Percentage of ULBs having twin-bin system installed at public places.	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
16	Percentage of ULBs having transfer stations instead of secondary storage bins	<u>Information provided by 18 States/UTs</u> (Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	Andhra Pradesh, Gujarat, Madhya Pradesh & Rajasthan
17	Percentage of ULBs in which PPE has been provided to workers	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
18	Percentage of ULBs in which Capacity building of local bodies has been taken up by State Dept. of UD	<u>Information provided by 18 States/UTs</u> (Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura,	Andhra Pradesh, Gujarat, Madhya Pradesh & Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	
19	Percentage of ULBs in which workers have been educated on Door to door collection of waste	<u>Information provided by 17 states</u> (Andhra Pradesh, Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	Goa, Gujarat, Madhya Pradesh, Mizoram & Rajasthan
20	Percentage of ULBs in which Training has been imparted to waste pickers/waste collectors	<u>Information provided by 18 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	Goa, Gujarat, Madhya Pradesh & Rajasthan
21	Percentage of ULBs having separate Street sweepings collection and disposal system	<u>Information provided by 18 States/UTs</u> (Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry	Andhra Pradesh, Gujarat, Madhya Pradesh & Mizoram
22	Percentage of ULBs in which Segregation of waste at	<u>Information provided by 18 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa,	Gujarat, Madhya Pradesh, Mizoram & Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
	household level/source has been implemented	Haryana, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry displayed on ULB's website	
23	Percentage of ULBs in which waste Segregation by street vendors has been implemented.	<u>Information provided by 14 States/UTs</u> (Assam, Chhattisgarh, Kerala, Maharashtra, Manipur, Orissa, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Haryana Madhya Pradesh, Mizoram, Punjab & Rajasthan.
24	Percentage of ULBs in which Segregation of waste by RWAs, market associations, gated communities, institutions (> 5000 sqm area), hotels, restaurants etc has been implemented	<u>Information provided by 19 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Gujarat, Mizoram & Rajasthan
25	Percentage of ULBs in which Segregation of Waste at source for inerts and C&D Waste has been implemented	<u>Information provided by 20 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Daman and Diu,	Chandigarh & Rajasthan

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Status of Information Provided by States/UTs (SWM)

S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Delhi, Lakshadweep & Puducherry)	
26	Percentage of ULBs in which informal sector of waste pickers, waste collectors and recycling industry in reducing waste in state policy has been engaged	<u>Information provided by 18 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat & Rajasthan
27	Percentage of ULBs in which Space for SW segregation, storage and processing of solid waste for 200 units / 5000 square has been allocated	<u>Information provided by 18 States/UTs</u> (Assam, Chhattisgarh, Goa, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Gujarat, Haryana & Madhya Pradesh
28	Percentage of ULBs in which Scheme for registration of waste pickers and dealers has been implemented	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi & Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
29	Percentage of ULBs in which land has been identified for setting up waste processing facilities (22 (1))	<u>Information provided by 21 States/UTs</u> (Andhra Pradesh, Assam, Goa, Gujrat, Chhattisgarh, Haryana, Kerala, Madhya Pradesh,	Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
30	Percentage of ULBs in which non-biodegradable waste and inert waste are used for filling up of construction areas and construction of roads	<u>Information provided by 14 States/UTs</u> (Assam, Chhattisgarh, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Chandigarh, Goa, Gujarat, <u>Haryana</u> , Madhya Pradesh, Mizoram & Rajasthan,
31	Percentage of ULBs in which Usage of RDF by Cement plants /Power plants/Industries located within 200 km of such facility has been implemented	<u>Information provided by 18 States/UTs</u> (Assam, Chhattisgarh, Goa, <u>Haryana</u> , Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Gujarat, Madhya Pradesh & Rajasthan
32	Percentage of ULBs in which home /decentralized and centralized composting has been initiated	<u>Information provided by 19 States/UTs</u> (Assam, Chhattisgarh, Goa, Gujarat, <u>Haryana</u> , Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman	Andhra Pradesh, Madhya Pradesh & Rajasthan

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Status of Information Provided by States/UTs (SWM)				
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have Submitted information or submitted partial information	of which not or partial
		and Diu, Delhi, Lakshadweep & Puducherry)		
33	Percentage of ULBs in which Storage of Horticulture waste on generators own premises has been initiated	<u>Information provided by 17 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Goa, Gujarat, Madhya Pradesh, Mizoram & Rajasthan	
34	Percentage ULBs in which setting up of solid waste and processing facilities has been incorporated in Master Plan of the city	<u>Information provided by 16 states</u> (Assam, Chhattisgarh, Goa, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Gujarat, Haryana , Madhya Pradesh, Punjab & Rajasthan	
35	Percentage of ULBs in which 5% or 5 sheds in SEZ, IE, Industrial park have been allocated for recovery and recycling facility	<u>Information provided by 15 States/UTs</u> (Assam, Chhattisgarh, Goa, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Chandigarh, Gujarat, Haryana , Madhya Pradesh, Mizoram & Rajasthan	
36	Percentage of ULBs in which material recovery facilities for sorting of recyclables by informal sector have been set up	<u>Information provided by 21 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Goa, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura,	Rajasthan	

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Status of Information Provided by States/UTs. (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
37	Percentage of ULBs in which Waste from vegetable, flower, fish, meat, poultry market is processed in biomethanation plant	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Madhya Pradesh, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Mizoram, Rajasthan
38	Percentage of ULBs in which use of Chemical fertilizers in parks has been phased out	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
39	Percentage Number of Waste processing based on Waste to Energy/RDF	<u>Information provided by 20 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala, Maharashtra, Madhya Pradesh, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andaman and Nicobar Island & Rajasthan
40	Percentage of Waste processing units based on Composting/Biomethanation	<u>Information provided by 21 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Kerala,	Mizoram

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Maharashtra, Madhya Pradesh, Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
41	Percentage of ULBs in which Biodegradable waste is sent to compost/biomethanation plant	<u>Information provided by 19 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Madhya Pradesh, Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi & Puducherry)	Lakshadweep, Gujarat & Mizoram
42	Percentage of ULBs in which non-biodegradable wastes is sent to MRF/ Secondary storage facility	<u>Information provided by 20 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Gujarat & Rajasthan
43	Percentage of W to E plants having Facilities for segregation of waste prior to processing of waste in W to E Plants	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Goa, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Chandigarh, Daman and Diu,	Andaman and Nicobar Island, Andhra Pradesh, Gujarat, Madhya Pradesh & Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Delhi, Lakshadweep & Puducherry)	
44	Percentage increase in number of Authorizations granted	<u>Information provided by 16 States/UTs</u> (Assam, Chhattisgarh, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, <u>Haryana</u> , Madhya Pradesh & Rajasthan
45	Percentage of ULBs displaying data related to functioning of plant and its adherence to prescribed parameters displayed on ULB's website	<u>Information provided by 13 States/UTs</u> (Assam, Chhattisgarh, <u>Haryana</u> , Kerala, Maharashtra, Manipur, Mizoram, Tripura, Andaman and Nicobar Island, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Chandigarh, Goa, Gujarat, Madhya Pradesh, Orissa, Punjab, Tamil Nadu & Rajasthan
46	Percentage of ULBs in which land has been identified for landfill site (11 f)	<u>Information provided by 20 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, <u>Haryana</u> , Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Gujarat & Rajasthan
47	Percentage of ULBs in which land has been allocated for landfill site (Rule 12a)	<u>Information provided by 19 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, <u>Haryana</u> , Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab,	Gujarat, Kerala & Rajasthan

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
48	Percentage of ULBs having own /regional operational Landfill sites	<u>Information provided by 16 States/UTs</u> (Andhra Pradesh, Assam, Chhattisgarh, Goa, Haryana, Maharashtra, Manipur, Mizoram, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi & Puducherry)	Gujarat, Kerala, Lakshadweep, Madhya Pradesh, Orissa & Rajasthan
49	Percentage of landfill sites in which Provision of Green Belt /Buffer Zone around landfill site has been made	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
50	Percentage of Landfill sites for which Buffer zone has been notified	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
51	Percentage of landfill sites in which efforts have been taken	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana,	Andhra Pradesh, Goa, Gujarat,

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
	to prevent/manage generation of leachate	Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Madhya Pradesh & Rajasthan
52	Percentage of landfill sites in which efforts have been taken to prevent /manage generation of methane gas	<u>Information provided by 17 States/UTs (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)</u>	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh, Rajasthan
53	Percentage of landfill/dumpsites in which CCTV has been installed	<u>Information provided by 16 States/UTs (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)</u>	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh, Mizoram, Rajasthan
54	Percentage of ULBs having Decentralized waste disposal facilities	<u>Information provided by 18 States/UTs (Assam, Chhattisgarh, Haryana, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)</u>	Andhra Pradesh, Goa, Gujarat, Rajasthan

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Status of Information Provided by States/UTs (SWM)

S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
55	Percentage of landfill sites in which landfilling or dumping of mixed waste is continued.	Information provided by 17 States/UTs (Andhra Pradesh, Assam, Chhattisgarh, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Goa, Gujarat, Haryana Madhya Pradesh, Rajasthan
56	Percentage of landfill sites in which only non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive waste is disposed	Information provided by 16 States (Assam, Chhattisgarh, Haryana , Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh, Mizoram & Rajasthan
57	Percentage of ULBs in which Investigation of old /existing dumpsites for bio-mining has been initiated	Information provided by 21 states (Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana , Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi & Puducherry)	Lakshadweep
58	Percentage of ULBs which have framed Byelaws incorporating User fees and spot fines for littering	Information provided by 20 states (Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Haryana , Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tamil Nadu,	Goa & Madhya Pradesh

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Status of Information Provided by States/UTs (SWM)			
S.No.	Items	Name of States/UTs which have submitted information	Name of States/UTs which have not Submitted information or submitted partial information
		Tripura, Andaman and Nicobar Island, Chandigarh, Daman and Diu, Delhi, Lakshadweep & Puducherry)	
59	Percentage of ULBs having Citizen Grievance redressal mechanism	<u>Information provided by 17 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh; Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh & Rajasthan
60	Percentage of ULBs uploading Month wise details of SWM targets on MIS	<u>Information provided by 16 States/UTs</u> (Assam, Chhattisgarh, Haryana, Kerala, Maharashtra, Manipur, Orissa, Punjab, Tamil Nadu, Tripura, Andaman and Nicobar Island, Chandigarh; Daman and Diu, Delhi, Lakshadweep & Puducherry)	Andhra Pradesh, Goa, Gujarat, Madhya Pradesh, Mizoram & Rajasthan

The information provided by the States/UTs has been further analysed for nine key parameters of Solid Waste parameters. State wise performance of the States/UTs against these nine key parameters is given in table below:

Performance of States/UTs (SWM)													
S. No.	Item	Lakshadweep	Chandigarh	Daman & Diu	Delhi	Tripura	Assam	Odissha	Kerala	Maharashtra	Tamil Nadu	Puducherry	Chandigarh
1	Percentage of ULBs which have submitted Annual Report in Form IV to Secy, UD and SPCB	G	G	G	G	G	G	G	G	G	G	G	G
2	Percentage of ULBs in which user fees has been incorporated in Byelaws	P	G	G	G	G	AV	G	No info	G	G	G	G
3	Percentage of ULBs having Door to door collection system	P	G	G	AV	G	AV	G	G	G	G	G	G
4	Percentage of ULBs using Compartmentalized vehicles for collection of different fractions of waste	No Info	G	G	P	P	P	P	P	G	G	P	G
G- Good (>75%), Av-Average(>50% upto 75%), P-Poor (<50%), No Info- No information/Partial information													

Performance of States/UTs (SWM)													
S. No.	Item	Laksha dweep	Chandi garh	Daman & Diu	Del hi	Trip ura	Assa m	Odis ha	Kera la	Maharas htra	Tamil Nadu	Puduch erry	Chandi garh
5	Percentage of ULBs in which Segregation of waste at household level/source has been implemented	P	G	G	P	G	P	G	G	G	No Info	P	G
6	Percentage of ULBs in which material recovery facilities for sorting of recyclables by informal sector have been set up.	G	G	G	P	P	AV	AV	AV	G	P	G	P
7	Percentage of ULBs in which Biodegradable waste is sent to compost/biomethan ation plant	No Info	G	G	P	P	P	AV	G	G	G	G	G
8	Percentage of ULBs having own /regional operational Landfill sites	No Info	G	G	P	G	P	No Info	No info	AV	G	G	G
G- Good (>75 %), Av-Average(>50% upto 75%), P-Poor (<50%), No Info-No information/Partial information													

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Performance of States/UTs (SWM)													
S. No.	Item	Lakshadweep	Chandigarh	Daman & Diu	Delhi	Tripura	Assam	Odisha	Kerala	Maharashtra	Tamil Nadu	Puducherry	Chandigarh
9	Percentage of ULBs in which Investigation of old/existing dumpsites for bio-mining has been initiated	No Info	G	G	G	P	P	G	P	AV	AV	G	G
G- Good (>75%), Av-Average(>50% upto 75%), P-Poor (<50%), No Info- No information/Partial information													

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Performance of States/UTs (SWM)

S. No.	Item	Andaman & Nicobar	Andhra Pradesh	Goa	Madhya Pradesh	Gujarat	Mizoram	Haryana	Manipur	Punjab	Rajasthan
1	Percentage of ULBs which have submitted Annual Report in Form IV to Secy, UD and SPCB	G	No Info	G	No Info	No Info	G	G	AV	G	G
2	Percentage of ULBs in which user fees has been incorporated in Byelaws	G	AV	No Info	No Info	No Info	G	G	P	AV	No Info
3	Percentage of ULBs having Door to door collection system	G	G	G	G	G	G	G	G	G	G
4	Percentage of ULBs using Compartmentalized vehicles for collection of different fractions of waste	AV	No Info	No Info	No Info	No Info	G	<u>No Info</u>	AV	G	No Info
G- Good (>75%), Av-Average (>50% upto 75%), P-Poor (<50%), No Info- No information/Partial information											

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5	Percentage of ULBs in which Segregation of waste at household level/source has been implemented	No Info	G	G	No Info	G	Partial Info	G	G	G	No Info
6	Percentage of ULBs in which material recovery facilities for sorting of recyclables by informal sector have been set up	G	AV	G	AV	G	G	P	P	AV	No Info
7	Percentage of ULBs in which Biodegradable waste is sent to compost/biomethanation plant	AV	AV	G	AV	No Info	No Info	P	P	G	Av
8	Percentage of ULBs having own /regional operational Landfill sites	G	P	Partial Info	G	no Info	Partial Info	P	AV	P	No Info
9	Percentage of ULBs in which Investigation of old /existing dumpsites for bio-mining has been initiated	G	P	G	AV	Partial info	Partial Info	P	P	P	p

G- Good (>75 %), Av-Average(>50% upto 75%), P-Poor (<50%), No Info- No information/Partial information

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Based on the above assessment, overall performance of the States/UTs against these nine parameters is given in the table below

OVERALL PERFORMANCE OF STATES/UTs (SWM)

S.No.	Important Items	Number of States in the Specified Category			
		Good	Average	Poor	Submitted No /Partial Information
1	Percentage of ULBs which have submitted Annual Report in Form IV to Secy, UD and SPCB	18	1	0	3
2	Percentage of ULBs in which user fees has been incorporated in Byelaws	12	3	2	5
3	Percentage of ULBs having Door to door collection system	19	2	1	0
4	Percentage of ULBs using Compartmentalized vehicles for collection of different fractions of waste	7	2	6	7
5	Percentage of ULBs in which Segregation of waste at household level/source has been implemented	13	0	4	5
6	Percentage of ULBs in which material recovery facilities for sorting of recyclables by informal sector have been set up	9	6	6	1
7	Percentage of ULBs in which Biodegradable waste is sent to compost/biomethanation plant	9	5	5	3
8	Percentage of ULBs having own /regional operational Landfill sites	8	2	5	7
9	Percentage of ULBs in which Investigation of old /existing dumpsites for bio-mining has been initiated	8	3	8	3

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CPCB's observations based on the above assessment are as given below:

- i. Initiatives have been taken by States/UTs for compliance of Solid Waste Management Rules, 2016.
- ii. As per the assessment of information provided by the States/UTs, it is observed that although performance of most States/UTs is in good category as per as door-to-door collection of waste is concern, it decreases progressively as solid waste management moves from collection to segregation to processing to final disposal in that order.
- iii. Compliance by maximum States/UTs was found inadequate on following parameters.
 - a. Imposition of User fees;
 - b. Segregation of Waste at source
 - c. Using compartmentalized vehicles for collection of different fractions of waste.
 - d. Setting up of Material recovery facilities for sorting of recyclables by informal sector
 - e. Waste processing.
 - f. Investigation of old/existing dumpsites for bio-mining.
 - g. Information on engagement & training of informal sector consisting of waste pickers, waste collectors and recycling industry in waste management.
 - h. Prevention/management of leachate and methane gas generation from land fill site.
 - i. CCTV installation at dumpsite.

3.1.3 Recommendations:

- i. Segregation of waste at source, using compartmentalized vehicles for collection of different fractions of waste, processing of waste, Bio-mining of legacy waste and scheme for engagement of informal sector in Solid Waste management needs further strengthening
- ii. The states/UTs require to specify the time line for implementation of their action plan
- iii. In compliance with NGT's Directions dated March 06, 2019 in OA No. 606/2018, CPCB has developed an online portal for to monitor compliance of States/UTs with provisions of SWM Rules and uploaded on SPCB Sanyojan' on CPCB website. Only 8 States/UTs (Goa, Himachal Pradesh, Meghalaya, Mizoram, Kerala, Puducherry, Sikkim and West Bengal) have uploaded their information so far. All States/UTs are required to submit their compliance report quarterly on the said portal.

3.2 Sewage Management

3.2.1 Information Status:

Total 22 no. of States and UTs (Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar and Nagar Haveli, Daman and Diu, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, Tripura) have provided the reports to CPCB as required. State-wise information received for Sewage Management is attached as Annexure-VI.

3.2.2 Observations:

The States/UTs were required to provide information against seven parameters as per CPCB format. However, few States /UTs have not provided information against all these seven parameters, the details of the same are given in the table below:

The observations on the information provided by the States/UTs are given below:

STATUS OF INFORMATION PROVIDED BY STATES/UTs (Sewage Management)		
Sl. No.	Action Point	REMARKS
1.	Estimated Sewage Generation	<p>Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar and Nagar Haveli, Daman And Diu, Delhi, Goa, Gujarat, <u>Haryana</u>, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, Tripura.</p> <p>Complete information received from 5 States: (Andhra Pradesh, Andaman, & Nicobar, Delhi, Kerala, and Madhya Pradesh).</p> <p>Incomplete information received from-10 States: (Daman and Diu, Gujarat, Haryana, Manipur, Orissa, Pondicherry, Tripura, Madhya Pradesh, Maharashtra, Chandigarh).</p> <p>No- information-7 States: (Dadar and Nagar Haveli, Chhattisgarh, Goa, Karnataka, Mizoram, Rajasthan, Tamil Nadu).</p>
2.	Treatment Capacity (Projection for 05years to be taken into consideration)	<p>Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar and Nagar Haveli, Daman and Diu, Delhi, Goa, Gujarat, <u>Haryana</u>, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, Tripura.</p> <p>Complete information received from 04 states: (Andaman & Nicobar, Delhi, Orissa, Maharashtra).</p> <p>Incomplete information received from 10 states: (Andhra Pradesh, Daman and Diu, Haryana, Kerala, Manipur,</p>

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STATUS OF INFORMATION PROVIDED BY STATES/UTs (Sewage Management)

Sl. No.	Action Point	REMARKS
		Pondicherry, Tripura, Madhya Pradesh, Maharashtra, Chandigarh). No- information-8 States: (Dadar and Nagar Haveli, Chhattisgarh, Goa, Karnataka, Mizoram, Rajasthan, Tamil Nadu, Gujarat).
3.	Status of Sewerage System (in Km)	Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar and Nagar Haveli, Daman And Diu, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, Tripura. Complete information received from 04 States: (Delhi, Daman And Diu, Orissa, and Maharashtra). Incomplete information received from 08 states: (Andaman And Nicobar, Haryana, Kerala, Manipur, Pondicherry, Tripura, Madhya Pradesh and Chandigarh). No- information-10 States: (Andhra Pradesh, Assam, Gujarat, Dadar and Nagar Haveli, Chhattisgarh, Goa, Karnataka, Mizoram, Rajasthan, Tamil Nadu).
4.	No. of STPs (Details to be provided as per Annexure)	Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar and Nagar Haveli, Daman And Diu, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, Tripura. Complete information received from 03 States: (Andhra Pradesh, Delhi, Orissa) Incomplete information received from 10 States: (Andaman And Nicobar, Daman And Diu, Gujarat, Haryana, Kerala, Pondicherry, Tripura, Maharashtra, Madhya Pradesh and Chandigarh). No- information. 09 States: (Dadar and Nagar Haveli, Chhattisgarh, Assam, Goa, Karnataka, Mizoram, Rajasthan, Tamil Nadu, Manipur).
5.	Has bulk users identified for reuse of treated Water such as Industrial Clusters, Metro Rail, Indian Railways, Infrastructure Projects, Agriculture, Bus	Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar And Nagar Haveli, Daman And Diu, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, and Tripura.

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STATUS OF INFORMATION PROVIDED BY STATES/UTs (Sewage Management)

Sl. No.	Action Point	REMARKS
	Depots and PWD? (Y/N)	<p>Complete information received from 03 States: (Andhra Pradesh, Delhi and Haryana).</p> <p>Incomplete information received from 05 States: (Andaman and Nicobar, Orissa, Pondicherry, Tripura, Maharashtra).</p> <p>No- information-14 States: (Daman And Diu, Gujarat, Dadar And Nagar Haveli, Chhattisgarh, Goa, Karnataka, Kerala, Madhya Pradesh, Chandigarh, Assam, Mizoram, Rajasthan, Tamil Nadu, Manipur).</p>
6.	Quantity of treated wastewater being used by Bulk User (in MLD)	<p>Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar And Nagar Haveli, Daman And Diu, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu, and Tripura).</p> <p>Complete information received from 01 State: Delhi</p> <p>Incomplete information received from 06 States: (Andhra Pradesh, Andaman and Nicobar, Daman and Diu, Pondicherry, Tripura and Maharashtra).</p> <p>No-information- 15 States: (Andhra Pradesh, Assam, Chandigarh, Chhattisgarh, Gujarat, Haryana, Kerala, Manipur, Orissa, Dadar and Nagar Haveli, Goa, Karnataka, Mizoram, Rajasthan, Tamil Nadu).</p>
7.	No. of Water Aquatic Sources (Lakes, Pond, etc.) being developed through treated wastewater	<p>Reply received from 22 States/UTs: Andhra Pradesh, Andaman & Nicobar, Assam, Chandigarh, Chhattisgarh, Dadar And Nagar Haveli, Daman And Diu, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Pondicherry, Rajasthan, Tamil Nadu and Tripura).</p> <p>Complete information received from: 02 States/UTs-(Delhi and Pondicherry).</p> <p>Incomplete information received from: 02 states (Tripura and Maharashtra)</p> <p>No- information- 18 States/UTs-(Andhra Pradesh, Andaman And Nicobar, Assam, Chandigarh, Chhattisgarh, Daman And Diu, Gujarat, Haryana, Kerala, Manipur, Orissa, Madhya</p>

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STATUS OF INFORMATION PROVIDED BY STATES/UTs (Sewage Management)		
Sl. No.	Action Point	REMARKS
		Pradesh, Dadar And Nagar Haveli, Goa, Karnataka, Mizoram, Rajasthan, Tamil Nadu).

The information provided by the States/UTs has been further analysed for two key parameters of Sewage. State wise performance of the States/UTs against these two key parameters is given in table below:

PERFORMANCE OF STATES /UTs (Sewage Management)			
Sl.No.	States/UTs	% Gap in Treatment Capacity	% Gap in Sewage Network
1.	Andhra Pradesh	63.47%	No Information
2.	Andaman & Nicobar Islands	98.14%	Partial Information (Existing sewerage system Not Provided).
3.	Assam	No Information	No Information
4.	Chandigarh	Partial Information (Sewage Generation Not Provided)	Partial Information (Desired / Projected sewerage system Not Provided)
5.	Chhattisgarh	No Information	No Information
6.	Dadra Nagar & Haveli	Partial Information (Sewage Generation Not Provided)	Partial Information (Desired / Projected sewerage system Not Provided)
7.	Daman & Diu	43.86%	78.81%
8.	Delhi	17.06%	No Information
9.	Goa	No Information	No Information
10.	Gujarat	No Information	No Information
11.	Haryana	Partial Information (Sewage Generation & Treatment Capacity Not Clear)	Partial Information (Desired / Projected sewerage system Not Provided)
12.	Karnataka	No Information	No Information
13.	Kerala	Partial Information (Sewage Generation & Treatment Capacity Not Clear)	Partial Information (Desired / Projected sewerage system Not Provided)
14.	Madhya Pradesh	79.96%	No Information
15.	Maharashtra	21.74%	21.93%
16.	Manipur	52.11%	Partial Information (Desired / Projected sewerage system Not Provided).
17.	Mizoram	No Information	No Information
18.	Odisha	Partial Information (Sewage Generation & Treatment Capacity Not Clear)	72.63%
19.	Pondicherry	0% (No gap-Treatment capacity is more than sewage generation.)	Partial Information (Desired / Projected sewerage system Not Provided).
20.	Rajasthan	Partial Information (Sewage Generation & Treatment Capacity Not Clear)	No Information

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PERFORMANCE OF STATES /UTs (Sewage Management)			
21.	Tamil Nadu	No Information	No Information
22.	Tripura	Partial Information (Sewage Generation & Treatment Capacity Not Clear)	Partial Information (Desired / Projected sewerage system Not Provided)

Based on the above assessment, overall performance of the States/UTs against these two parameters is given in the table below

OVERALL PERFORMANCE OF STATES/UTs (Sewage Management)					
Parameters	Good	Average	Poor	Partial Information	No information
Gap in Sewage Treatment	Delhi, Maharashtra, Pondicherry (3)	Daman & Diu (1)	Andhra Pradesh, Andaman & Nicobar, Madhya Pradesh, Manipur (4)	Chandigarh, Dadra, Nagar & Haveli, Haryana, Kerala, Odisha, Rajasthan, Tripura (07 States/UTs).	Assam, Chhattisgarh, Goa, Gujarat, Karnataka, Mizoram, Tamil Nadu (07 States/UTs).
Gap in Sewerage Network	Maharashtra (1)	-	Daman & Diu, Odisha. (2)	Andaman & Nicobar Islands, Chandigarh, Dadra Nagar & Haveli, Haryana, Kerala, Manipur, Pondicherry, Tripura (08 States/UTs).	Andhra Pradesh, Assam, Chhattisgarh, Delhi, Goa, Gujarat, Karnataka, Madhya Pradesh, Mizoram, Rajasthan, Tamil Nadu (11 States/UTs).
G- Good (>75 %), Av-Average(>50% upto 75%), P-Poor (<50%), No Info- No information; Partial Information					

CPCB's observations based on the above assessment are as given below:

- i. Maharashtra is the only state in which Sewage treatment capacity and Sewerage network provided is more than 75% of the requirement.
- ii. Most States/UTs have either partial or no information w.r.t to requirement of Sewage treatment capacity and that of Sewerage network
- iii. Performance of States/UTs w.r.t provision of sewerage network is worse than provision of sewage treatment facilities

3.2.2 Recommendations:

- (i) The States /UTs need to address the various aspects related to Sewage management including strengthening of treatment capacity by increasing no. Of STPs, assessment of treated sewage data, identification of hotspots and taking remedial measures, designating authorities for developing mechanism for taking action against defaulters.
- (ii) The States/UTs need to identify bulk users for reuse of treated Water such as Industrial Clusters, Metro Rail, Indian Railways, Infrastructure Projects, Agriculture, Bus Depots and PWD.
- (iii) The States/UTs need to develop no. of Water/Aquatic Sources(Lakes, Ponds, etc.) by using treated wastewater.
- (iv) The States/UTs need to provide complete information as per directions of Hon'ble NGTs including current status, desirable status, gap and the timeline for the proposed action.

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(v) The States/UTs need to provide complete information on the various issues related to Sewage management covering the issues in the template provided by CPCB and as per the Directions of the Hon'ble NGT to ensure completion of the action points within the specified timelines.

3.3 Noise Management

3.3.1 Information Status

Out of 24 States and UTs, 10 states and UTs e. g. Andaman & Nicobar Island, Assam, Chandigarh, Delhi, Maharashtra, Tamil Nadu, Odisha, Daman & Diu, Manipur and Punjab have provided the information regarding noise. Detailed information is placed at Annexure VII.

3.3.2 Observations.

The States/UTs were required to provide information against fourteen parameters as per CPCB format. However, few States /UTs have not provided information against all these fourteen parameters, the details of the same are given in the table below:

STATUS OF INFORMATION PROVIDED BY STATES/UTs (Noise)	
Issued related to noise	Summary
No. of stations for Ambient Noise Monitoring	Out of 24 States and UTs, 8 states e. g. Assam, Delhi, Maharashtra, Tamil Nadu, Odisha, Daman & Diu and Manipur have provided the number of stations for ambient noise monitoring and among them number of monitoring station is higher in Odisha and the number is 56 .
No. of stations in Industrial Zone	8 no. of States and UTs e.g. Assam, Delhi, Maharashtra, Tamil Nadu, Odisha, Daman & Diu and Manipur have provided the number of stations for ambient noise monitoring and among them number of monitoring station is higher in Odisha and the number is 14 .
No. of stations in Commercial Zone.	8 states Assam, Delhi, Maharashtra, Tamil Nadu, Odisha, Daman & Diu and Manipur have provided the number of stations for ambient noise monitoring and among them number of monitoring station is higher in Odisha and number is 14.
No. of stations in Residential Zone.	8 states Assam, Delhi, Maharashtra, Tamil Nadu, Odisha, Daman & Diu and Manipur have provided the number of stations for ambient noise monitoring and among them number of monitoring station is higher in Odisha and number is 14.
No. of stations in Silence Zone	8 states Assam, Delhi, Maharashtra, Tamil Nadu, Odisha, Daman & Diu and Manipur have provided the number of stations for ambient noise monitoring

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STATUS OF INFORMATION PROVIDED BY STATES/UTs (Noise)	
Issued related to noise	Summary
	and among them number of monitoring station is higher in Odisha and number is 14.
Compliance of Ambient Standards (No. of Stations) Industrial Zone Commercial Zone Residential Zone Silence Zone	Monitoring of ambient standard report given by 4 states Assam, Daman & Diu, Manipur and Odisha and other states have not provided any data.
Identification of Hot Spots	Only Kerala and Manipur identify the hot spots and other states have not provided any data.
Designated Authorities defined as per Noise Rules (Y/N) (Details to be provided)	Designated Authorities details provided by 6 States and UTs e.g. Delhi, Manipur, Maharashtra, Kerala, Odisha and Andaman & Nicobar Island.
Has Methodology been prepared for granting permission for installation of Public Address System. (Details to be provided)	Methodology for granting permission for installation of Public Address System have been prepared and provided by 7 States/UTs e.g. Delhi, Maharashtra, Odisha, Daman & Diu, Kerala, Andaman & Nicobar Island and Manipur.
Has Methodology been prepared for redressal of complaint on noise Pollution. (Y/N) (Details to be provided)	Methodology for redressal of complaint on noise Pollution have been prepared and provided by 8 States and UTs e.g. Delhi, Maharashtra, Odisha, Daman & Diu, Kerala, Tamil Nadu, Andaman & Nicobar Island and Manipur.
No. of Police Stations equipped with Sound level meter.	5 States and UTs e.g. Chandigarh, Chattisgarh, Delhi, Maharashtra and Odisha provided the data of no. of police station equipped with sound level meter.
No. of Police Stations having officers trained as per Noise Pollution Rules by SPCBs/PCs.	5 States and UTs e.g. Chandigarh, Chattisgarh, Delhi, Maharashtra and Odisha provided the no. of police station equipped with sound level meter.
Has Protocol been developed for taking appropriate action against the defaulters?	5 States and UTs e.g. Delhi, Manipur, Maharashtra, Tamil Nadu and Andaman & Nicobar Island provided the protocol developed for taking appropriate action against the defaulters.

The information provided by the States/UTs has been further analysed for five key parameters of control of noise pollution. Statewise performance of the States/UTs against these five key parameters is given in table below:

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PERFORMANCE OF STATES/ UTs (Noise)										
Parameters	States									
	Andam an & Nicoba r Island	Assam	Chandi garh	Delhi	Mahara shtra	Tamil Nadu	Odisha	Dam an & Diu	Manipur	Punjab
% Gap in Network.	100	100	NI	80.7	PI	33.3	17.6	PI	PI	NI
% Gap of Compliance of Ambient Standard	NI	NI	NI	100 (On the basis of installe d station)	NI	NI	75	0	PI	NI
No. of Designated Authorities	PI	0	NI	PI	PI	PI (Indica tes no orders issued)	PI	0	PI	NI
No. of Police Stations equipped with sound level meter	0	NI	NI	0	PI (Indicat es all, Numbe r not provide d)	NI	PI	NI	NI	NI
No. of Police Stations having officers trained as per Noise Pollution Rules	0	PI	NI	PI	PI (Indicat es all, Numbe r not provide d)	NI	PI	NI	0	NI

NOTE:

PI: Partial Information, NI: No information

Based on the above assessment, overall performance of the States/UTs against these five parameters is given in the table below:

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OVERALL PERFORMANCE OF STATES/UTs (Noise)					
Parameters	No. of States				
	Good	Average	Poor	Partial Information	No Information
No. of Network	1	1	3	3	2
Compliance of ambient Standard	1	1	1	1	6
No. of Designated Authorities	0	0	2	6	2
No. of Police Stations equipped with sound level meter	0	0	2	2	6
No. of Police Stations having officers trained as per Noise Pollution Rules	0	0	2	4	4

CPCB's observations based on the above assessment are as given below:

- (a) Odisha has set up maximum number of stations as per plan.
- (b) Maharashtra has achieved maximum compliance w.r.t equipping the police stations with noise monitoring equipment and training of its officials.
- (c) Substantial non-compliance observed w.r.t to provisions of Noise Rules for other states/UTs

3.3.3 Recommendations:

- (i) The States /UTs need to address the various aspects related to Noise management including strengthening of monitoring network, assessment of noise monitoring data, identification of hotspots and taking remedial measures, designating authorities for developing mechanism for taking action against defaulters.
- (ii) The States/UTs need to provide complete information as per directions of Hon'ble NGTs including current status, desirable status, gap and the timeline for the proposed action.
- (iii) The States/UTs need to provide quarterly progress reports on the various issues related to Noise Pollution covering the issues in the template provided by CPCB and as per the Directions of Hon'ble NGT to ensure completion of the action points within the specified timelines.

3.4. Construction and Demolished Waste

3.4.1 Information Status

Information has been received from 11 no. of States/ UTs (Andhra Pradesh, Chattishgarh, Dadra & Nagar Haveli, Delhi, Goa, Gujarat, Madhya Pradesh,

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(Maharashtra, Rajasthan, Tamil Nadu and Tripura). Details are enclosed at Annexure-VIII.

3.4.2 Observations

Information received from the states/UTs has been evaluated based on four key parameters namely Estimation of Quantity of C&D Waste, provision of facilities for collection & transportation of C&D Waste, Setting up of facilities for C&D waste and utilization of processed C&D waste.

State/UT wise assessment based on these key parameters is given in the table below

PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)					
S/L	State	Waste generated (Estimated/Not estimated/Did not provide)	Waste collection & transportation facilities (Adequate/Not adequate/Did not provide)	Waste processing facilities (Capacity/Did not provide)	Off-take of processed C&D waste for re-use (Quantity/Did not provide)
1.	Andhra Pradesh	Not estimated/provide d.	<p>Not adequate. Proper details of collection and transportation not provided.</p> <p>02 ULBs have own processing plants and transportation arrangements.</p> <p>Waste of ULBs producing above 50 TPD will go to processing plants.</p> <p>Waste of ULBs producing less than 50 TPD will go to crushing units.</p> <p>Detailed transportation plan not provided.</p> <p>45 ULBs established C&D waste collection centers</p>	<p>Total ULBs= 110</p> <p>Waste processing facilities= Only 02 ULBs (Visakhapatnam & Vijayawada) have processing facilities.</p> <p>Capacity= 200 TPD & 01 100 TPD capacity plant is under construction at Tirupati.</p>	<p>Actual quantity of processed waste off-take not provided.</p> <p>The end product is being supplied to industries and also used for roads construction.</p>

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)					
			and 88 ULBs established call centers		
			Has plan for augmenting waste collection centers and call centers.		
2.	Chattishgarh	Not estimated/provide d.	Fairly adequate. The C&D waste is collected by ULB'S separate vehicles in covered manner. ULBS are lifting the C&D waste from waste generators after receiving complaints through a toll-free number or by written complaints. Directions issued for proper management of C&D waste in accordance with provisions of rules. The Vidhvansh Se Srojon model is used. It is a low cost, Sustainable, decentralized model based on extensive segregation and recycling.	Local Authorities claim to have facilities for processing C&D waste. There is no requirement for new C&D waste processing facilities.	Details not provided. Nothing mentioned regarding off-take of C&D waste. As per the short-term plan, C&D waste management facilities have been established in the existing SLRM centers and waste is being utilized by ULB'S in-house or by making recycled products such as tiles, bricks, paver blocks etc.

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)					
			It is combined with the benefits of citizen participation and urban livelihood promotion.		
			Waste generators are also directed to submit action plan for management of C&D waste.		
3	Dadra & Nagar Haveli	Not estimated/provide d..	Not adequate. Silvassa Municipal Council vide its Order dated 13/12/2018 had notified the provisions for the management, handling and disposal of C&D waste generated in the UT of Dadra & Nagar Haveli.	Not provided.	Not provided.
4	Delhi	Approximately 3900 TPD of C&D waste is generated in Delhi.	ULBs have identified designated places for dumping of C&D waste in their areas of jurisdiction and those are taken to the processing facilities. - North DMC has taken measures for making	03 facilities exist and are in operation. Directions u/s 31(A) of the Air (P&CP) Act, 1981 and u/s 5 of the E(P) Act,	100% off-take not achieved as of now. However, Government is working on and requesting different departments to use more recycled or /processed C&D waste for their new constructions.

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)

			<p>surprise inspection in night to find out the violators and to necessary action is being taken including issuing of challan.</p> <p>- SDMC is in process of installing CCTV at hot spots, where C&D waste is illegally dumped.</p> <p>- DPCC has issued letter to North MCD for taking necessary action for removal of heap of C&D waste.</p> <p>- DPCC had deployed night patrolling teams for detection of unauthorized dumping of C&D waste in industrial areas of Delhi and took necessary action as required.</p>	<p>1986 was issued by DPCC to C&D waste processing facility as required.</p>	
5.	Goa	No information provided/not estimated.	Presently, all the ULBs have their suitable sites for treatment of waste except for Cacora Curchorem.	Not adequate. Identification of suitable sites for	Did not provide any details.

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)

			<p>Municipal Council (CCMC) in South Goa district. The site in respect of CCMC has been handed over to Goa Waste management Corporation (GWMC) for setting up Solid Waste Management Facility at Cacora.</p> <p>All 191 village panchayats are undertaking door-to-door collection / street cleaning / conversion of black-spots into green-spots</p>	<p>setting up solid waste processing facilities.</p>	
6.	Gujarat	No information provided/not estimated.	<p>Not adequate.</p> <p>State Authorities only drafted plan in this regard.</p>	<p>Not adequate.</p> <p>State Board in its Report submitted that 300 TPD facility is operational for C&D waste. No further details provided.</p>	<p>Not provided.</p> <p>Facilities being set-up.</p>

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)					
7.	Madhya Pradesh	No information provided/estimated.	Not adequate. The ULBs notified C&D collection & transportation mechanism in local newspapers. This has ensured that citizens do not throw waste in open areas. Policy for C&D waste processing facilities has been prepared.	Not adequate. At present, only one ULB (Indore City) has set up a facility for processing of C&D Waste. 02 more ULBs are currently in the process of setting up C&D Waste processing facility..	Systematic off-take not started. In addition, 255 ULBs have established a mechanism for collection, storage and usage of C&D waste The ULBs are using collected C&D waste mainly for filling low lying areas and providing the C&D Waste as raw material to the manufactures of paver blocks, bricks, etc.
8.	Maharashtra	No information provided/not estimated.	Not adequate.	Not adequate. Regarding C&D waste processing facility please find Table-1 below.	No information provided.
9.	Rajasthan	No information provided/not estimated.	Not adequate. Draft of the C&D Waste Management Policy has	Not adequate. Treatment Plant under	No information provided.

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)

			been prepared and is under process of approval.	construction at Udaipur for 50 TDP.	
10	Tamil Nadu	No information provided/not estimated.	Action Plan prepared in the ULBs and separate store sites for C&D waste earmarked. Suitable Collection Proper mechanism for inflow and outflow of C&D waste is being planned by 31.12.2020 and will be fully established.	Adequate (100%).	Adequate (100%). Utilization is done.
11	Tripura	At present, total about 20.75 MT per day of C&D waste is being generated in 20 ULBs, of which generated about 5.00 MT/day.	Not adequate. All the 20 ULBs are separately collecting and transporting the C&D waste using trippers and disposing them. Processing Plant (in PPP mode) for manufacturing eco-bricks, mechanical hollow bricks,	Not adequate. Policy for management to be notified. State Government has planned for setting up one c&D wwaste	Not done now. Has plan for sensitizing Government Agencies to use more processed C&D waste.

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PERFORMANCE OF STATES/UTs (C&D WASTE MANAGEMENT)					
				processing plant.	

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EPCB's observations based on the above assessment are as given below:

- i. As per information received, Desirable Level of Compliance in terms of statutes have been achieved by very few States/UTs
- ii. Only two states- Delhi & Tripura have provided information regarding quantity of C&D waste generated in their States/UT
- iii. Adequate facilities for collection and transportation of C&D Waste provided in Chhattisgarh. Good initiatives in this regard taken in Delhi and Goa
- iv. Adequate facilities for C&D Waste Processing provided in Tamil Nadu. Waste processing facilities have been set up in five other states namely Maharashtra,, Delhi, Andhra Pradesh, Rajasthan, MP and Chhattisgarh.
- v. Adequate utilization of processed C&D Waste achieved in Tamil Nadu,, where as utilization of processed C&D Waste remains a major issue in other states.
- vi. Name and Designation of Designated Officer for Ensuring Compliance have been provided by Chhattisgarh, Madhya Pradesh and Tripura whereas Maharashtra has only communicated the number of officials.

3.4.3 Recommendations

- i. The States /UTs need to address the various aspects related to C&D Waste management including collection and transportation of C&D Waste, setting up of waste processing facilities as well as utilization of C&D Waste processed products
- ii. The States/UTs need to provide complete information as per directions of Hon'ble NGTs including current status, desirable status, gap and the timeline for the proposed action.
- iii. The States/UTs need to provide quarterly progress reports on the various issues related to C&D Waste management covering the major issues highlighted in Section 3.4.2 and as per the Directions of the Hon'ble NGT to ensure completion of the action points within the specified timelines

3.5 E-Waste

3.5.1 Information Status:

In compliance to the Hon'ble National Green Tribunal Order dated 24-04-2019 & 12-09-2019 in O.A. No 606 of 2018, seventeen (17) states/UTs have submitted information related to E-Waste. Eleven (11) states have submitted the reports in the prescribed format namely Assam, Chandigarh, Chhattisgarh, Delhi, Haryana, Kerala, Lakshadweep, Manipur, Odisha, Puducherry and Tripura. Six (06) states namely Andhra Pradesh, Dadar Nagar H, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu have not submitted report in the prescribed format. Compiled information received from States/UTs is attached in Annexure- IX

3.5.2 Observations:

The information provided by the States/UTs has been further analysed for six key parameters of E-Waste management. Statewise performance of the States/UTs against these six key parameters is given in table below:

PERFORMANCE OF STATES/UTs (E-Waste)

S. N.	Parameters	Good	Average	Poor	No-Information Provided	Remarks
1.	Checking of informal trading, dismantling and recycling of waste		Andhra Pradesh, Assam, Chandigarh, Chhattisgarh, DD& DNH, Delhi, Haryana, Kerala, Lakshadweep, Odisha, Manipur, Maharashtra, Puducherry, Tripura, Tamil Nadu		Madhya Pradesh, Rajasthan, Arunachal Pradesh, Bihar, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal Andaman and Nicobar, Jammu & Kashmir	As Per report submitted by secretaries of States/UTs under OA No. 606/2018 of Hon'ble NGT
2.	Facilitate collection and disposal of e-waste	Assam, Kerala, Odisha, Puducherry	Andhra Pradesh, Chandigarh, Chhattisgarh, DD& DNH, Delhi, Haryana, Manipur, Madhya Pradesh, Maharashtra, Tripura, Tamil Nadu	Lakshadweep	Rajasthan, Arunachal Pradesh, Bihar, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal Andaman and Nicobar,	As Per report submitted by secretaries of States/UTs under OA No. 606/2018 of Hon'ble NGT

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PERFORMANCE OF STATES/UTs (E-Waste)						
S. N.	Parameters	Good	Average	Poor	No-Information Provided	Remarks
3.	Governance frame work for monitoring compliance	Kerala, Odisha	Andhra Pradesh, Assam, Chandigarh, Chhattisgarh, Delhi, Tripura, Tamil Nadu	DD& DNH, Lakshadwee P	Jammu & Kashmir, Haryana, Manipur, Madhya Pradesh, Maharashtra, Rajasthan	As Per report submitted by secretaries of States/UTs under OA No 606/2018 of Hon'ble NGT.
4.	Capacity building at district/State/CPCB level	Chhattisgarh, Puducherry, Tripura	Andhra Pradesh, Assam, Chandigarh, DD& DNH, Delhi, Haryana, Kerala, Odisha, Tamil Nadu, Manipur, Maharashtra, Rajasthan	Lakshadwee P	Madhya Pradesh, Arunachal Pradesh, Bihar, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal, Andaman and Nicobar, Jammu & Kashmir	As Per report submitted by secretaries of States/UTs under OA No 606/2018 of Hon'ble NGT.
5.	IBC plan be firmed up and executed	Chandigarh, Chhattisgarh, Odisha	Andhra Pradesh, Assam, DD& DNH, Delhi, Haryana, Manipur, Madhya Pradesh, Puducherry, Tripura, Tamil Nadu	Lakshadwee P	Kerala, Maharashtra, Rajasthan, Arunachal Pradesh, Bihar, Goa, Gujarat, Himachal Pradesh, Jharkhand,	As Per report submitted by secretaries of States/UTs under OA No 606/2018 of Hon'ble NGT.

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PERFORMANCE OF STATES/UTs (E-Waste)						
S. N.	Parameters	Good	Average	Poor	No-Information Provided	Remarks
					Karnataka, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West, Bengal Andaman and Nicobar, Jammu & Kashmir	
6.	Strengthen system of enforcement		Assam, Chandigarh, Chhattisgarh, DD& DNH, Delhi, Haryana, Kerala, Odisha, Puducherry, Tripura	Lakshadweep, Maharashtra,	Andhra Pradesh, Manipur, Madhya Pradesh, Rajasthan, Tamil Nadu, Arunachal Pradesh, Bihar, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West, Bengal Andaman and Nicobar, Jammu & Kashmir	As Per report submitted by secretaries of States/UTs under OA No 606/2018 of Hon'ble NGT

CPCB's observations based on the above assessment is as given below:

- a) Checking of informal trading, dismantling, and recycling of e-waste:

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As per information submitted by 17 SPCBs/PCCs, 12 SPCBs/PCCs are in coordination with District Administration in carrying out quarterly drive for checking of informal trading, dismantling, and recycling of e-waste. 05 SPCBs/PCCs are yet to start this drive.

- b) **Facilitate collection and disposal of e-waste:**
As per information submitted by 17 SPCBs/PCCs, 15 SPCBs/PCCs are in the process of formulating mechanism for collection and for incentivizing setting up of recycling facilities. 02 states have not provided information regarding this activity.
- c) **Governance framework for monitoring compliance:**
As per information submitted by 17 SPCBs/PCCs, 06 SPCBs/PCCs have designated state, district and municipal level Nodal officers for monitoring of compliance, 03 SPCBs/PCCs are under process to designated state, district and municipal level Nodal officers. 08 SPCBs/PCCs have not provided any information regarding this activity.
- d) **Capacity building at district/State/CPCB level:**
As per information submitted by 17 SPCBs/PCCs, 13 SPCBs/PCCs have conducted Special workshops to educate functionaries in government /NGOs, 02 SPCBs/PCCs are under process and 02 SPCBs/PCCs have not yet started.
- e) **IEC plan be firmed up and executed:**
As per information submitted by 17 SPCBs/PCCs, 10 SPCBs/PCCs have formed IEC plan for educating public at large about the system of collection, incentive structure and facilities for recycling. 02 SPCBs/PCCs are under process to form IEC plan and 05 SPCBs/PCCs have not formed IEC plan yet.
- f) **Strengthen system of enforcement:**
As per information submitted by 17 SPCBs/PCCs, 09 SPCBs/PCCs have agreed to conduct quarterly review of violations and enforcement actions at city/district/state level, 02 SPCBs/PCCs are under process to comply this activity and 06 SPCBs/PCCs have not provided any information regarding this activity.

3.5.3 Recommendations

1. All the SPCBs/PCCs need to follow the action plan for implement of Action Plan.
2. Software Portal has been developed under OA No 512/2018 of Hon'ble NGT for compliance monitoring of action plan for e-waste management. All the SPCBs/PCCs have to regularly update their information on this portal.

3.6 Bio Medical Waste

3.6.1 Information Status:

In pursuant to the Order dated 12.09.2019 passed by Hon'ble National Green Tribunal (Hon'ble NGT) in the matter of O.A. No. 606/2018, CPCB has received progress report on action plan related to implementation of Biomedical Waste

Management Rules, 2016. A questionnaire containing 15 nos. of Key Performance Indicators was prepared by CPCB for assessing the implementation status of BMW Rules, 2016.

22 States/UTs namely Andaman and Nicobar, Andhra Pradesh, Assam, Chandigarh, Chhattisgarh, Daman, Diu and Dadra Nagar Haveli (DD & DNH), Delhi, Goa, Gujarat, Haryana, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Odisha, Puducherry, Rajasthan, Tamil Nadu, Tripura, have submitted progress report on Gap analysis. Karnataka also provided information but not provided as per desired format. Information pertaining to remaining States/UTs has been taken from Status report submitted by States in the matter of O.A. No. 710 of 2017 filed by Sh Shailesh Singh before Hon'ble NGT.

3.6.2 Observations:

Based on the revised action plan submitted by State Governments/State Pollution Control Boards, status of compliance on Key Performance Indicators prepared by CPCB is given below

PERFORMANCE OF STATES/UTs (BMW)					
S. No.	Key performance indicator	Good	Average	Poor	Not Provided
1.	Inventory of all Healthcare Facilities and biomedical waste generation	Andaman & Nicobar, Chandigarh, DD & DNH, Haryana, Kerala, Lakshadweep, Madhya Pradesh, Odisha, Puducherry, Tamilnadu, Tripura	Andhra Pradesh, Chhattisgarh, Delhi, Goa, Gujarat, Karnataka, Mizoram, Rajasthan	Assam, Maharashtra, Manipur	Arunachal Pradesh, Bihar, Himachal Pradesh, J&K, Jharkhand, Meghalaya, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal
2.	Authorization to all Healthcare Facilities including non-bedded HCFs		Andaman & Nicobar, Andhra Pradesh, Chandigarh, Chhattisgarh, DD & DNH, Delhi, Goa, Gujarat, Haryana, Karnataka, Kerala, Lakshadweep, Madhya Pradesh,	Assam, Manipur	Arunachal Pradesh, Bihar, Himachal Pradesh, J&K, Jharkhand, Meghalaya, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal

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PERFORMANCE OF STATES/UTs (BMW)					
S. No.	Key performance Indicator	Good	Average	Poor	Not Provided
			Maharashtra, Mizoram, Odisha, Puducherry, Rajasthan, Tamilnadu, Tripura		
3.	Facilitate setting-up adequate number of Common Biomedical Waste Treatment Facilities (CBWTFs) to cover entire State or all HCFs	Andhra Pradesh, Chandigarh, Delhi, Haryana, Madhya Pradesh, Tamilnadu	Assam, Chhattisgarh, DD & DNH, Goa, Gujarat, Kerala, Lakshadweep, Maharashtra, Manipur, Mizoram, Puducherry, Rajasthan, Tripura	Andaman & Nicobar,	Karnataka, Odisha, Arunachal Pradesh, Bihar, Himachal Pradesh, J&K, Jharkhand, Meghalaya, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal
4.	Implementation status of Barcode system	DD & DNH, Tamilnadu	Andhra Pradesh, Chandigarh, Chhattisgarh, Delhi, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Rajasthan	Andaman & Nicobar, Assam, Lakshadweep, Manipur, Mizoram, Tripura	Goa, Karnataka, Kerala, Arunachal Pradesh, Bihar, Himachal Pradesh, J&K, Jharkhand, Meghalaya, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal
5.	Installation of OCEMS by CBMWTs as a self-monitoring tool and transmission of data with servers of SPCBs/ CPCB	Andhra Pradesh, Chandigarh, Delhi, Haryana, Kerala, Madhya Pradesh, Tamilnadu	Assam, Maharashtra, Odisha, Puducherry	Manipur	Andaman & Nicobar, Chhattisgarh, DD & DNH, Goa, Gujarat, Karnataka, Lakshadweep, Mizoram, Rajasthan, Tripura, Arunachal Pradesh, Bihar,

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PERFORMANCE OF STATES/UTs (BMW)

S. No.	Key performance indicator	Good	Average	Poor	Not Provided
					Himachal Pradesh, J&K, Jharkhand, Meghalaya, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal
6.	Monitoring of Healthcare Facilities and Common Biomedical Waste Treatment Facilities	Andhra Pradesh, Chandigarh, Delhi, Gujarat, Haryana, Kerala, Madhya Pradesh, Maharashtra, Tamilnadu	Andaman & Nicobar, Assam, Chhattisgarh, DD & DNH, Goa, Karnataka, Lakshadweep, Manipur, Odisha, Puducherry, Rajasthan, Tripura	Mizoram	Arunachal Pradesh, Bihar, Himachal Pradesh, J&K, Jharkhand, Meghalaya, Nagaland, Punjab, Sikkim, Telangana, Uttarakhand, Uttar Pradesh, West Bengal

Note:

Good - States/UTs which have submitted progress report and completed the action plan.

Average - States/UTs which have submitted progress report but action plan is under process.

Poor - States/UTs which have submitted progress report but action plan is not upto the mark and status of completion is very poor.

Not provided - States/UTs which have not submitted progress report as per O.A. no. 606/2018

As per reports submitted by the States, Observations are as follows:

- Inventory has been completed by 16 out of 35 States/UTs namely Mizoram, Andhra Pradesh, Haryana, Chhattisgarh, Goa, Jharkhand, Delhi, Gujarat, Kerala, Bihar, Uttarakhand, West Bengal, Karnataka, Chandigarh, Punjab and Manipur.
- As required under BMW Rules, 2016, every non-bedded HCF is required to obtain authorisation for ensuring proper treatment & disposal of biomedical waste. States/UTs like Mizoram, Nagaland, Odisha, Sikkim, UP, Tripura, Haryana, DD & DNH, Goa, Lakshadweep, Jharkhand, West Bengal, Manipur, Delhi, Kerala, Gujarat, Bihar, Karnataka, Telangana, J & K, Uttarakhand, Punjab and Arunachal Pradesh are required to ensure that one time authorisation is granted to non-bedded HCFs.

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- In States/UTs such as Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir and Kerala, CBWTFs are not adequate to cater all HCFs located in the States/UTs.
- Deep Burial is still practiced in States/UTs namely Andaman & Nicobar, Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Lakshadweep, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Rajasthan, Sikkim, Tamilnadu, Tripura, Uttarakhand.
- Implementation of bar code system is not yet completely implemented in States/UTs namely Andaman & Nicobar, Assam, Jammu & Kashmir, Odisha, Uttar Pradesh, West Bengal, Jharkhand, Madhya Pradesh, Rajasthan and Tamil Nadu.
- Action plan related to monitoring of implementation to BMW Rules, 2016 by Healthcare Facilities is not completed by Nagaland, Odisha, Sikkim, Andhra Pradesh, Manipur, Kerala, Meghalaya, and Karnataka.
- Online emission monitoring systems is not yet installed in CBWTFs of all States/UTs
- Training and capacity building programs is still lacking in few States/UTs like Mizoram, Nagaland, Odisha, Sikkim, J& K, Tripura, DD & DNH, Delhi, Meghalaya, Puducherry, Rajasthan, Kerala, Bihar, Manipur and Karnataka.

3.6.3 Recommendations:

State-wise progress report on revised action plan along with recommendations are given at Annexure-X

3.7 Hazardous Waste

3.7.1 Information Status

In this regard, a format on compliance of Hazardous & Other Waste (Management and Transboundary Movement) Rules, 2016 has been prepared requesting all Chief Secretaries of all States/UTs to provide compliance status report. The format covers aspects such as Action plan along with time line for implementation of orders of Hon'ble Tribunal, Current Status of implementation, Gaps identified for implementing the directions of Hon'ble Tribunal, Details of state level committee constituted for the purpose of compliance of HOWM Rules, 2016.

In response to the said format, States/UTs wise responses 20 SPCBs/PCCs have been compiled and provided as Annexure XI. List of the 20 SPCBs/PCCs who have responded to the format is as given below;

STATUS OF INFORMATION PROVIDED BY STATES/UTs (HWM)	
SPCBs/PCCs Responded	SPCBs/PCCs not Responded
Andhra Pradesh	Andaman & Nicobar
Assam	Arunachal Pradesh
Chandigarh	Bihar
Chhattisgarh	Gujarat
DD & DNH	Himachal Pradesh
Delhi	Jammu & Kashmir

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Goa	Jharkhand
Haryana	Karnataka
Kerala	Meghalaya
Lakshadweep	Nagaland
Maharashtra	Sikkim
Madhya Pradesh	Telangana
Manipur	Uttar Pradesh
Mizoram	Uttarakhand
Odisha	West Bengal
Puducherry	
Punjab	
Rajasthan	
Tamilnadu	
Tripura	

3.7.2 Observations

The summary of the status of implementation of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 based on the information received in the format circulated in the matter of O.A no. 606/2018 has been assessed for performance of the States/UTs based on key indicators namely, Hazardous Waste Authorization, Annual Inventory, Common TSDFs, Enforcement Action, Capacity Building.

The performance of the states/UTs based on key indicators w.r.t implementation of HOWM Rules, 2016 is provided in Table below.

Performance of the States/UTs (HOWM)						
S. No.	Key Indicators	Status of implementation of HOWM Rules, 2016 in the matter of O.A no. 606/2018				
		Good	Average	Poor	Relevant information not submitted	States/UTs not responded (15 States/UTs)
1.	Hazardous Waste Authorization (Adoption and enclosure of Uniform inspection report with authorization granted in stipulated timeframe; Clarity on mode of management)	Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Odisha and Rajasthan	Assam, Goa, Chandigarh, Maharashtra, Tamilnadu, Delhi and Tripura	Puducherry	DDDNH Haryana, Manipur, Mizoram, Kerala and Punjab	Andaman & Nicobar, Arunachal Pradesh, Bihar, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Meghalaya, Nagaland, Sikkim, Telangana, Uttar Pradesh, Uttarakhand, West Bengal
2.	Annual Inventory (Submitted for 2018-19 and provided all formats)	Andhra Pradesh, Chandigarh, Chhattisgarh, Delhi, Goa, Haryana, Kerala, Maharashtra, Madhya Pradesh, Mizoram, Odisha, Puducherry, Tamilnadu and Tripura	Assam and Manipur		DDDNH, Punjab and Rajasthan	
3.	Common TSDFs (Available or Action Initiated for establishment of)	Andhra Pradesh, DDDNH, Haryana, Maharashtra, Madhya Pradesh,	Assam, Chandigarh, Chhattisgarh, Delhi, Goa,	Mizoram, Puducherry and Tripura		

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Performance of the States/UTs (HWM)						
S. No.	Key Indicators	Status of implementation of HOWM Rules, 2016 in the matter of O.A no. 606/2018 :				
		Good	Average	Poor	Relevant information not submitted	States/UTs not responded (15 States/UTs)
	TSDP and opening of Escrow account)	Odisha, Punjab, Rajasthan and Tamilnadu	Kerala and Manipur			
4.	Enforcement action (Non-compliances & action taken thereof and reconciliation of Manifest document)	Madhya Pradesh, and Tamilnadu	Goa, Chhattisgarh, Chandigarh, Maharashtra, Manipur, Puducherry, Delhi, and Tripura	Assam	Andhra Pradesh, DDDNH, Haryana, Kerala, Punjab, Mizoram, Odisha, and Rajasthan	
	Capacity building (Availability of Laboratory facility for analyses of all parameters listed under Schedule II of HOWM Rules, 2016)	Andhra Pradesh, Chandigarh, Goa, Haryana, Kerala, Maharashtra, Madhya Pradesh, Mizoram, Odisha, Rajasthan, Tamilnadu and Tripura	Chhattisgarh and Delhi	Assam, Manipur and Puducherry	Punjab and DDDNH	

Note: In case of Lakshadweep, the performance categorization has not been carried out as the number of hazardous waste generating units has been reported as nil; however, it is expected that hazardous wastes such as used/homste oil, used lead acid batteries, etc. are generated from automobiles workshops/service stations/etc.

3:7.3 Recommendations:

For effective implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 concerned SPCBs/PCCs and State Govt./UT Admin are requested to ensure the following:

- i. It is recommended that 05 SPCBs/PCCs (namely: Dadar Nagar Haveli & Daman & Diu; Haryana; Lakshadweep; Manipur and Nagaland) directed to submit the status on implementation of recommendations made by the Monitoring Committee in its interim report, as CPCB has not received any information from these SPCBs/PCCs.
- ii. SPCBs/PCCs need to implement 25 action points, out of which 11 action points needs to be implemented immediately and other 14 in regular and non-immediate manner. It is recommended that SPCBs/PCCs which are not complying with the recommendations made by Monitoring Committee should submit the status report to CPCB immediately.
- iii. It is recommended that till National Hazardous Waste Tracking System (NHWTS) which is being developed by CPCB is made functional, SPCBs/PCCs may be directed to ensure and verify reconciliation of manifest.
- iv. SPCBs/PCCs shall strictly follow the guidelines for inventorization of hazardous and other waste issued by CPCB and ensure verification and validation of the annual returns submitted by the occupiers/recycler/pre-processor/utilizer/co-processor operator of disposal facilities including submission of the annual inventory to CPCB within the stipulated time period.

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- v. It is recommended that SPCBs/PCCs (namely Himachal Pradesh, Sikkim, Punjab, Kerala and Jharkhand) which have reported non-compliance but not taken any action shall be directed to take action against such violators as per provisions of HOWM Rules, 2016.
- a. Further, it is also recommended that SPCBs/PCCs may be directed to initiate actions against all such units which are violating one or other provisions of HOWM Rule, 2016 including non-compliance to the documenting submission such annual returns, manifest document, etc.
- vi. It is recommended, that the timeline provided by the SPCBs/PCCs with regard to adopting waste management hierarchy (as stipulated in the HOWM Rules) to ensure the level playing for the industries shall be strictly adhere to.
- a. Further, SPCBs/PCCs shall also initiate development of certain benchmarks/ guidelines for the possibility of hazardous waste recycling/ utilization on case to case to basis as most of the SPCBs/PCCs have not taken any initiative on the same.
- vii. It is recommended that SPCBs/PCC may be directed to initiate development of sectoral process based HW generation range to have uniformity in assessing the HW generation from industries and benchmarking the same.
- viii. It is recommended that SPCBs/PCCs of (Karnataka, Maharashtra, Rajasthan, Kerala and Uttarakhand) having Common TSDF to immediately open the Escrow Account as per O.M of MoEF&CC including deposition of mandatory amount.
- a. Further, SPCBs/PCCs of Gujarat, Jharkhand, Karnataka, Odisha, Rajasthan, Tamil Nadu and West Bengal shall take action against the Common TSDF(s) for not displaying the details of mandatory amount deposited in the Escrow Account on their website.
- ix. SPCBs/PCCs may be directed to expedite conducting of environment audit of the Common/Captive SLFs in the time bound manner as specified in the Interim Report of the Monitoring Committee Report.
- x. SPCBs/PCCs have reported that out of 30 SPCBs/PCCs only 19 are having laboratory facilities for analysis of all hazardous waste parameters as required under HOWM Rules, 2016. Therefore, it is recommended that all the remaining 11 SPCBs/PCCs (Andaman and Nicobar Islands, Arunachal Pradesh, Delhi, Goa, Jammu & Kashmir, Jharkhand, Meghalaya, Odisha, Puducherry, Sikkim and Uttarakhand) should be equipped with all the facilities for analysis of all hazardous waste parameters as required under HOWM Rules, 2016.
- xi. It is recommended to direct States/UTs (namely Andaman and Nicobar Islands, Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Chandigarh, Delhi,

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Goa, Jammu & Kashmir, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Tripura and Sikkim) where common TSDF is not available to immediately set up adequate number/capacity of Common TSDFs in such States/UT.

- xii. Chief Secretaries of the States/UTs may be directed to submit biannually compliance report to CPCB by collecting information from the State Government/ Departments like Labour/Industries/Environment and SPCBs/PCCs.

3.8 100 Industrial Clusters

3.8.1 Information Status:

CEPI is a rational number between 0 and 100, assigned to a given location to characterize the environmental quality following the algorithm of source, pathway and receptor. CPCB, conducted environmental quality monitoring in 100 industrial clusters/areas located in 21 states across the country for CEPI evaluation based on the revised CEPI-2016 under MoEFCC sponsored project during Dec. 2107 -March 2018. Thereafter, CPCB undertook evaluation of CEPI scores.

As a result of CEPI evaluation during Dec. 2107 -March 2018, following is the number of CPAs/SPAs

CPAs: Nos. of PIAs with CEPI scores ≥ 70 is 38

SPAs: Nos. of PIAs with CEPI scores ≥ 60 & < 70 is 31

OPAs: Nos. of PIAs with CEPI scores < 60 is 31

It is to be noted that 69 CPAs/SPAs are located in 20 States/UTs.

In compliance with Order dated September 12, 2019 in OA No. 606/2018 information has been received from eight state/UTs (Andhra Pradesh, Chhattisgarh, Delhi, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Rajasthan) State-wise information received is enclosed at Annexure XII. 12 States/UTs which have not provided information on CPAs include Assam, Bihar, Haryana, HP, Jharkhand, Karnataka, Odisha, Punjab, Tamil Nadu, UP, Uttarakhand, Telangana and West Bengal.

3.8.2 Observations:

Information received from the nine States/UTs have been assessed with respect to three key parameters. An overview of the assessment is given in the table below:

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PERFORMANCE OF STATES/UTs (CPA/SPA)

S.no	State	No Of CPA/SPA	Status of constitution of committee	Status of submission of action plan	Status of SPCBs Performance for 100 Industrial clusters
1	ANDHRA PRADESH	1	Committee constituted for structuring action plan on 29.1.2019.	Action plan Submitted for Vijayawada on 12.3.2019.	Very Good
2	CHHATTISGARH	2	Committee constituted for structuring action plan on 24.1.2019.	Action plan Submitted for Siltara IA and Raipur on 28.3.2019.	Very Good
3	DELHI	1	Committee constituted for structuring action plan on 20.2.2019.	Action plan Submitted for Najafgarh-Drain basin 16.4.2019.	Very Good
4	GUJARAT	7	..	Updated / new Action Plan for six CPAs and one SPA of Gujarat has been prepared by GPCB and submitted the same to CPCB Delhi and Regional Directorate, CPCB West Zone, Vadodara on	Good

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				01.10.2019 and 04.10.2019 Respectively	
5	KERALA	0	NA	NA	Very Good
6	MADHYA PRADESH	0	NA	NA	Very Good
7	MAHARASHTRA	6	Committee constituted for structuring action plan on 31.12.2018.	Action plan Submitted for all CPA/SPA in Feb 2019.	Very Good
8	RAJASTHAN	5	Committee constituted for structuring action plan on 13.06.2019.	Draft of Action Plan for Jodhpur and Pali has been prepared by MNIT Jaipur and has been sent to CPCB on 30.05.2019. Draft of Action Plan for Bhiwadi has been prepared by IIT Kanpur and is under examination at State Govt. level Draft of Action Plan for Jaipur has been prepared by IIT Kanpur and is under examination	Good

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					at State Govt. level.
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3.8.3 Recommendations:

- i. The concerned States/UTs to prepare and submit action plans within three months for improvement of environmental quality in the CPAs/SPAs, prohibition of non-complying pollution activities
- ii. The concerned SPCBs/PCCs to levy and recover environmental compensation from non-complying units/ common facilities.

3.9 Status of CETPS/ETPs

3.9.1 Information Status

In compliance with Order dated September 12, 2019 in OA No. 606/2018 information has been received from twelve state/UTs (Andhra Pradesh, Delhi, Gujarat, Haryana, Karnataka, Kerala, MP, Maharashtra, Punjab, Rajasthan, Tamil Nadu and Tripura) State-wise information received is enclosed at Annexure XIII. It may be noted that 191 operational CETPs are located in 19 States/UTs. 7 States/UTs which have not provided information on CETPs are namely Himachal Pradesh, Jharkhand, Uttar Pradesh, Uttarakhand, West Bengal, Telangana and Jammu & Kashmir,

Information on ETPs have been provided by 13 States/UTs (Andhra Pradesh, Delhi, Gujarat, Haryana, Karnataka, Kerala, MP, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Chhattisgarh and Tripura). Remaining States/UTs have not provided information on the matter

Information containing current status, desirable level of compliance in terms of statutes, gap between current and desired levels and proposal of attending the gap with time lines is given as Annexure-XIII

3.9.2 Observations

The information received from the States/UTs has been assessed for key parameters. An overview of the assessment is given in the table below:

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PERFORMANCE OF STATES/UTs (CETPs)							
Sl. No.	State	No. of CETPs	No. of CETPs with the inlet quality standards prescribed by the SPCBs	No. of Non-Complying CETPs	Percentage of CETPs Non-complying	Ranking of SPCBs on basis of CETPs Functioning	
1	Tamil Nadu	36	0	3	8	1	
2	Karnataka	10	7	1	10	2	
3	Maharashtra	25	22	3	12	3	
4	Andhra Pradesh	6	5	1	16	4	
5	Punjab	4	0	1	25	5	
6	Kerala	6	0	2	33	6	
7	Haryana	19	14	9	47	7	
8	Madhya Pradesh	2	2	1	50	8	
9	Gujarat	33	33	17	51	9	

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PERFORMANCE OF STATES/UTs (CETPs)						
Sl. No.	State	No. of CETPs	No. of CETPs with the inlet quality standards prescribed by the SPCBs	No. of Non-Complying CETPs	Percentage of CETPs Non-complying	Ranking of SPCBs on basis of CETPs Functioning
10	Rajasthan	15	13	11	73	10
11	Delhi	13	13	12	92	11
12	Tripura	1	1	1	100	12

3.9.3 Recommendations

- (i) Proper technological combination for CETPs has to be identified by engaging Expert agencies
- (ii) Separate treatment technology should be provided for hazardous waste water, high TDS and toxic effluents
- (iii) CETP operators should be given proper knowledge and training for operation and maintenance of CETPs

3.10 351 Polluter Stretches in the country

3.10.1 Information Status

1. Based on water quality monitoring carried out in the years 2016 and 2017, CPCB identified 351 polluted river stretches in the Country. The criteria pollutant, Biochemical Oxygen Demand (BOD) was considered for identification and prioritization of polluted river stretches in the country.

2. Hon'ble NGT vide orders dated 20.09.2018, 19.12.2018 & 08.04.2019 in OA No 673/2018 in the matter of News item published in 'THE HINDU' titled "More river stretches are now critically polluted: CPCB" directed all State Governments and UT Administrations to prepare action plans for restoration of identified Polluted River Stretches and execution of approved action plans within 2 years

(from 1st April, 2019) for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e. BOD < 3 mg/L and FC < 500.MPN/100 mL).

3. As per Hon'ble NGT order dated 8.4.2019, States/ UTs were are also required to submit performance guarantee (for No. of Polluted River Stretches in a State/UT > 10; 5 to 10 & < 5, the performance guarantee in Rupees 15 Crore, 10 Crore & 5 Crore respectively).

4. As per Hon'ble NGT order dated 8.4.2019, Assam, Manipur & UP State are liable to pay compensation in terms of order dated 19.12.2018 for delay in submission of action plans within a month to CPCB.

5. As per Hon'ble NGT order dated 8.4.2019, Delhi, Meghalaya, Nagaland, Tamil Nadu, UP & Uttarakhand are liable to pay compensation as per order dated 19.12.2018 for delay at the scale of 50% of the compensation payable by the States which have failed to submit complete action plans. State-wise information received for Hazardous Waste is attached as Annexure-XIV

3.10.2 Observation:

The information provided by the States /UTs have been assessed for key parameters. An overview of the assessment is given below:

PERFORMANC OF STATES/UTS (Polluted River Stretches)				
Parameter/ Thematic area	Best Performing	Average	Poor	No information
351 Polluted River Stretches in the Country	(on the basis of approval by Task team in 1st review)	(On the basis of submission of action plans within timelines)	(On the basis of compensation imposed by Hon'ble NGT for submission of incomplete action plans and delay in submission)	
	1. Gujarat 2. Haryana 3. Himachal Pradesh 4. Kerala 5. Punjab 6. Telangana 7. West Bengal	1. Andhra Pradesh 2. Bihar 3. Chhattisgarh 4. Daman, Diu and Dadra Nagar Haveli 5. Goa 6. Jammu & Kashmir 7. Jharkhand 8. Karnataka 9. Madhya Pradesh 10. Maharashtra 11. Mizoram 12. Odisha 13. Puducherry 14. Rajasthan	1. Tamil Nadu 2. Nagaland 3. Delhi 4. Manipur 5. Meghalaya 6. Assam 7. Uttar Pradesh 8. Uttarakhand	

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		15. Sikkim		
		16. Tripura		

CPCB's observations based on the above assessment is given below :

- i. All States and Union Territories have submitted action plans approved by River Rejuvenation Committee (RRC) of respective State Govt./ UT Administrations.
- ii. CPCB has reviewed action plans w.r.t. Priority I and Priority II polluted river stretches. CPCB has reviewed action plans w.r.t. Priority I and Priority II polluted river stretches. So far, 60 action plans out of 61 Priority I and Priority II polluted river stretches pertaining to 18 States & 1 UT have been approved by CPCB Task Team.
- iii. Out of 31 States/ UTs, 12 States/UTs (Daman, Diu and Dadra Nagar Haveli, Delhi, Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Manipur, Mizoram, Odisha, Puducherry, West Bengal) have submitted Performance/ Bank Guarantee to CPCB.
- iv. None of the States (Assam, Delhi, Manipur, Meghalaya, Nagaland, Tamil Nadu, UP & Uttarakhand) have submitted compensation for delay in submission of action plans or submission of incomplete action plans to CPCB.

3.10.3 Recommendations

- i. All States/ UTs are required to ensure implementation of all action plans within 2 years (from 1st April, 2019) for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e. BOD <3 mg/L and FC <500 MPN/100 mL).
- ii. States/ UTs viz - Andhra Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh and Uttarakhand are required to submit Performance/ Bank Guarantee to CPCB.
- iii. States/UT (Assam, Delhi, Manipur, Meghalaya, Nagaland, Tamil Nadu, UP & Uttarakhand) to submit compensation for delay in submission of action plans or submission of incomplete action plans to CPCB.

3.11 Rejuvenation of water bodies.

3.11.1 Information Status:

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Hon'ble NGT vide order dated 10.5.2019 in O. A. No 325 of 2015 M.A. No 26/2019 in O.A. No. 325/2015 in the matter of Lt. Col. Sarvadaman Singh Oberoi Vs UOI & Ors before Hon'ble NGT, PB, New Delhi directed all the States and UTs to review the existing framework of restoration all the water bodies by preparing an appropriate action plan within three months and furnish to the CPCB.

CPCB prepared Indicative Guidelines for Restoration of Water Bodies and circulated to all States/ UTs so that it can be used as a reference for preparation of action plans for restoration of water bodies in respective States/UTs in compliance to Hon'ble NGT order dated 30.5.2019 in O. A. No 325/2015.

State-wise information received for Polluter Stretches and Rejuvenation of water bodies is attached as Annexure XV.

3.11.2 Observation:

Information provided by States/UTs have been assessed for key parameters. An overview of the assessment is given in the table below:

PERFORMANCE OF STATES/UTs (Rejuvenation of Water Bodies)			
Restoration of Water Bodies	(on the basis of review by Expert Committee)	(on the basis of submission of action plans)	(for non-submission of action plan)
	None	1. Andaman and Nicobar Islands 2. Chandigarh 3. Chhattisgarh 4. Haryana 5. Meghalaya 6. Tamil Nadu 7. Tripura	1. Andhra Pradesh 2. Arunachal Pradesh 3. Assam 4. Bihar 5. Dadra and Nagar Haveli 6. Daman and Diu 7. Delhi 8. Goa 9. Gujarat 10. Himachal Pradesh 11. Jammu and Kashmir 12. Jharkhand 13. Karnataka 14. Kerala 15. Lakshadweep 16. Madhya Pradesh 17. Maharashtra 18. Manipur 19. Mizoram 20. Nagaland 21. Odisha 22. Puducherry 23. Punjab 24. Rajasthan 25. Sikkim

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			26. Telangana	
			27. Uttar Pradesh	
			28. Uttarakhand	
			29. West Bengal	

CPCB's observations based on the above assessment is given below:

- i. Out of 36 States/ UTs, only 5 States provided action plans for restoration of water bodies.
- ii. None of the States have submitted action plans in line with indicative guidelines for restoration of water bodies circulated by CPCB.
- iii. Based on water quality assessment of lakes, ponds & tanks in the year 2018, out of 435 locations monitored, 357 locations were not complying to the primary water quality criteria for bathing.

3.11.3 Recommendations:

The response from the States/UTs is not adequate to ensure restoration of all polluted water bodies (Lakes or Ponds) which may be attributed to

1. No basic information on water bodies is available as the ponds or lakes are owned by both public and private owners.
2. Data on water quality of water bodies may not be readily available to arrive at the water body is polluted or not.
3. No provisions for prioritisation of water bodies;
4. Lack of knowledge or guidelines on the subject matter; and
5. There is confusion among the States/UTs w.r.t the definition of water bodies as it covers all running water bodies as well as stagnant water bodies such as lakes or ponds or tanks. Clarity should be given in this regard.

In view of above, Hon'ble NGT may consider following actions as proposed by CPCB and to consider extension of appropriate time for preparation of action plans for restoration of water bodies (especially polluted ponds or lakes) by the States/UTs and thereafter CPCB to review the action plans received from States/UTs as well as implementation of action plans by the concerned States/UTs.

Expert Committee constituted by CPCB suggested CPCB for seeking time of six months for finalisation of the guidelines for restoration of Ponds or Lakes. However, CPCB will make all possible efforts to finalise the same within four months' time.

Thereafter, all the concerned States or UTs may finalise and submission of action plans within four months to CPCB as well as implementation of approved action plans in a time frame of not more than two years. Details of activities to be performed are detailed below: -

PROPOSED ACTIVITIES FOR REJUVENATION OF WATER BODIES

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S.N o.	Activity Proposed	Organization Responsible
1	Identification and Geo-Tagging of Ponds or Lakes in the Country	NRSA, State Space Application Centre and Concerned State Departments
2	Assessment of Water Quality of Ponds or lakes	Through Laboratories approved under E. (P) Act, 1986 by the Concerned State Department/ULBs/State Environment Dept. / SPCB/PCC
3	Prioritization of Ponds or Lakes for restoration in consultation with the respective SPCB	State Environment Department/ SPCB/PCC
4	Preparation and submission of action plans for restoration of prioritized ponds or Lakes to CPCB for random scrutiny of proposed action plans	State Environment Department/ SPCB/PCC
5	Execution of approved action plans	State Environment Department/ SPCB/PCC under the overall supervision of Principal Secretary, Environment Department

3.12 Non-attainment cities

3.12.1 Information Status:

122 non-attainment cities are located 23 States/UTs. In compliance with Directions of Hon'ble NGT to matter (O.A. 606/2018), no information has been provided by 16 states - Jammu & Kashmir, Jharkhand, Himachal Pradesh, Meghalaya, Nagaland, Orissa, Punjab, Telangana, U.P., Uttarakhand, West Bengal, Bihar, Tamilnadu, Karnataka, Chandigarh and Assam, on the thematic area. Detailed information provided by remaining 7 State/UTs (Andhra Pradesh, Chhattisgarh, Maharashtra, Delhi, Gujarat, Madhya Pradesh & Rajasthan) is placed at Annexure VI

3.12.2 Observations

Information received from 07 States /UTs have been assessed for key parameters and the same is given below

Performance of States/UTs (Non-attainment Cities)				
Parameter	Performance of States			No information Available
	Good	Average	Poor	
Submission of city action plans	Chhattisgarh Delhi Gujarat	Andhra Pradesh		

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Performance of States/UTs (Non-attainment Cities)				
Parameter	Performance of States			No information Available
	Good	Average	Poor	
	Madhya Pradesh Maharashtra Rajasthan			
Evaluate existing air quality monitoring mechanism	Andhra Pradesh Chhattisgarh Delhi Gujarat Madhya Pradesh Maharashtra Rajasthan			
Preparation of Air Quality Monitoring Committee	-do-			
Submission of Quarterly Progress Report	Chhattisgarh Delhi Madhya Pradesh Rajasthan Gujarat		Andhra Pradesh Maharashtra	
Submission of Consent Fund Details		Chhattisgarh	Andhra Pradesh Delhi Gujarat Madhya Pradesh Maharashtra Rajasthan	
Development of Public complaint redressal mechanisms	Delhi Madhya Pradesh	Maharashtra		Andhra Pradesh Chhattisgarh Gujarat Rajasthan
Submission of Emergency Response System		Delhi		Andhra Pradesh Chhattisgarh Gujarat Madhya Pradesh Maharashtra Rajasthan

*Good: Component Submitted, Average: component partially submitted; Poor: no information submitted

CPCB's observations based on the above assessment are given below:

- i. In compliance with directions of Hon'ble NGT in the matter (O.A. 606/2018), out of 122 cities in 23 States/UTs (102 + 20), status is received from only 39 cities (07 States)
- ii. City action plans prepared through respective State Air Quality Monitoring committee (AQMC) and approved for implementation for 39 non-attainment (NA) cities in 07 States.

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- iii. Public Complaint Redressal Mechanisms (PCRM) is to be prepared by all the states harbouring Non-attainment cities. Out of 39 PCRM developed by 10 cities.
- iv. Out of 39 cities, Quarterly Progress Report is received from 17 cities.
- v. Emergency response system to be developed by all States/UTs is part of order, and no compliance status received from any of the state, except Delhi.
- vi. No information/ proper information on details of consent funds along with action plan as per Hon'ble NGT's order provided by all 7 States.

3.12.3 Recommendations:

- i. Compliance status/Quarterly Progress Report may be submitted as per enclosed format (Annexure XVI A).
- ii. Public complaint redressal mechanism is to be prepared by all the States/UTs harbouring Non-attainment cities, as per Hon'ble NGT order dated November 21, 2019 (O.A. 681/2018), the portal is to be developed and report to be submitted by respective States to CPCB within 2 months from the order.
- iii. Andhra Pradesh and Tamil Nadu to submit city action plan of newly added non-attainment cities in their state by January 31, 2020, as per Hon'ble NGT order dated November 21, 2019 (O.A. 681/2018).
- iv. Emergency response system to be developed by all states and submitted to CPCB by December 20, 2019, as per Hon'ble NGT order dated November 21, 2019 (O.A. 681/2018).
- v. Details of consent funds along with action plan as per Hon'ble NGT order dated August 06, 2019 (O.A. 681/2018) to be provided by all states, latest by January 31, 2020.
- vi. The States/UTs which are able to successfully control air pollution in measurable terms in respect of 122 NACs may place their successful models and best practices on their respective websites for the benefit of others. (Hon'ble NGT order dated August 06, 2019 - O.A. 681/2018)

3.3 Illegal sand mining.

3.13.1 Information Status:

Total 11 States and Union Territories (Andhra Pradesh, Chhattisgarh, Dadra and Nagar Haveli, Delhi, Goa, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Rajasthan, Tripura) have submitted information regarding the illegal mining. The information provided is per the points and directions of Hon'ble NGT OA No. 606/2018 order dated-12.09.2019 Para 4 by Tripura and Madhya Pradesh. State-wise information received for illegal sand mining is attached as Annexure XVII.

3.13.2 Observations

CPCB's observations on the information submitted by the States/UTs is given below:

- i. Information regarding action taken in respect of illegal mining in the States/UTs has been reported in the information provided by States/UTs.
- ii. No illegal mining has been reported by Dadra and Nagra Haveli, Delhi, Kerala and Tripura.
- iii. Brief of action taken by States/UTs regarding the illegal mining is as follows:
 - Local regulations framed regarding sand mining operation
 - Special Committee at District level setup for implementation of regulations of sand mining.
 - Meetings held at State/District level on the matter.
 - Steps taken in compliance of Hon'ble NGT cases regarding illegal mining applicable to individual states/UTs.
 - Cases of illegal mining and amount recovered therein reported.

3.13.3 Recommendations:

- i. All States and UTs should submit the information in the matter of Hon'ble NGT OA No. 606/2018 as per Para 4 of order dated-12.09.2019 regarding the illegal sand mining.

3.14 Ground water extraction/contamination and re-charge

The States/UTs have not provided any status on the issue- illegal extraction of ground water, hence, CPCB has no comments to offer. A note has been prepared w.r.t Ground Water extraction issues and is enclosed at Annexure XVIII.

Item No. 04 & 05

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
(Through Video Conferencing)**

Original Application No. 804/2017
(Earlier O.A. No. 36/2012)

WITH

M.A. No. 1302/2018

IN

Interlocutory Application No. 63

IN

W. P. (C) No. 657/1995

Rajiv Narayan & Anr

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

With

The Research Foundation for Science, Technology
And Natural Resource Policy

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 12.04.2019

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s): Mr. Raj Panjwani, Senior Advocate
Ms. Meera Gopal, Advocate
Mr. Rahul Choudhary, Advocate

For Respondent (s): K. Enatoli Sema and Mr. Amit Kumar Singh Advocates
for State of Nagaland
Mr. Manish Kumar, Advocate
Mr. Sriansh Prakash and Mr. Raj Kumar Maurya,
Advocates for EDMC
Mr. Daleep Dhyani, Advocate for UPPCB
Mr. Amit Tiwari, Advocate for SOUP
Mr. Raj Kumar, Advocate for CPCB

ORDER

1. The issue for consideration is non-compliance of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. The status reports filed by the States were considered with reference to the following:

- “1. As to what is the total generation of hazardous waste in their respective States.
 2. Which agencies have been authorized in terms of rules to collect, transport, disposed of and the process of the hazardous wastes.
 3. What is the capacity of the plants which have been given due authorization for that purpose.
 4. What happens and how the remnant hazardous waste is being dealt with.
 5. The members who have been allotted any of the authorized plants and are not sending hazardous waste to those plants. What action the concerned authorities i.e. the State Government and the respective States and State Pollution Control Boards have taken so far, against such members.
- These details should be filed within one week from today.”

2. Vide order dated 30.07.2018, the Tribunal found that Central Pollution Control Board (CPCB) was required to prepare a consolidated review report every year under Rule 20, based on reports of the State Pollution Control Boards (SPCBs). The Tribunal directed as follows:

- “(i) All the States, where the hazardous waste is being generated must set up Treatment, Storage and Disposal Facility (TSDF) facility of adequate capacity at appropriate locations within three months from today and forthwith imitate action against erring units.
- (ii) Central Government and Central Pollution Control Board must forthwith monitor the compliance of the rules by reviewing the need for action in all the states.
- (iii) The Central Pollution Control Board may forthwith constitute a monitoring Committee for the purpose it may appoint a Nodal Officer exclusively to oversee the compliance of the rules. The Member Secretary CPCB may act as a Nodal Officer till a substitute is found. The action taken must be placed on the website of the Central Pollution Control Board within 3 months from today. Compliance report be filed before this Tribunal on or before 30th November, 2018, which will be treated as a separate application.”

3. Setting up of Treatment, Disposal and Storage Facility (TSDF) being an urgent and important requirement which was required to be monitored as above. In compliance of the directions of the Tribunal, an affidavit has been filed on 08.02.2019 by the CPCB stating that on 09.08.2018 a Monitoring Committee was constituted headed by Dr. Ajay A. Deshpande, former Expert Member, NGT. CPCB also issued directions under Section 5 of the Environment (Protection) Act, 1986 on 30.01.2019 for all the SPCBs/Pollution Control Committees (PCCs) as follows:

- a) Ensure that all the solvent recovery industries in the state have mandatory Authorisation for the same in compliance with the SOP and Checklist issued by CPCB for solvent recovery units, within one month. The said SOP and checklist have been circulated to all SPCBs/PCCs vide letter no. B29016/(SC)/1(55-IV)/17-18/WM-II/18152-86 dated 08/3/2018 and is also available at CPCB website http://cpcb.nic.in/uploads/hwmd/utilizaionspent_solvent.pdf.*
- b) Ensure that these solvent recovery industries shall immediately follow the SOP, for safe and scientific spent solvent handling, processing and storage.*
- c) Ensure that such solvent recovery units shall comply with the provisions of HOWM Rules, 2016, in terms of interstate transport of Hazardous waste and manifest document prescribed under Rule 18 and 19 of the HOWM Rules, 2016, with immediate effect. Stringent action be taken against the erring industries who are giving the spent solvent to such recycling industries without following the manifest systems.*
- d) Conduct industry interaction programs within a month to create awareness and sensitization on HOWM Rules, 2016 with all the stakeholder industries of Spent Solvent generation/utilization.*
- e) Prepare an inventory of such solvent recovery units and publish the same on their website for information of all, stakeholders within one month with copy to CPCB within one month.”*

4. The Monitoring Committee furnished its interim report in compliance of orders of this Tribunal after reviewing the various aspects of enforcement of the Rules proposing actions as follows:

“

Sl.	Observations	Proposed Actions (Responsible
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No.		Agency and timeline of action)
1	<p>Hazardous waste identification: - Uniformity in assessment, Byproducts and solvents (Details in Chapter 4 – Section 4.1.1)</p> <p>a. The Rules define by-products very categorically linking it to its intended use. Presently, there is no verification or appraisal of such continuous intended use before classifying certain waste as a byproduct. There is a need for SOP/guidelines for identification of by-products based on the manufacturing process as well as intended use.</p> <p>b. Applicability of various clauses of the HW Rules to the 'other waste' also needs to be defined clearly in the Rules itself.</p> <p>c. Presently, there is hardly any scientific examination or scrutiny for identification and quantification of HW prior to grant of authorisation.</p> <p>d. The HW Rules basically focuses on a close loop approach for the HW Management which is reflected in the adoption of manifest system in order to ensure that the HW movement is continuously tracked till its final disposal (Cradle to Grave approach).</p> <p>e. However, in case of spent solvent sent for solvent recovery, such manifest system seems to be ending at the door step of the spent solvent recycler. It would be advisable to continue this manifest system right upto the actual user of such recovered solvent from solvent recovery plant to ensure appropriate regulation of spent solvent plant performance and appropriate accounting and use of recovered solvent.</p> <p>The similar approach is also required to be adopted in all cases of recycling/recovery/ utilisation such as used oil, waste oil, lead scrap, spent acid, spent catalyst, etc.</p>	<p>1. There is a need to urgently prepare a guidelines or protocol on how to decide the by-product on specific criteria. This can be done based on chemical process involved in order to bring consistency in approach. (MoEF&CC and CPCB: 06 months)</p> <p>2. Other waste is presently missing from all the regulatory actions, including inventory. It is necessary to bring such waste in regulatory domain, as envisaged in the rules. (SPCBs/PCCs: inventory of 2018-19 onwards).</p> <p>3. SPCBs/PCCs need to take steps to ensure closing of the manifests received and reconcile the HW handling data. This work is humungous and need support in terms of software and online submissions. (SPCBs/PCCs).</p> <p>4. Pan India IT based solution is suggested for tracking HW. Such integrated data handling and management solution is under implementation by CPCB which the committee would like to review in next phase.</p> <p>5. The pre-processing and recycling/utilisation facilities need to be treated as critical environmental infrastructure facilities for sound environmental management of hazardous waste so as to ensure enhanced level and frequency of enforcement and environmental monitoring. Elaborate protocols are needed to be developed. (SPCBs/PCCs: continuous activity).</p> <p>6. According to Rules, the identification and quantification of the hazardous waste generation is to be done at the authorisation stage itself and therefore, it is necessary that SPCBs shall adopt the scientific principles as enumerated for such identification and quantification of HW. (SPCB/PCCs: Immediate)</p>

2.	<p>Grant of Authorisation by SPCBs/PCCs (Details in Chapter 4 – Section 4.1.2)</p> <p>a. The Rules stipulates requirement of enclosing field inspection report while granting authorisation</p> <p>b. The committee observed that only in few cases the SPCBs are enclosing the said field inspection report alongwith authorisation granted.</p> <p>c. Further, such filed inspection report lacks details w.r.t to adequacy of the facilities on storage, transportation, treatment, recycling/utilisation, disposal, etc.</p>	<p>1. Uniform format for visits and inspections of HW handling facilities is necessary to ensure comprehensive inspections as per the provisions of the Rules. A format is proposed by the Committee which is given at Annexure XVI.</p> <p>2. The authorisation document should clearly stipulate respective mode of management (such as common or captive incineration/secured landfilling or pre-processing or recycling or utilization or export or captive storage, as applicable) for each category of HW being generated. (SPCB/PCCs: immediate)</p>
3.	<p>Inventory (Details in Chapter 4 – Section 4.2)</p> <p>a. Inventories are based on reporting by the generators/occupiers through annual report as well as authorisation.</p> <p>b. The inventory data do not cover all the industries who have been granted authorisation. It also does not cover the hazardous waste from domestic sources, interstate movement, import/export of hazardous waste, and other waste.</p> <p>c. The inventories are not verified and validated based on the scientific principles by the State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs).</p> <p>d. There is a substantial variation in the quantity declared in the authorisation and actual quantity of hazardous waste generation declared in the annual report.</p> <p>e. Quantities reported in the captive utilisation of hazardous waste appear to be on higher side and are not verified.</p> <p>f. There are no standard protocol/guidelines for preparation of HW inventory based on sound scientific principles and approach which is a basic necessity to ensure uniform and consistent preparation of HW inventory by different</p>	<p>1. Standard guidelines and protocol based on scientific fundamentals for preparation of inventory should be prepared by CPCB and strictly followed by the SPCBs/PCCs to ensure reliable and credible inventory. (SPCBs/PCCs and CPCB/: <u>inventory of 2018-19 onwards</u>)</p> <p>2. SPCBs/PCCs shall verify and scientifically validate the HW data and facilities before grant or renewal of authorisation. (SPCBs/PCCs: <u>inventory of 2018-19 onwards</u>)</p> <p>3. There is an emergent need to develop sectoral process based reasonable HW generation range to have uniformity in assessing the HW generation from industries and benchmarking the same with its peers, rather than solely depending on industry data. (SPCBs/PCCs: continuous activity)</p> <p>4. All occupiers who have authorisations shall submit the Annual report and in case of non-compliance, action needs to be taken by SPCB/PCC. (SPCBs/PCCs: <u>inventory of 2018-19 onwards</u>)</p> <p>5. The timelines for inventory preparation as envisaged in Rules be strictly complied with by SPCBs/PCCs. Preparation of country's inventory by CPCB is dependent on such timely submission by SPCBs/PCCS. (SPCBs/PCCs and CPCB)</p>

	<p>SPCBs/PCCs.</p> <p>4. Enforcement actions. (Details in Chapter 5)</p> <p>a. Though there have been several incidents on record of noncompliance of HW Regulations resulting in discharge of HW in environment, the powers vested with the CPCB/SPCBs/PCCs for recovering environmental damages under Rules 23(1) has not been invoked.</p> <p>b. Only three States namely Maharashtra, Telangana and Madhya Pradesh have reported prosecution actions under Section 15 of EP Act, 1986.</p> <p>c. There are hardly few cases where the SPCBs/PCCs have invoked provisions related to revocation and/or refusal of authorisation in view of the observed noncompliances.</p> <p>d. Inspection report, mostly is not attached along with the authorisation granted. Wherever inspection reports have been attached such reports lack in required information for appraisal.</p>	<p>1. SPCBs/PCCs shall invoke the powers conferred under clause 23 (1) and (2) of the Rules, related to all damages caused to the environment or third party due to improper handling and management of the hazardous and other wastes, and non-compliance respectively. CPCB has already issued guidelines for Liability assessment, for invoking clause 23(1) and (2) of HW Rules. CPCB shall also take consequential actions under clause 23 (1) as per the said guidelines wherever directions under section 5 of the E(P) Act have been issued by CPCB, noticing environmental damages. <u>(SPCBs/PCCs and CPCB: Immediate).</u></p> <p>2. The habitual and serious defaulters shall be prosecuted under provisions of the Environment (Protection) Act, 1986. Other alternative regulatory actions including refusal and revocation of Authorisation can also be explored following the due process. <u>(SPCBs/PCCs: Immediate)</u></p> <p>3. Non-compliance to be documented while processing authorisation for renewal or inspections in order to invoke powers of refusal or revocation of Authorisation as per Rules. <u>(SPCBs/PCCs: Immediate)</u></p> <p>4. Urgent updation of concerned websites of SPCBs/PCCs/CPCB with respect to all enforcement actions along with details of industries and action taken. <u>(SPCBs/PCCs/ CPCB: Immediate)</u></p> <p>5. There is need to have an enforcement framework for effective enforcement of Rules based on principle of proportionality and also, precautionary principle. Such framework will remove ambiguity in regulatory actions and bring transparency, predictability and consistency in enforcement for actions. <u>(SPCBs/PCCs/CPCB: within 06 months)</u></p>
5.	<p>Hazardous waste utilisation and recycle. Issues and need of improvements (Details in Chapter 4 – Section 4.3)</p> <p>a. The inventory data shows skewed variation in utilisation of HW pattern among different</p>	<p>1. The inventory data needs to be verified and validated before accepting the same. The states shall adopt the proposed guidelines immediately while preparation of HW inventory. <u>(SPCBs/PCCs: Immediate)</u></p>

<p>States. For example in Gujarat about 36 % of the HW generated is either recycled or utilised, whereas in Maharashtra 0.98 % HW generated is recycled and utilised.</p> <p>b. Maharashtra is not authorising and promoting the co-processing which is one of the major option of utilisation of HW, although the HW Rules provided hierarchy of waste management promoting recycle and utilisation of the HW. There is a need to have a consistent and scientific approach to promote the HW recycle and reuse in consonance of the objective of the HW Rules expressed in terms of hierarchy, throughout the country.</p> <p>c. There are certain environmental risks associated with the recycle and utilisation of the HW in case of non-compliance. It is therefore necessary that such recycle and utilisation of HW is strictly regulated in terms of the performance of such recycle and utilisation.</p> <p>d. There is need to immediately prepare guidelines for high volume low impact waste like slags from pyrometallurgical operations, fly ash, red mud, Jarosite, mine tailings and ore beneficiation rejects.</p> <p>e. More clarity is required on the application of Rule 9 particularly in case of captive utilisation. Presently, it is very difficult for SPCB/PCC field staff to investigate and analyse such claims of industry. Therefore, presently, the data given by industry is relied upon in totality.</p> <p>f. The pre-processing facilities collect the HW from different industries and carry out the homogenization/blending activities to achieve the required calorific value and other desired specification for co-processing. As this industry sector indulge in handling the wide range of</p>	<p>2. There is emergent need of consistent approach in recycle and utilisation of HW in terms waste management hierarchy mandated in the rules across all the States in order to ensure the level playing field for the industry. This can be achieved by advocacy programme such as concept of waste exchange banks, know your waste programme, circular economy, documentation of the success stories along with regulatory interventions wherever required. (SPCBs/PCCs)</p> <p>3. It is also necessary to develop certain benchmarks/guidelines for the possibilities of HW recycle/utilization on case to case basis. For example, for co-processing at Cement plants the Thermal Substitution Ratio (TSR) can be an objective criterion to decide the potential to use HW for utilisation purpose. The range of TSR at different cement plants can be collated to develop a database for sound coprocessing practices. (SPCBs/PCCs)</p> <p>4. The concept of environmental benchmarking among the similar industries generating HW can be useful to ensure consistency and uniformity. The emerging trend of circular economy would be a key intervention for rationalising the HW generation and reuse/utilisation (SPCBs/PCCs: continuous activity)</p>
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	wastes from different industries, it would be prudent to have improved enforcement regime in terms of number of inspections, detailing of inspection, environmental monitoring and reporting of waste receive/disposed etc. on the lines of common facilities.	
6.	<p>Common Treatment, Storage and Disposal facilities: reporting. (Details in Chapter 4 – Section 4.5)</p> <p>a. The Committee has observed that in some cases the TSDF rejects the consignment received from the waste generator for non-compliance of acceptance criteria. This consignment is returned back to the waste generator.</p> <p>b. The site selection criteria, design and layout are the critical parameters for establishment of the TSDF. In addition, waste storage, stabilization, landfilling, incineration and leachate management are critical operations. The committee has observed non-compliance of these guidelines For example TSDF at Balotra, Roorkee, Kanpur, etc.</p> <p>c. Of 18 SPCBs/PCCs having common secured landfills, 06 SPCBs have still not opened Escrow Account provision for postclosure monitoring of common SLF.</p> <p>d. Compliance of the Hon'ble NGT orders dated 30/07/2018 with regard to setting of TSDFs and taking imitating actions against erring units- Only Goa and Odisha have submitted action plan with timeframe for setting of Common SLF + Incinerator and Common Incinerator respectively. Only Odisha has taken action against erring units</p>	<p>1. The practice of returning the HW consignment needs to be immediately stopped and the consignment needs to be stored within the TSDF with information to the waste generator and also the concerned SPCB. The TSDF shall take appropriate measures to dispose this waste at the risk and cost of the waste generator under due information to the SPCB immediately on priority. Though the present guidelines prescribed that the waste shall be sent back to the waste generators, this practice needs to be immediately discontinued in view of non-accounting of the waste once it is out of manifest protocol and the associated environmental risks. <u>(SPCBs/PCCs/TSDFs: immediate)</u></p> <p>2. SPCBs/PCCs shall conduct environmental audit including the site selection criteria, design and layout for the TSDFs in next one year. They can engage expert institutes for the purpose and seek CPCB's technical advice on the ToR of the study, if required. <u>(SPCBs/PCCs: 01 year)</u></p> <p>3. All the Common SLF shall disclose the mandatory amount deposited in Escrow Account annually to SPCB/PCC, CPCB and display on their website. SPCB/PCC to take action in case of non-compliance. <u>(SPCBs/PCCs: immediate)</u></p> <p>4. It is necessary that the Hon'ble NGT orders dated 30/07/2018 with regard to setting up of TSDF and taking imitate actions against erring units be strictly complied with by the concerned State/UT Government and SPCBs/PCCs. <u>(State/UT Governments and SPCBs/PCCs: immediate)</u></p>
7.	<p>Contaminated sites: Status, identification, need of urgent action, investment, capacity building,</p>	<p>1. It is necessary that such contaminated site database is developed after due verification by SPCBs/PCCs and validation by</p>

<p>guidelines. (Details in Chapter 4 – Section 4.7)</p> <p>The Committee has initiated work on monitoring of direction of the Hon'ble Supreme Court with regard to contaminated site WP 657/1995 and has discussed the matter with SPCBs/PCCs/CPCB and the petitioner Shri Sanjay Parikh, Adv. The Committee recognised the monitoring of this aspect has a large scope and the committee intends to focus on this specific issue in coming days. In the meantime committee has made following preliminary observations and record the need of immediate interventions.</p> <p>a. MoEF&CC/CPCB have identified total 329 potentially hazardous waste contaminated sites and subjected them for screening based on verification by the SPCBs. After the verification by SPCBs, the total 144 sites have been identified as contaminated sites and 57 sites are still under evaluation. The Committee is of the opinion that the identification of the contaminated sites is an elaborate process involving objective criteria and standard protocols. It is expected that SPCBs and CPCB shall follow such objective criteria and standard protocol to identify the contaminated sites and also to assess their scope and extent of contamination.</p> <p>b. Out of 144 identified contaminated sites, CPCB has prioritised 8 sites for which DPR for assessment and remediation has been prepared. However, there is an urgent need to execute this remediation plan on top priority. The Committee has been informed that the required financial resources for such remediation have not been mobilised so far.</p> <p>c. There is a change in number of such identified sites over the period which</p>	<p>CPCB or some expert third party, so as to ensure the reliability of such data base. The entire process of screening, verification and validation needs to be as per standard protocol and the data needs to be owned by both SPCB/PCC and CPCB, not leaving the things at state level alone. (SPCBs/PCCs/CPCB: continuous activity)</p> <p>2. CPCB should update national priority list of such confirmed contaminated sites. (CPCB: continuous activity)</p> <p>3. Concerned SPCBs/PCCs shall identify the responsible person/industry, for each of these contaminated sites for suitable application for polluter pays principle for the remediation programme in line with the CPCB guidelines 'Implementing Liabilities for Environmental Damages & Disposal of Hazardous Waste and Penalty'. (SPCBs/PCCs: Immediate and continuous activity)</p> <p>4. Both SPCBs and CPCB shall continue the process of identification of probable contaminated sites and subject them to identification criteria and decide their status as well as scope and extent of such contamination. This process is a dynamic and need to be a regular feature of enforcement. (SPCBs/PCCs and CPCB: continuous activity)</p> <p>5. In case of the contaminated sites where the polluter is not identified, the State/UT Government would be required to finance remediation of such sites to safeguard the people living in contaminated areas from adverse health effects, in terms of their constitutional responsibility to protect and improve the environment. (States/UTs Government and SPCBs/PCCs)</p> <p>6. SPCBs/PCCs need to initiate immediate intervention measures for containing immediate threats from existing contaminated sites (in both active and inactive sites) and also further ingress of HW. (SPCBs/PCCs: immediate)</p>
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	could be due to listing/delisting of probable contaminated sites as a result of increased enforcement and monitoring activities, and variations in criteria.	
8.	<p>Impact of other regulations (Details in Chapter 4 – Section 4.2)</p> <p>The committee notes that HW resulting from enforcement of other regulations like E-waste, SW rules etc are presently not accounted in the HW management plans under HW rules. Committee finds a need to consider impact of other regulations while planning HW management including preparation of inventory and assessing the impacts.</p> <p>a. As per E-waste regulation, in case of fluorescent and other mercury containing lamp where recyclers are not available, such waste is channelized to common TSDF for disposal after pretreatment/immobilization of mercury. Such waste should also be accounted into HW inventorisation.</p> <p>b. In case of solid waste rules, there is a separate category of domestic HW which is expected to be disposed in the Common Hazardous facility, however, there is no data or information available on the quantity and quality of such domestic HW available so far.</p>	<p>SPCBs/PCCs and CPCB need to take cognizance of these aspects while enforcing the relevant rules and also, preparation of HW inventory and other interventions. (SPCBs/PCCs and CPCB)</p>
9.	<p>Import and export. (Details in Chapter 4 – Section 4.6)</p> <p>a. Harmonization of Basel codes with ITC (HS codes): The Ministry (MOEF) provides permission on the basis of Basel codes while DGFT uses HS codes. There is a need to synchronize the two codes to avoid confusion.</p> <p>b. Risk management assessment: The customs authorities use the risk management system (RMS) to enable low risk consignments to be cleared based on the acceptance of the importer's self-assessment and without examination. Roughly 30 percent of containers covered under risk management out of</p>	<p>Committee would deliberate on this issue further for making detailed recommendations. Still however, following recommendations on co-ordination and data management are made;</p> <p>1. There is need to synchronise Basel code and HS codes to cover all scheduled items as per HW rules in customs verification and control more effectively. <u>(MoEF&CC, Custom and Port Authorities)</u></p> <p>2. CAG has come out with details of illegal HW import and its storage in ports and ICDs. This needs to be verified on priority and action be taken for disposal of the same in terms of earlier orders of Hon'ble Supreme Court. <u>(Custom and Port Authorities)</u></p> <p>3. Improve traceability of importers:</p>

	<p>which 10 percent are physically verified. There are different types of waste streams which have not been integrated in the RMS. There is a need to review the import/export data of various waste streams and include them in RMS. Further, waste streams in Schedule III – Parts A, B and D and Schedule VI that are often mis-declared by importers need to be identified and added to the RMS.</p> <p>c. Collaboration between regulating authorities: Regular interaction between the Ministry of Environment, Forest and Climate Change, CPCB, SPCBs/PCCs, customs and ports authorities should take place with frequent consultative meetings and trainings in order to avoid working in silos.</p>	<p>The Customs authorities could make the registration process of importers more stringent as there have been cases where importers have never been able to be traced when their illegal imports were intercepted <u>(MoEF&CC, DGFT, Custom and Port authorities)</u></p>
10	<p>Capacity building in CPCB and SPCBs/PCCs and other agencies (trained adequate manpower, laboratory, budget) (Details in Chapter 4 – Section 4.7 and 4.8)</p>	<p>1. Each of the SPCBs/PCCs/Custom/TSDf, as listed in report, need to have at least one laboratory where all HW parameters as required under the Rules can be analysed. <u>(SPCBs/PCCs/Custom/TSDf: 06 months)</u></p> <p>2. Capacity building in SPCBs/PCCs for rapid preliminary assessment of contaminated sites, which may include practical training on use of tools for soil and groundwater screening such as hand-held XRF instruments, Colorimeter, PID for VOCs/ SVOCs, hand operated augers, groundwater pumps, level meters, etc. <u>(CPCB: 06 months)</u></p> <p>3.SPCBs/PCCs and CPCB needs capacity building in terms of qualified and experienced manpower and also, tools and techniques for effective governance. Committee is informed about steps being taken by SPCBs and would review the same in detail. <u>(MoEF&CC, State/UT Government, CPCB and SPCBs / PCCs: Immediate)</u></p>
11.	<p>Duties performed by State/UT Govt. as stipulated under the HOWM Rules, 2016 (Details in Chapter 5) The State Govts. have been</p>	<p>1. There is need to sensitize State/UT Govts. about duties required to be performed by the concerned department/agency as stipulated under Rule 5(1), 5(2),</p>

<p>entrusted with duties of authorising Dept. of Industry/other Govt. agency and Dept. of Labour/other Govt. agency with regard to allocation/earmarking of industrial space, recognition/registration/ health & safety/etc. of workers involved in recycling/ preprocessing/ other utilization activities of HW and submission of integrated plan under Rule 5(1), (2) and (3) respectively: The State Govt. has also been entrusted with duties of identification and notification of sites for common TSDF and publishing periodically inventory of disposal sites as stipulated under Schedule VII of the HOWM Rules, 2016. It has been observed that actions have not been taken on the above (except identification and notification for common TSDFs in few States) by the State/UT Govt. and there is lack of awareness among them in this regard.</p>	<p>5(3) and Schedule VII of the HOWM Rules, 2016. Hon'ble NGT may issue appropriate directions in this regard. <u>(All State/UT Govts.: Immediate)</u></p>
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5. Having regard to the sensitiveness of the issue and impact of non-compliance on environment and public health, the above recommendations need to be fully implemented and monitored by the Chief Secretaries at State Level and by the MoEF&CC and CPCB at national level.
6. The affidavit of CPCB further states that the Committee has not covered all the aspects and certain other aspects which remain to be considered include contaminated site, capacity building of regulators, issues related to import and export of hazardous waste etc. for which further time of six months is required.
7. We are of the view that the Committee must complete its task expeditiously within three months from today. In view of the fact that

two months have already gone by after the affidavit was filed, its final report may now be submitted on or before 31.07.019.

8. It is made clear that if the progress in implementation of the Rules is not found to be adequate, the States may be required to furnish performance guarantees to comply with the Rules in a time bound manner.
9. CPCB may determine the scale of compensation to be recovered for violation of the Rules within one month from today and furnish a report to this Tribunal by-email at ngt.filing@gmail.com. CPCB may furnish final action taken report in the matter on or before 15.08.019 by e-mail at ngt.filing@gmail.com.
10. The Chief Secretaries may look into the issue of capacity building of the SPCBs/PCCs to deal with the issue of compliance of the Rules.

List for further consideration on 26.08.2019.

Adarsh Kumar Goel, CP

Dr. Nagin Nanda, EM

April 12, 2019
Original Application No. 804/2017
(Earlier O.A. No. 36/2012)
DV

Item No. 01

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 804/2017

Rajiv Narayan & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 26.08.2019

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant(s):

Mr. Raj Panjwani, Sr. Advocate and Mr. Rahul Choudhary, Advocate

For Respondent (s):

Mr. Raj Kumar, Advocate for CPCB
Mr. Manish Kumar, Advocate for State of HP
Mr. Anuj Chaturvedi, Advocate for DSIIDC
Ms. K. Enatoli Sema, Advocate for State of Nagaland
Mr. Rahul Verma, AAG for State of Uttarakhand
Mr. Amit Tiwari, Advocate for State of UP
Mr. Pradeep Misra and Mr. Daleep Dhyani, Advocates for UPPCB
Mr. Mukesh Verma, Advocate for UEPPCB & MPCB
Mr. Rahul Khurana, Advocate for State of Haryana and HSPCB

ORDER

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I. Preface

1. The matter has been taken up in continuation of order dated 12.04.2019 on the subject of review of compliance of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM Rules).
2. Due to alarming situation created by generation and unscientific dumping of hazardous waste resulting in serious and irreversible damage to the environment and public health, the issue was considered by the Hon'ble Supreme Court *inter alia* in *Writ Petition No. 657/1995, The Research Foundation for Science, Technology and Natural Resource Policy Vs. Union of India & Ors., (2005) 10 SCC 510*. Directions were issued for preparation of a comprehensive report on illegal hazardous waste dump sites, inventory of generation of such waste, National Inventory for Rehabilitation of Hazardous Waste Dump Sites and Regulation of Import etc. The Hon'ble Supreme Court referred to Basel Convention and MARPOL Convention and also considered and accepted the recommendation of the High Powered

Committee on the subject of handling of hazardous waste generated by the ship breaking process and also the waste oil or such other material. MoEF&CC was directed to consider making a provision for bank guarantee by the importers using used oil, furnace oil and zinc waste to regulate illegal transboundary movement of hazardous waste. Directions were also issued for publication of toxic inventory and community participation. Timelines were prescribed for twenty nine specified activities to be undertaken by MoEF&CC, CPCB, SPCBs/PCCs. The matter was disposed of vide judgment dated 06.07.2012 reported in (2012) 7 SCC 769 reiterating continued compliance of earlier directions with further directions for scientific handling of hazardous waste including ship breaking, banning import of hazardous waste and reviewing and revising Hazardous Waste (Management and Handling) Rules, 1989 to cover the aspects not satisfactorily dealt with and also to provide adequate protection to the workers and the public.

II. Proceedings before the Tribunal

3. We may note the background of proceedings of this matter in this Tribunal. The Original Application (O.A No. 36/2012) sought regulation of polluting activities in Ghaziabad in the light of newspaper reports that Ghaziabad was topping the list of polluted areas. The application was disposed of on 13.01.2015 with certain directions. Thereafter while considering various reports on environmental pollution vide order dated 29.08.2017, scope of

proceedings was extended to all the states in the country relating to compliance of HOWM Rules, with following direction:

1. *“As to what is the total generation of hazardous waste in their respective States.*
 2. *Which agencies have been authorized in terms of rules to collect, transport, disposed of and the process of the hazardous wastes.*
 3. *What is the capacity of the plants which have been given due authorization for that purpose.*
 4. *What happens and how the remnant hazardous waste is being dealt with.*
 5. *The members who have been allotted any of the authorized plants and are not sending hazardous waste to those plants. What action the concerned authorities i.e. the State Government and the respective States and State Pollution Control Boards have taken so far, against such members. These details should be filed within one week from today.”*
4. Thereafter vide order dated 25.10.2017 the Tribunal disposed off the application with liberty to file independent application on the subject of HOWM Rules. This led to application being assigned new O.A No. 804/2017.
5. In the course of consideration of the said matter on 30.07.2018 the Tribunal noted the status of compliance of the HOWM Rules in various states and directed as follows:
- (i) *All the States, where the hazardous waste is being generated must set up Treatment, Storage and Disposal Facility (TSDF) facility of adequate capacity at appropriate locations within three months from today and forthwith imitate action against erring units.*
 - (ii) *Central Government and Central Pollution Control Board must forthwith monitor the compliance of the rules by reviewing the need for action in all the states.*
 - (iii) *The Central Pollution Control Board may forthwith constitute a monitoring Committee for the purpose it may appoint a Nodal Officer exclusively to oversee the compliance of the rules. The Member Secretary CPCB may act as a Nodal Officer till a substitute is found. The action taken must be placed on the website of the*

Central Pollution Control Board within 3 months from today. Compliance report be filed before this Tribunal on or before 30th November, 2018, which will be treated as a separate application.”

6. On 18.07.2018, the Hon’ble Supreme Court considered the prayer to deal with the issues which according to the applicant had not been earlier covered. The said issues were transferred to this Tribunal. The application mentioned the said issues to be as follows:

- A. Preparation of a National Inventory of Hazardous wastes;*
- B. Complete identification and registration of Hazardous wastes generating units in the country;*
- C. Construction of TSDF/Land fills;*
- D. Hazardous Waste Dump Sites;*
- E. Waste oil/used oil read with the order dated 23.10.2007;*
- F. Setting up of laboratories at the dock/ports;*
- G. Institutional Reforms in MoEF, CPCB, SPCB, PCC;*
- H. National policy documents on Hazardous Wastes as well as cleaner technology;*
- I. Regarding workers handling hazardous wastes.”*

7. In pursuance of the above M.A No. 1302/2018 was filed before this Tribunal. Vide order dated 05.12.2018, this Tribunal directed that the issues being connected to the implementation of judgment dated 06.07.2012 of the Hon’ble Supreme Court may be considered by the Committee constituted by the CPCB in pursuance of order of this Tribunal dated 30.07.2018 on 09.08.2018.

III. Constitution of Committee by CPCB and Direction to SPCBs/PCCs

8. We may note that the CPCB in compliance of the order of this Tribunal constituted a Monitoring Committee on 09.08.2018 and issued directions on 30.01.2019 to all the SPCBs/PCCs as follows:

“a) Ensure that all the solvent recovery industries in the state have mandatory Authorisation for the same in compliance with the SOP and Checklist issued by CPCB for solvent recovery units, within one month. The said SOP and checklist have been circulated to all SPCBs/PCCs vide letter no. B29016/(SC)/1(55-IV)/17-18/WMII/18152-86 dated 08/3/2018 and is also available at CPCB website http://cpcb.nic.in/uploads/hwmd/utilizaionspent_solvent.pdf.

b) Ensure that these solvent recovery industries shall immediately follow the SOP, for safe and scientific spent solvent handling, processing and storage.

c) Ensure that such solvent recovery units shall comply with the provisions of HOWM Rules, 2016, in terms of interstate transport of Hazardous waste and manifest document prescribed under Rule 18 and 19 of the HOWM Rules, 2016, with immediate effect. Stringent action be taken against the erring industries who are giving the spent solvent to such recycling industries without following the manifest systems.

d) Conduct industry interaction programs within a month to create awareness and sensitization on HOWM Rules, 2016 with all the stakeholder industries of Spent Solvent generation/utilization.

e) Prepare an inventory of such solvent recovery units and publish the same on their website for information of all, stakeholders within one month with copy to CPCB within one month.”

IV. Reports of the Committee, Action by the SPCBs/PCCs Further Reports of the CPCB and consideration by this Tribunal

9. **Interim Report dated 29.01.2019 by the Monitoring Committee -**

The Monitoring Committee gave its interim report dated 29.01.2019 under the following headings:

1. *Hazardous waste identification: - Uniformity in assessment, Byproducts and solvents (Details in Chapter 4 – Section 4.1.1)*
2. *Grant of Authorisation by SPCBs/PCCs (Details in Chapter 4 – Section 4.1.2)*
3. *Inventory (Details in Chapter 4 – Section 4.2)*
4. *Enforcement actions. (Details in Chapter 5)*
5. *Hazardous waste utilisation and recycle. Issues and need of improvements (Details in Chapter 4 – Section 4.3)*
6. *Common Treatment, Storage and Disposal facilities: reporting. (Details in Chapter 4 – Section 4.5)*
7. *Contaminated sites: Status, identification, need of urgent action, investment, capacity building, guidelines. (Details in Chapter 4 – Section 4.7)*
8. *Impact of other regulations (Details in Chapter 4 – Section 4.2)*
9. *Import and export. (Details in Chapter 4 – Section 4.6)*
10. *Capacity building in CPCB and SPCBs/PCCs and other agencies (trained adequate manpower, laboratory, budget) (Details in Chapter 4 – Section 4.7 and 4.8)*
11. *Duties performed by State/UT Govt. as stipulated under the HOWM Rules, 2016 (Details in Chapter 5)*

On each of the above subjects, the Committee made recommendations for time bound action.

10. **Order of the Tribunal dated 12.04.2019**- The report was considered by the Tribunal on 12.04.2019. The Tribunal accepted the recommendations and directed the Chief Secretaries of the States at the State level and Ministry of Environment, Forest and Climate Change (MoEF&CC) and CPCB at the national level to monitor the compliance of the recommendations. The Committee was directed to complete its remaining task within three months. The CPCB was to complete its report on the regime of compensation for violation of the HOWM Rules.
11. **Report of CPCB on Compensation regime** - Learned Counsel for the CPCB states that as per order of this Tribunal dated 12.04.2019, report dated 10.05.2019 has been prepared on the subject of compensation regime and will be filed, if the same has not been earlier filed.
12. **Final Report of the Committee dated 23.07.2019**- The CPCB has also filed "Final Report of Monitoring Committee on Management of Hazardous Waste" on 23.07.2019. The issues dealt with in the report are:
- I. Contaminated Sites and Related Issues
 - II. Import and Export of Hazardous Wastes and Issues
 - III. Waste Reception Facilities for wastes generated from ships and issues
 - IV. Impact of HW on Workers' Health
 - V. Status of compliance of issues with regard to orders of Hon'ble Supreme Court dated 14.10.2003

The committee has suggested disposal of accumulated waste through Treatment, Storage and Disposal Facilities (TSDFs) or on-site secured landfilling (SLF), preparation of guidelines for identification and assessment of contaminated sites, capacity building programme for officials of SPCBs/PCCs to deal with the subject, assessment of 195 sites for probable contamination, resolution of issues relating to financial arrangement between Central-State Government for remediation of contaminated sites, revising policy framework, speedy disposal of confiscated consignments imported illegally, upgrading the laboratories, finalizing procedure for taking bank guarantee from importers to safeguard against illegal import of hazardous waste, strengthening risk management systems while verifying documents for import of waste, laying down requirement of reception facilities at each cargo loading and unloading port, terminal and ship repair ports providing safeguards for the workers handling the waste, institutional reforms and finalizing a national policy for effective enforcement of the HOWM Rules. Summary of observations and recommendations of the Committee are as follows:

Sl. No.	Observations	Proposed Actions (Responsible Agency and timeline of action)
I. CONTAMINATED SITES AND RELATED ISSUES		
1	<p>Disposal of hazardous wastes accumulated at identified sites:</p> <p>(i) The Committee has observed that there are several contaminated dumpsites in various parts of country where hazardous and other wastes were</p>	<p>(i) CPCB/SPCBs/PCCs to ensure that the hazardous waste accumulated at all such identified sites shall be disposed of either through Treatment, Storage and Disposal Facilities (TSDFs) or on-site secured landfilling (SLF) on</p>

	dumped historically, which resulted in contamination of soil, groundwater and surface water thereby posing health and environmental risks.	priority to stop further contamination (CPCB/ SPCBs/PCCs: 06 months)
2	Guidelines for Identification and Assessment of Contaminated Sites: (i) The Committee notes that CPCB is working on standard uniform identification and assessment guidelines for the probable contaminated sites and any new additional sites, such guidelines will bring a consistency and uniformity in dealing with the contaminated sites issues.	(i) For a consistent and uniform application and approach across the country, guidelines for identification and assessment of contaminated sites shall be published. (CPCB: 03 months)
3	Assessment and remediation of Contaminated sites: (i) The Committee has observed that there is a need of awareness and capacity building in SPCBs/PCCs on the entire remediation process including identification, detailed assessment, DPR preparation and execution of remediation. (ii) Further, the committee notes with regret that even today there are about 195 probable contaminated sites (329- 134) which needs a thorough assessment for its confirmation as contaminated site or otherwise. Though the DPRs of 17 sites out of 21 are prepared under NCEF Project and the same have been forwarded to respective State Governments and State Boards. However, no remediation efforts have been initiated at such sites.	(i) Capacity building program for officials of SPCBs/PCCs on the entire process of remediation, which may include practical training on use of tools for soil and groundwater screening such as hand-held XRF instruments, Colorimeter, PID for VOCs/ SVOCs, hand operated augers, groundwater pumps, level meters, etc. shall be organized by CPCB. (CPCB: 06 months) (ii) Assessment of about 195 probable contaminated sites and any new additional sites recommended by CPCB/SPCBs/PCCs shall be completed within period of 1 year after publication of such guidance document by CPCB. (CPCB/SPCBs/PCCs: 1 year) (III) For effective implementation of the remediation plan at State level, Empowered Monitoring Committee chaired by Principal Secretary, Department of Environment having

		<p>representatives from department of Industries, SPCB/PCC, Ground water development agency, etc. shall be constituted.</p> <p>(State Govt: 04 months)</p>
4	<p>Financial Arrangements for remediation of contaminated sites:</p> <p>(i) The Committee while taking note of public trust doctrine read with provisions of section 9 of E (P) Act, it is the duty of the Govt. both Central and State to protect environment by taking remedial measures irrespective of the financial arrangements which seems to be a matter of ongoing deliberations.</p>	<p>(i) Financial arrangements between Central-State Governments for the proposed remediation projects shall be resolved immediately so that the remediation works as proposed in DPRs can be undertaken on priority. These DPRs (2017-18 and 2018-19) may need to be revisited if no action is taken in a reasonable time for execution of remediation works.</p> <p>(ii) Govt. should take up on priority not only remediation projects at the sites where DPRs have been prepared but also the assessment of about 195 sites, besides any new addition of potentially contaminated site, if any. (MoEF&CC/State Govt.: 06 months)</p>
5	<p>Networking of Academic and Research Institutes:</p> <p>(i) Execution of remediation program would require necessary interdisciplinary expertise at the SPCBs/PCCs. The CPCB/SPCBs/PCCs may find it difficult to work on these aspects unilaterally and therefore there has to be coordination and information sharing among these agencies beside developing a network of academic and research institutes which can help in creating an "Expertise Pool". (ii) The committee also notes that a part of such capacity building efforts specific action research programs can be initiated by these agencies and more particularly</p>	<p>(i) MoEF&CC/CPCB/SPCBs/PCCs shall undertake action research and also promote academic courses on this subject in association with academic and research institutions. (MoEF&CC/CPCB/ SPCBs/PCCs: 06 months)</p>

	professional courses on remediation and restoration can be sponsored at academic/research institution which will help to create a critical mass of expertise in this subject.	
II. IMPORT AND EXPORT OF HAZARDOUS WASTES AND ISSUES		
5	<p>Disposal of illegally imported consignments:</p> <p>(i) In case of confiscated items, responsibility to dispose lies with Customs. CBIC vide Circular No.31/2004- Cus, dated 26-4-2004 has referred to the orders of the Hon'ble Supreme Court in the matter of WP(C) 657/1995 for disposal of hazardous waste. The committee observed that the above circular needs to be amended for disposal of hazardous waste including allocation of fund by the concerned agency for bearing the cost of disposal.</p> <p>(ii) The committee observed that in case of unclaimed/uncleared consignments (where the claimants of the goods/wastes are nontraceable), disposal is to be carried out by port authorities/ICDs (custodian of the unclaimed/uncleared consignments) in consultation with customs and considerable delay in clearing those consignments lying in ICDs/CFSS is a major concern as also referred in the CAG Report.</p>	<p>(i) The customs circular dated 26-4-2004 requires amendment by Central Board of Indirect Taxes and Customs (CBIC) and it is recommended that CBIC to also devise policy framework for speedy disposal and bearing the cost of disposal of confiscated consignments (illegal / banned and non-conformity to the specifications of the products as applicable / as per Schedule V of HOWM Rules, 2016).</p> <p style="text-align: center;">(CBIC: 03 months)</p> <p>(ii) Port authorities/ICDs may also devise a policy, if necessary, in consultation with customs, to ensure HW disposal and its cost so as to expedite the disposal all the unclaimed cargo lying at various ports (and CFSS)/ICDs in a time bound manner.</p> <p style="text-align: center;">(Port Authorities: 03 months)</p>
6	<p>Laboratory Upgradation in Ports/Docks:</p> <p>(i) For upgradation and setting up of laboratories at various docks/ports to prevent entry of hazardous waste, Customs have informed that the revenue</p>	<p>(i) The committee is of the opinion that list of equipments as provided by CBIC for upgradation shall also be provided at major ports, with import and export facilities by CBIC. However, at other ports, arrangements for analysis of</p>

	<p>laboratories at 05 zones (Chennai, Delhi, Kandla, Kolkata and Mumbai) were identified for upgradation for testing of Hazardous waste as per the directions of the Hon'ble Supreme Court on 11.06.2004. Process of replacing nonfunctional equipments required for testing of Hazardous Waste is being further undertaken with the latest configuration/specification and technology. Further details of the laboratory facilities available in customs for analysis of hazardous materials in those five locations were also provided by customs.</p>	<p>relevant parameters with EPA/NABL accredited laboratories having minimum requisite laboratory infrastructure/equipment can be put in place in advance by CBIC.</p> <p style="text-align: center;">(CBIC: 03 months)</p>
7	<p>Bank Guarantee procedure:</p> <p>(i) Para 2.35 of Foreign Trade Policy 2015-20 stipulates that wherever any duty free import is allowed or where otherwise specifically stated, importer shall execute, Legal undertaking (LUT) / Bank Guarantee (BG) / Bond with the customs authority, as prescribed, before clearance of goods. However, execution of the same has not been clarified by DGFT and Customs.</p>	<p>(i) Applicability of bank guarantee for the list or category of items and procedure of executing BG by importer/PSIAs, as applicable, need to be specified by DGFT.</p> <p style="text-align: center;">(DGFT: 03 months)</p> <p>(ii) Procedure of executing bank guarantee by PSIAs and importer in case of import of restricted items (including hazardous wastes specified under Schedule III and VIII) and other items respectively, be devised and mandated by DGFT.</p> <p style="text-align: center;">(DGFT: 03 months)</p>
8	<p>Verification of documents for HW in Part D:</p> <p>(i) Schedule VIII of HOWM Rules, 2016 lays down list of documents for verification by customs for import of other wastes (specified in Part D of Schedule III of the said Rules). For instance, in the CAG report, it has been reported that 49 consignments of restricted goods viz., steel sheets, steel melting scrap etc. were cleared by Customs in four ICDs (viz.,</p>	<p>(i) CBIC shall strengthen their Risk Management System (RMS) for improved vigilance while verifying documents for import of other wastes (Part D of Schedule III of HOWM Rules, 2016) especially those goods/wastes that are similar to hazardous wastes (regulated or banned/prohibited for import), as there is a possibility that prohibited wastes are imported under the other wastes category.</p>

	Chennai, Marmagoa, Ahmedabad and Shillong) for importation without proper documents such as clearance from MoEF, conditions as specified in Schedule 1 and 2 of ITC(HS) policy etc.	(CBIC: immediate)
9	<p>RMS system:</p> <p>(i) The customs authorities use the risk management system (RMS) to enable low risk consignments to be cleared based on the acceptance of the importer's self-assessment and without examination. Roughly 30 percent of containers covered under risk management out of which 10 percent are physically verified. There are different types of waste streams which have not been integrated in the RMS. There is a need to review the import/export data of various waste streams and include them in RMS. Further, waste streams in Schedule III – Parts A, B and D and Schedule VI that are often mis-declared by importers need to be identified and added to the RMS.</p> <p>(ii) RMS has to be made robust so as to cover all the hazardous goods or consignments listed with HS code classification in accordance with ITC (HS) policy, 2017 for complete verification and testing of the consignments.</p>	<p>(i) There is need to synchronize Basel code and HS codes to cover all scheduled items as per HW rules in customs verification and control more effectively.</p> <p>(MoEF&CC, Custom and Port Authorities: 06 months)</p> <p>(ii) In order to tackle illegal import of HW consignments (misdeclaration) and those similar to unrestricted items without HS code, such items need to be identified and classified with HS code and brought under the ambit of RMS for stringent verification and testing procedure (for example 'other' waste oil, 'other' oils, furnace oil, Rubber/Tyre oil, Lead / Zinc scrap etc. with hazardous characteristics beyond the limits specified in the HOWM Rules, 2016 be classified with HS Code).</p> <p>(CBIC and DGFT: 06 months)</p> <p>(iii) This process is a continuous process and the monitoring committee recommends that this compliance be reviewed jointly by MoEF&CC and Customs in their coordination meetings.</p> <p>(MoEF&CC, Custom authority: on a regular basis)</p>
10	<p>DGFT license in public domain:</p> <p>(i) Details of licenses issued to import restricted items not placed on DGFT website, which may require to be communicated to the</p>	<p>(i) Details of licenses issued to import restricted items be placed on DGFT website so as to keep the concerned agencies such as Customs and MoEF&CC informed.</p>

	concerned agencies such as Customs and MoEF&CC.	(DGFT: 03 months)
11	<p>Harmonization of 'other' category in line with HWM Rules, 2016:</p> <p>(i) Harmonization of Basel codes with ITC (HS codes): The Ministry (MOEF) provides permission on the basis of Basel codes while DGFT uses HS codes. There is a need to synchronize the two codes to avoid confusion.</p> <p>(ii) Import of items under 'other' waste oil (ITC code: 2710 99 00) are restricted, however these items are not clearly specified. As the item 'other' (ITC code: 2710 19 90) along with certain list of oils are allowed freely, so there is a possibility of import of used/waste oil under the garb of oil under the 'other' category.</p> <p>(iii) No HS code has been specified categorically for any of the hazardous and other wastes except for metal scrap and waste oil.</p>	<p>(i) Items that require to be provided with HS code under the classification of oils be specified categorically under the 'other' class in consultation with MoEF&CC.</p> <p>(DGFT: 06 months)</p> <p>(ii) HS code for all the hazardous and other wastes listed in Part A, Part B and Part D of Schedule III of the Rules be specified by DGFT and Customs. The Committee recognizes that notifying HS code is an elaborate and time consuming procedure which requires international deliberations and confirmation and therefore the committee recommends to strengthen the RMS which can provide an expeditious alternative safeguard mechanism.</p> <p>(DGFT and Customs: 03 months)</p>
12	<p>Pre-Shipment Inspection Agency (PSIAs) for certain category of oils as per Annexure 13 of the ASG Report:</p> <p>(i) Pre-shipment Inspection Agencies (PSIA) notified by DGFT are available for metal scrap wastes only and there is a need for pre-shipment inspection for certain category of oils (i.e. list of oils suggested for pre-shipment inspections certificate for imports in the Recommendations of the former ASG, Sh Gopal Subramaniam.</p>	<p>(i) Initiatives similar to that of metallic scrap wastes be taken by DGFT for notifying PSIAs for certain category of oils suggested for pre-shipment inspections certificate for imports in the Recommendations of the former ASG, Sh Gopal Subramaniam.</p> <p>(ii) Once the PSIAs procedure are specified, the same must be shared with MoEF&CC, CPCB/SPCBs/PCCs and other regulatory authorities.</p> <p>(DGFT: 06 months)</p>

13	<p>Penal Action against the defaulters in case illegal import:</p> <p>(i) Section 135 of Customs Act lays down provisions for prosecution of importer for the offences such as mis-declaration of value or fraudulent evasion or attempt at evasion of any duty or any prohibition, where the person is liable to be punished with imprisonment for a term exceeding up to seven years and with fine. Violations with regard to prohibited goods, namely, hazardous and other wastes are not categorically notified under section 135.</p>	<p>(i) As a means to improve traceability of importers, the Customs authorities could make the registration process of importers more stringent as there have been cases where importers have never been able to be traced when their illegal imports were intercepted. All incidences of illegal import of HW shall be immediately reported to MoEF & CC as per provisions of the Rules.</p> <p>(MoEF&CC, DGFT, Custom and Port authorities: 03 months)</p> <p>(ii) In case of illegal import of hazardous wastes, MoEF&CC may consider delegation of power vested under section 19 of the Environment (Protection) Act, 1986 to CBIC, to enable them to take credible action against such violators under the E(P) Act, 1986.</p> <p>(MoEF&CC: 06 months)</p>
14	<p>Re-export of illegal consignments after confiscation:</p> <p>(i) With regard to re-export of illegally imported items DGFT has referred to a recent order of Hon'ble High Court of Kerala, where in the case pertaining to import of Multifunctional Devices (MFDs) without permission/license from DGFT, the Hon'ble High Court had directed that the powers to direct importers to re-export lies with the DGFT under FT (D&R) Act, 1992 and not with the customs authorities.</p>	<p>(i) As of now, DGFT can take action against the erring importers as per the provisions of Foreign Trade (Development & Regulation) Act, 1992, since the feasibility of delegating such powers to the Customs Authorities is being examined in DGFT. The committee recommends to expedite the process in a time bound manner (preferably within 3 months) so as to ensure speedy disposal of consignments lying in ICDs/CFSs.</p> <p>(DGFT: within 03 months)</p>
15	<p>Clearance of Waste Oil/Sludge from Ships:</p> <p>(i) Used/ Waste Oil generated from</p>	<p>(i) Used/ Waste Oil generated from ships collected by the reception facilities of various ports shall be covered under Authorisation by</p>

	<p>ships are collected by the reception facilities of various ports without authorization by concerned SPCBs/PCCs.</p> <p>(ii) Therefore, Waste oils may get disposed illegally in the garb of waste oil from ships under the obligation of MARPOL.</p>	<p>SPCBs/PCCs for its designated disposal and facilitate tracking of waste under HOWM Rules, 2016.</p> <p>(Port Authorities/ SPCBs/PCCs: Immediate)</p>
16	<p>Findings of CAG Report:</p> <p>(i) Findings and recommendations of Report No. 16 of 2018 of the Comptroller and Auditor General of India on 'Performance Audit of Inland Container Depots (ICDs) and Container Freight Stations (CFSs)' needs to addressed by concerned agencies such as port authorities and customs.</p>	<p>(i) CBIC shall prepare annual inventory of the illegally imported consignments stored in Ports/ICDs/CFSs and submit the same to CPCB and MoEF&CC by 30th September of every year and publish on its website.</p> <p>(ii) Wherever importer of illegally imported consignments is traceable, importer shall not be allowed to import/export, directly or indirectly any material until illegally imported consignments is safely disposed off scientifically as per HOWM Rules, 2016.</p> <p>(Customs, Port Authorities and DGFT: 03 months)</p>
17	<p>Authorization under HWM Rules, 2016 from concerned SPCB/PCC:</p> <p>(i) Custom and Port authorities have not obtained requisite authorization for handling, storage, transportation, recycling, utilization, offering for sale, transfer or disposal, as the case may be, from the State Pollution Control Board.</p>	<p>(i) Necessary authorization for handling, storage, transportation, recycling, utilization, offering for sale, transfer or disposal, as the case may be obtained by Customs and Port authorities to deal with the hazardous wastes that are confiscated and waste from ships respectively.</p> <p>(Port authorities and Customs: Immediate)</p>
18	<p>Collaboration between regulating authorities:</p> <p>(i) The committee observed that regulatory agencies such as Ministry of Environment, Forest and Climate Change, CPCB,</p>	<p>(i) Regular interaction between the Ministry of Environment, Forest and Climate Change, CPCB, SPCBs/PCCs, customs and ports authorities should take place with frequent consultative meetings and trainings in order to avoid working</p>

	SPCBs/PCCs, customs and ports authorities do not interact on a regular basis.	in silos. (MoEF&CC, CPCB, SPCBs/PCCs, customs and ports authorities: On a regular basis)
III. WASTE RECEPTION FACILITIES IN PORTS TO DEAL WITH WASTES GENERATED FROM SHIPS (MARPOL)		
19	<p>Availability of Waste Reception Facilities at ports:</p> <p>(i) In accordance with the orders of the Hon'ble SC, the Ministry of Shipping has to notify availability of reception facilities as per MARPOL Convention. No clear information could be received from DG(shipping) who represented Ministry of Shipping in the interactions with the committee.</p> <p>(ii) According to notification dated 07th Jan 2010 of Department of Shipping the Central Government is required to determine the types of facilities required for the purpose of provision of reception facilities at each cargo loading and unloading port, terminal and ship repair port and notify the organization thereof.</p>	(i) Ministry of Shipping needs to urgently prescribe requirement of reception facilities at each cargo loading and unloading port, terminal and ship repair ports preferably within 06 months, if not done earlier, and such reception facilities shall be provided by such authorities within a period of one year thereafter. (Ministry of Shipping: 06 months and 01 year)
20	<p>Authorization for the waste reception facilities and ports:</p> <p>(i) The committee observed that Port authorities have not obtained authorization under HW rules for waste reception facilities in ports to deal with wastes generated from ships. The annual report of wastes generated and disposed are not reported to concerned SPCBs/PCCs. Concerned SPCBs/PCCs need to enforce provisions of HOWM Rules, 2016.</p>	(i) State Pollution Control Boards shall enforce provisions of HW Rules, 2016 for grant of authorisation and manifest submissions at such waste reception facilities as well as port operations. SPCBs shall ensure that the HW handled at such facilities and ports should be covered in the Annual report to be prepared as per HOWM Rules, 2016. (SPCBs/PCCs and Port Authority: with immediate effect)
21	<p>Swachh sagar portal:</p> <p>(i) DG(S) has developed</p>	(i) The committee recommends Ministry of Shipping to ensure that

	<p>Centralized port reception facility portal: Swachh sagar which is an online system to facilitate early information sharing of waste category and quantity by ships to the port authorities. The committee was informed that this online information management system is not widely and regularly used at several ports.</p>	<p>all the major and nonmajor ports utilize the Swachh sagar online portal immediately which will ensure better HW management. The MoEF&CC/CPCB/SPCBs should also have an access to this portal for enforcement purpose.</p> <p>(Ministry of Shipping: 03 months)</p>
IV. IMPACT OF HW ON WORKERS' HEALTH		
22	<p>Coverage of all workers under ESI act, 1948:</p> <p>(i) The Special Committee constituted by Apex Court has recommended all workers (covered under ESI Act, 1948 and not covered under ESI Act, 1948) to get medical benefits and compensation under ESI Act, 1948. However, the recommendations of the Report of the Special Committee, May 2004 has not been implemented.</p>	<p>(i) The committee recommends that all the workers engaged in HW handling, storage, transport, preprocessing, utilisation and disposal (covered under ESI Act, 1948 and not covered under ESI Act, 1948) need to get medical benefits and compensation under ESI Act, 1948 as per the recommendations of the Report of the Special Committee, May 2004 and the same be implemented on priority.</p> <p>(Ministry of Labour & Employment: 03 months)</p>
23	<p>Implementation of Rule 5(2) of HOWM Rules, 2016:</p> <p>(i) The committee regrets to note that most of the State Labour Departments are not fully aware of the responsibility cast upon them under Rule 5(2) of HW Rules, 2016 and have not complied with.</p>	<p>(i) The committee recommends Hon'ble Tribunal to direct Chief Secretaries of States to ensure effective and urgent implementation of the provisions of the rules as stipulated under Rule 5(2) of HOWM Rules, 2016 by Department of Labour. (Department of Labour, Respective State/UT Government: Immediate)</p>
24	<p>Unauthorized industries be brought under the ambit of ESI Act, 1948:</p> <p>(i) It is a known fact that there are several unauthorized industries involved in hazardous waste handling like EWaste processing, battery recycling, solvent reuse</p>	<p>(i) Ministry of Labour need to devise a scheme similar to the provisions of ESI Act, 1948 to cover the workers employed in unorganized sector. (Ministry of Labour & Employment : 06 months)</p>

	<p>etc., which employ significant number of workers. It is necessary that all such industries need to be regulated by concerned SPCB/State labour department so that the workers employed therein are brought under the ambit of health and other social support scheme similar to the provisions of ESI Act, 1948.</p>	
25	<p>Implementation of provisions of statute for safety and health of all workers handling HW:</p> <p>(i) The scope of Rule 5(2) of Hazardous Waste (Management and Transboundary Movement) Rules, 2016 is restricted to only workers involved in Recycling, Preprocessing and other utilization activities. As per recommendations of Expert Committee constituted by Apex court, the scope of such health related considerations need to be for all persons handling hazardous waste.</p>	<p>(i) The Monitoring committee is of the view that even at HW generating industry/activity, the workers involved in HW handling including storage and transportation and also in-plant reuse/ recycle/ reutilization will also be exposed to similar environmental health risks. Therefore, the committee recommends that MoEF&CC may examine the same and may consider amendment of the ambit of Rule 5(2) of HOWM Rules, 2016.</p> <p>(MoEF&CC: 06 months)</p>
26	<p>DISPLAY OF INFORMATION OUTSIDE THE FACTORY GATE:</p> <p>(i) The committee notes with regret that many of the SPCBs/PCCs have not responded to the correspondence of CPCB in this regard.</p> <p>(ii) The committee has also observed non-compliances with regard to display of information outside the factory gate in most of the States/UTs inspected by CPCB.</p>	<p>(i) Considering the orders of the Hon'ble Apex court and also the need of information sharing with the local community the committee recommends that the SPCBs need to ensure the compliance of the directions of the Hon'ble Apex court on regular basis rather than a onetime compliance.</p> <p>(ii) The verification of the updation of display board should be an integral part of any inspection carried out by CPCB/SPCBs/PCCs without exception. In case of noncompliance the concerned officer should be subjected to departmental actions.</p> <p>(CPCB/SPCBs/PCCs: Immediate)</p>
27	<p>INSTITUTIONAL REFORMS:</p>	<p>(i) Capacity building in CPCB and</p>

	<p>(i) The committee is of the opinion that there is an urgent need to develop an appropriate and sound institutional framework at SPCBs consisting sound policies, trained and experienced manpower, necessary infrastructure including the laboratories besides having proper enforcement protocol at the State and Central Board level for the effective enforcement of the HW rules.</p> <p>(ii) The committee is of the opinion that there is a need of impetus for action research specifically in the areas of green chemistry, cleaner technology, waste minimization, circular economy and LCA by SPCB/CPCB. It is also necessary that findings of such research shall be shared among all the stakeholders so that there can be environmental benchmarking of the relevant processes across the country.</p>	<p>SPCBs/PCCs and other agencies (viz., trained adequate manpower, laboratory, budget etc.) shall be expedited as recommended in the orders of Hon'ble NGT dated 12.04.2019.</p> <p>(CPCB, SPCBs/PCCs, MoEF&CC and State/UT Government: Immediate)</p> <p>(ii) The committee recommends that CPCB/SPCBs/PCCs shall take efforts similar to that of the State of Gujarat where a separate institution named Gujarat Cleaner Production Centre (GCPC) which conducts such action research supported by adequate information dissemination program and advocacy programs for promoting the cleaner technology.</p> <p>(iii) CPCB/SPCBs/PCCs shall proactively engage in research and development activities by supporting research in clean technology and cleaner production and also, awareness program for the purpose.</p> <p>(CPCB and SPCBs/PCCs: Immediate)</p>
28	<p>NATIONAL POLICY:</p> <p>(i) HW management is a complex technical and scientific subject which require a multidisciplinary approach for the effective management and enforcement of HOWM Rules, 2016. There is a continuously improving understanding and knowledge about the impacts of Hazardous material at the national and international level. India is also an important stakeholder in many international treaties and conventions in the field of Hazardous chemicals and wastes</p>	<p>(i) MoEF&CC can examine the need of having specialized HW policy which can be appropriately aligned with the National Environment Policy (NEP), 2006 which will promote use of Clean Technology and also ensure sufficient financial allocations for technology research and information sharing resulting into improved HW management.</p> <p>(MOEF&CC: 06 months)</p>

	besides other environmental issues. There is a need of further documentation as well as policy framework for promotion of Clean Technology, financial incentives and research.	
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13. **Report dated 14.08.2019 by the CPCB with reference to compliance by the SPCBs/PCCs-**

An action taken report on implementation of recommendation of the Monitoring Committee of Management of Hazardous Waste has also been filed by the CPCB in terms of order dated 12.04.2019 on 14.08.2019 on the subject of compliance of the directions with regard to solvent recovery units.

The recommendations of the CPCB are as follows:

“Recommendations:

1. *It is recommended that SPCBs/PCCs (namely Assam, Bihar, Delhi, Haryana, Jammu & Kashmir, Lakshadweep, Manipur, Tripura, Uttar Pradesh, Uttarakhand and DDD&NH) may be directed to submit the compliance status on the directions issued by CPCB as the same has not received from these SPCBs/PCCs*
2. *SPCBs/PCCs of Goa, Karnataka, Maharashtra and Odisha, to ensure that that all the authorized solvent recovery units in States are verified for compliance to CPCB’s SOP.*
3. *It is recommended that SPCBs of Andhra Pradesh, Goa, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Telangana and West Bengal to ensure enforcement of manifest system as per the provisions of HOWM Rules, 2016 and initiate action against the erring units.*
4. *SPCBs of Himachal Pradesh, Madhya Pradesh and Rajasthan to immediately prepare inventory of Spent Solvent Recovery Unit available in their States and publish*

the same on their website. Further, all the SPCBs/PCCs having Spent Solvent recovery units to ensure updation and publishing of the inventory at their website on regular basis.

5. *It is recommended that SPCBs/PCCs of Rajasthan, Odisha, Goa and Punjab, shall immediately conduct interaction programs to create awareness and sensitization on HOWM Rules, 2016 with stakeholders of Spent Solvent generation/utilisation.”*

14. It may be noted that the directions of the CPCB dated 30.01.2019 on the subject are as follows:

- a) *Ensure that all the solvent recovery industries in the state have mandatory Authorization for the same in compliance with the SOP and Checklist issued by CPCB for solvent recovery units, within one month. The said SOP and checklist have been circulated to all SPCBs/PCCs vide letter no. B-29016/(SC)/1(55-IV)/17- 18/WM-II/18152-86 dated 08/3/2018 and is also available at CPCB website http://cpcb.nic.in/uploads/hwmd/utilizaion_spent_solvent.pdf.*
- b) *Ensure that these solvent recovery industries shall immediately follow the SOP, for safe and scientific spent solvent handling, processing and storage.*
- c) *Ensure that such solvent recovery units shall comply with the provisions of HOWM Rules, 2016, in terms of interstate transport of Hazardous waste and manifest document prescribed under Rule 18 and 19 of the HOWM Rules, 2016, with immediate effect. Stringent action be taken against the erring industries who are giving the spent solvent to such recycling industries without following the manifest systems.*
- d) *Conduct industry interaction programs within a month to create awareness and sensitization on HOWM Rules, 2016 with all the stakeholder industries of Spent Solvent generation/utilization.*
- e) *Prepare an inventory of such solvent recovery units and publish the same on their website for information of all*

stakeholders within one month with copy to CPCB within one month.”

15. The report finds following deficiencies in compliance of recommendations of the Committee and orders of this Tribunal by the States, the CPCB and the SPCBs/PCCs:

“4.1. BY STATE/UT DEPARTMENTS

- I. *Recommendation No. 6.4: It is necessary that the Hon’ble NGT orders dated 30/07/2018 with regard to setting up of TSDF and taking imitate actions against erring units be strictly complied with by the concerned State/UT Government and SPCBs/PCCs. (State/UT Governments and SPCBs/PCCs: immediate).*
- II. *Recommendation No. 7.5: In case of the contaminated sites where the polluter is not identified, the State/UT Government would be required to finance remediation of such sites to safeguard the people living in contaminated areas from adverse health effects, in terms of their constitutional responsibility to protect and improve the environment. (States/UTs Government and SPCBs/PCCs)*
- III. *Recommendation no. 10.3: SPCBs/PCCs and CPCB needs capacity building in terms of qualified and experienced manpower and also, tools and techniques for effective governance. Committee is informed about steps being taken by SPCBs and would review the same in detail. (MoEF&CC, State/UT Government, CPCB and SPCBs / PCCs: Immediate)*
- IV. *Recommendation no. 11.1: There is need to sensitize State/UT Govts. about duties required to be performed by the concerned department/agency as stipulated under Rule 5(1), 5(2), 5(3) and Schedule VII of the HOWM Rules, 2016. Hon’ble NGT may issue appropriate directions in this regard. (All State/UT Govts.: Immediate)*

4.2. BY CENTRAL POLLUTION CONTROL BOARD (CPCB)

- I. *Recommendation no. 1.1: There is a need to urgently prepare a guidelines or protocol on how to decide the by-*

product on specific criteria. This can be done based on chemical process involved in order to bring consistency in approach. (MoEF&CC and CPCB: 06 months)

- II. *Recommendation no. 1.4: Pan India IT based solution is suggested for tracking HW. Such integrated data handling and management solution is under implementation by CPCB which the committee would like to review in next phase.*
- III. *Recommendation no. 3.1: Standard guidelines and protocol based on scientific fundamentals for preparation of inventory should be prepared by CPCB and strictly followed by the SPCBs/PCCs to ensure reliable and credible inventory. (SPCBs/PCCs and CPCB/inventory of 2018-19 onwards).*
- IV. *Recommendation no. 3.5: The timelines for inventory preparation as envisaged in Rules be strictly complied with by SPCBs/PCCs. Preparation of country's inventory by CPCB is dependent on such timely submission by SPCBs/PCCS. (SPCBs/PCCs and CPCB).*
- V. *Recommendation no. 4.1: SPCBs/PCCs shall invoke the powers conferred under clause 23(1) and (2) of the Rules, related to all damages caused to the environment or third party due to improper handling and management of the hazardous and other wastes, and non-compliance respectively. CPCB has already issued guidelines for Liability assessment, for invoking clause 23(1) and (2) of HW Rules. CPCB shall also take consequential actions under clause 23 (1) as per the said guidelines noticing environmental damages. (SPCBs/PCCs and CPCB: Immediate).*
- VI. *Recommendation no. 4.4: Urgent updation of concerned websites of SPCBs/PCCs/CPCB with respect to all enforcement actions along with details of industries and action taken. (SPCBs/PCCs/ CPCB: Immediate).*
- VII. *Recommendation no. 4.5: There is need to have an enforcement framework for effective enforcement of Rules based on principle of proportionality and also, precautionary principle. Such framework will remove ambiguity in*

regulatory actions and bring transparency, predictability and consistency in enforcement for actions. (SPCBs/PCCs/CPCB: within 06 months).

VIII. *Recommendation no. 8: SPCBs/PCCs and CPCB need to take cognizance of these aspects (i.e. HW resulting from enforcement of other regulations) while enforcing the relevant rules and also, preparation of HW inventory and other interventions. (SPCBs/PCCs and CPCB).*

IX. *Recommendation no. 10.3: SPCBs/PCCs and CPCB needs capacity building in terms of qualified and experienced manpower and also, tools and techniques for effective governance. Committee is informed about steps being taken by SPCBs and would review the same in detail. (MoEF&CC, State/UT Government, CPCB and SPCBs / PCCs: Immediate)*

1.3. *BY STATE POLLUTION CONTROL BOARDS/ POLLUTION CONTROL COMMITTEES (SPCBS/PCCS)*

I. *Recommendation No. 1.2: Other waste is presently missing from all the regulatory actions, including inventory. It is necessary to bring such waste in regulatory domain, as envisaged in the rules (SPCBs/PCCs: inventory of 2018-19 onwards)*

II. *Recommendation No. 1.3: SPCBs/PCCs need to take steps to ensure closing of the manifests received and reconcile the HW handling data. This work is humungous and need support in terms of software and online submissions. (SPCBs/PCCs)*

III. *Recommendation No. 1.5: The pre-processing and recycling/utilisation facilities need to be treated as critical environmental infrastructure facilities for sound environmental management of hazardous waste so as to ensure enhanced level and frequency of enforcement and environmental monitoring. Elaborate protocols are needed to be developed. (SPCBs/PCCs: continuous activity)*

IV. *Recommendation No. 1.6: According to Rules, the identification and quantification of the hazardous waste generation is to be done at the authorization stage itself and*

therefore, it is necessary that SPCBs shall adopt the scientific principles as enumerated for such identification and quantification of HW. (SPCB/PCCs: Immediate)

- V. Recommendation No. 2.1: Uniform format for visits and inspections of HW handling facilities is necessary to ensure comprehensive inspections as per the provisions of the Rules. A format is proposed by the Committee.
- VI. Recommendation No. 2.2: The authorization document should clearly stipulate respective mode of management (such as common or captive incineration/secured landfilling or pre-processing or recycling or utilization or export or captive storage, as applicable) for each category of HW being generated. (SPCBs/PCCs: immediate)
- VII. Recommendation No. 3.2: SPCBs/PCCs shall verify and scientifically validate the HW data and facilities before grant or renewal of authorization. (SPCBs/PCCs: inventory of 2018-19 onwards)
- VIII. Recommendation No.3.3: There is an emergent need to develop sectoral process based reasonable HW generation range to have uniformity in assessing the HW generation from industries and benchmarking the same with its peers, rather than solely depending on industry data. (SPCBs/PCCs: continuous activity)
- IX. Recommendation No. 3.4: All occupiers who have authorizations shall submit the Annual report and in case of non-compliance, action needs to be taken by SPCB/PCC. (SPCBs/PCCs: inventory of 2018-19 onwards)
- X. Recommendation No. 4.1: SPCBs/PCCs shall invoke the powers conferred under clause 23 (1) and (2) of the Rules, related to all damages caused to the environment or third party due to improper handling and management of the hazardous and other wastes, and non-compliance respectively. CPCB has already issued guidelines for Liability assessment, for invoking clause 23(1) and (2) of HW Rules. CPCB shall also take consequential actions under clause 23 (1) as per the said guidelines wherever directions under section 5 of the E(P) Act have been issued

by CPCB, noticing environmental damages. (SPCBs/PCCs and CPCB: Immediate)

- XI. Recommendation No. 4.2: The habitual and serious defaulters shall be prosecuted under provisions of the Environment (Protection) Act, 1986. Other alternative regulatory actions including refusal and revocation of Authorization can also be explored following the due process. (SPCBs/PCCs: Immediate)
- XII. Recommendation No. 4.3: Non-compliance to be documented while processing authorization for renewal or inspections in order to invoke powers of refusal or revocation of Authorization as per Rules. (SPCBs/PCCs: Immediate)
- XIII. Recommendation No. 4.4: Urgent updation of concerned websites of SPCBs/PCCs/CPCB with respect to all enforcement actions along with details of industries and action taken. (SPCBs/PCCs/ CPCB: Immediate)
- XIV. Recommendation No. 4.5: There is need to have an enforcement framework for effective enforcement of Rules based on principle of proportionality and also, precautionary principle. Such framework will remove ambiguity in regulatory actions and bring transparency, predictability and consistency in enforcement for actions. (SPCBs/PCCs/CPCB: within 06 months)
- XV. Recommendation No. 5.1: The inventory data needs to be verified and validated before accepting the same. The states shall adopt the proposed guidelines immediately while preparation of HW inventory. (SPCBs/PCCs: Immediate)
- XVI. Recommendation No. 5.2: There is emergent need of consistent approach in recycle and utilisation of HW in terms waste management hierarchy mandated in the rules across all the States in order to ensure the level playing field for the industry. This can be achieved by advocacy programme such as concept of waste exchange banks, know your waste programme, circular economy, documentation of the success stories along with regulatory interventions wherever required. (SPCBs/PCCs)

- XVII. *Recommendation No. 5.3: It is also necessary to develop certain benchmarks/guidelines for the possibilities of HW recycle/utilisation on case to case basis. For example, for co-processing at Cement plants the Thermal Substitution Ratio (TSR) can be an objective criterion to decide the potential to use HW for utilization purpose. The range of TSR at different cement plants can be collated to develop a database for sound co-processing practices. (SPCBs/PCCs)*
- XVIII. *Recommendation No. 5.4: The concept of environmental benchmarking among the similar industries generating HW can be useful to ensure consistency and uniformity. The emerging trend of circular economy would be a key intervention for rationalizing the HW generation and reuse/utilization. (SPCBs/PCCs: continuous activity)*
- XIX. *Recommendation No. 6.1: The practice of returning the HW consignment needs to be immediately stopped and the consignment needs to be stored within the TSDF with information to the waste generator and also the concerned SPCB. The TSDF shall take appropriate measures to dispose this waste at the risk and cost of the waste generator under due information to the SPCB immediately on priority. Though the present guidelines prescribed that the waste shall be sent back to the waste generators, this practice needs to be immediately discontinued in view of non-accounting of the waste once it is out of manifest protocol and the associated environmental risks. (SPCBs/PCCs/TSDFs: immediate)*
- XX. *Recommendation No. 6.2: SPCBs/PCCs shall conduct environmental audit including the site selection criteria, design and layout for the TSDFs in next one year. They can engage expert institutes for the purpose and seek CPCB's technical advice on the ToR of the study, if required. (SPCBs/PCCs: 01 year)*
- XXI. *Recommendation No. 6.3: All the Common SLF shall disclose the mandatory amount deposited in Escrow Account annually to SPCB/PCC, CPCB and display on their website. SPCB/PCC to take action in case of non-compliance (SPCBs/PCCs: immediate)*

XXII. Recommendation No. 6.4: It is necessary that the Hon'ble NGT orders dated 30/07/2018 with regard to setting up of TSDF and taking imitate actions against erring units be strictly complied with by the concerned State/UT Government and SPCBs/PCCs. (State/UT Governments and SPCBs/PCCs: immediate)

XXIII. Recommendation No. 8.0: SPCBs/PCCs and CPCB need to take cognizance of these aspects while enforcing the relevant rules and also, preparation of HW inventory and other interventions. (SPCBs/PCCs and CPCB)

XXIV. Recommendation No. 10.1: Each of the SPCBs/PCCs/Custom/TSDF, as listed in report, need to have at least one laboratory where all HW parameters as required under the Rules can be analysed. (SPCBs/PCCs/Custom/TSDF: 06 months)

XXV. Recommendation No. 10.3: SPCBs/PCCs and CPCB needs capacity building in terms of qualified and experienced manpower and also, tools and techniques for effective governance. Committee is informed about steps being taken by SPCBs and would review the same in detail (MoEF&CC, State/UT Govt, CPCB and SPCBs/PCCs: Immediate)"

16. Recommendations of the CPCB to rectify above deficiencies are:

“6.1. RECOMMENDATIONS:

1. It is recommended that 05 SPCBs/PCCs (namely Dadar Nagar Haveli& Daman & Diu; Haryana; Lakshadweep; Manipur and Nagaland) directed to submit the status on implementation of recommendations made by the Monitoring Committee in its interim report, as CPCB has not received any information from these SPCBs/PCCs.
2. SPCBs/PCCs need to implement 25 action points, out of which 11 action points needs to be implemented immediately and other 14 in regular and nonimmediate manner. It is recommended that SPCBs/PCCs which are not complying with the recommendations made by Monitoring Committee should submit the status report to CPCB immediately.
3. It is recommended that till National Hazardous Waste Tracking System (NHWTS) which is being developed by

CPCB is made functional, SPCBs/PCCs may be directed to ensure and verify reconciliation of manifest.

6. *SPCBs/PCCs shall strictly follow the guidelines for inventorization of hazardous and other waste issued by CPCB and ensure verification and validation of the annual returns submitted by the occupiers/recycler/pre-processor/utilizer/coprocessor operator of disposal facilities including submission of the annual inventory to CPCB within the stipulated time period.*

5. *It is recommended that SPCBs/PCCs (namely Himachal Pradesh, Sikkim, Punjab, Kerala and Jharkhand) which have reported non-compliance but not taken any action shall be directed to take action against such violators as per provisions of HOWM Rules, 2016.*
Further, it is also recommended that SPCBs/PCCs may be directed to initiate actions against all such units which are violating one or other provisions of HOWM Rule, 2016 including non-compliance to the documenting submission such annual returns, manifest document, etc.

6. *It is recommended that the timeline provided by the SPCBs/PCCs with regard to adopting waste management hierarchy (as stipulated in the HOWM Rules) to ensure the level playing for the industries shall be strictly adhere to.*
Further, SPCBs/PCCs shall also initiate development of certain benchmarks/guidelines for the possibility of hazardous waste recycling/ utilization on case to case to basis as most of the SPCBs/PCCs have not taken any initiative on the same.

7. *It is recommended that SPCBs/PCC may be directed to initiate development of sectoral process based HW generation range to have uniformity in assessing the HW generation from industries and benchmarking the same.*

8. *It is recommended that SPCBs/PCCs of (Karnataka, Maharashtra, Rajasthan, Kerala and Uttarakhand) having Common TSDF to immediately open the Escrow Account as per O.M of MoEF&CC including deposition of mandatory amount.*
Further, SPCBs/PCCs of Gujarat, Jharkhand, Karnataka, Odisha, Rajasthan, Tamil Nadu and West Bengal shall

take action against the Common TSDF(s) for not displaying the details of mandatory amount deposited in the Escrow Account on their website.

9. *SPCBs/PCCs may be directed to expedite conducting of environment audit of the Common/Captive SLFs in the time bound manner as specified in the Interim Report of the Monitoring Committee Report.*
10. *SPCBs/PCCs have reported that out of 30 SPCBs/PCCs only 19 are having laboratory facilities for analysis of all hazardous waste parameters as required under HOWM Rules, 2016. Therefore, it is recommended that all the remaining 11 SPCBs/PCCs (Andaman and Nicobar Islands, Arunachal Pradesh, Delhi, Goa, Jammu & Kashmir, Jharkhand, Meghalaya, Odisha, Puducherry, Sikkim and Uttarakhand) should be equipped with all the facilities for analysis of all hazardous waste parameters as required under HOWM Rules, 2016.*
11. *It is recommended to direct States/UTs (namely Andaman and Nicobar Islands, Assam, Arunachal Pradesh, Bihar, Chhattisgarh, Chandigarh, Delhi, Goa, Jammu & Kashmir, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Tripura and Sikkim) where common TSDF is not available to immediately set up adequate number/capacity of Common TSDFs in such States/UT.*
12. *All the Chief Secretaries of the States/UTs may be directed to submit biannually compliance report to CPCB by collecting information from the State Government/ Departments like Labour/ Industries/ Environment and SPCBs/PCCs.”*

V. Consideration by this Tribunal and Directions

17. We have given due consideration to the report of the Committee as well as the report of the CPCB on the follow up action. We do not see any objection to the recommendations being accepted. No objection has been raised by any of the parties. Accordingly, the recommendations are accepted..

18. The States/UTs, CPCB/SPCBs/PCCs, Central Board of Indirect Taxes and Customs (CBIC), the Port Authorities, the DGFT, the MoEF&CC, the Ministry of Shipping, Ministry of Labour and Employment and the Department of Labour of all the concerned States/UTs may take necessary steps in terms of the recommendations of the Committee within the timelines specified. If there is any default, the Tribunal may consider requiring environmental compensation to be paid by the defaulting parties.
19. Hazardous waste being highly toxic in nature, having potential for irreversible damage to the environment and public safety, scientific handling of such waste has to be ensured.

VI. Directions

20. In the light of above, the States/UTs, CPCB/SPCBs/PCCs, the Central Board of Indirect Taxes and Customs (CBIC), the Port Authorities, the DGFT, the MoEF&CC, the Ministry of Shipping, Ministry of Labour and Employment and the Department of Labour of all the concerned States/UTs may take necessary steps in terms of the recommendations of the Committee within the timelines specified. If there is any default, the Tribunal may consider requiring environmental compensation to be paid by the defaulting parties.

While doing so following specific steps may be ensured:

- i. Hazardous waste inventory be updated and verified by way of test checks to ensure that the same is credible, reliable and robust in terms of contents and scope, as already recommended in the interim report of the Monitoring

Committee dated 29.01.2019 which was accepted by the Tribunal on 12.04.2019.

- ii. Since it has been reported that State Boards/PCCs of Dadra & Nagar Haveli, Haryana, Daman & Diu, Manipur, Lakshadweep and Nagaland have not furnished the relevant data, the said States/UTs may furnish the data within one month to the CPCB, failing which they will be liable to pay a sum of Rs, 1 lakh per month with effect from 01.10.2019.
- iii. As already directed, all the States which have not set up TSDF may do so and the States which fail to set up the same up to 31.03.2020, will be liable to pay environmental compensation of Rs. 10 lakh per month. However, with regard to States which may be categorized as small States, having regard to the quantum and nature of generation of hazardous waste, the liability to pay compensation will start from 01.01.2021. The categorization based on threshold limit of generation of hazardous waste be made by the CPCB within one month from today and placed on its website.
- iv. 126 sites which have already been identified as contaminated may be cleared of the hazardous waste within six months so that remediation process may start. The remediation work may start at the 55 sites for which DPRs have been completed within the timelines specified in the DPRs. For the remaining 71 sites, DPRs may be completed expeditiously but not later

than one year and thereafter remediation may be done as per the timelines in the DPRs.

- v. Failure to remove the waste from the 126 identified sites, will result in environmental compensation to be paid at the rate of Rs. 10 lakhs per site from 01.04.2020 by the concerned SPCBs/PCCs to the CPCB. Same rate will apply in respect of such of the 195 sites as are identified as contaminated with effect from 01.01.2021.
- vi. With regard to 195 probable contaminated sites, the assessment may be completed within six months and thereafter the waste may be removed within next six months from sites cleared by the CPCB to be contaminated.
- vii. The clearance of site by way of disposal or transfer should be strictly as per the HOWM Rules, to be monitored by the CPCB. The cost of removal of waste may be first paid out of the environment funds/consent funds available with the State PCBs/PCCs and thereafter recovered from the persons concerned.
- viii. Whenever any difficulty arises, the CPCB may, on being so satisfied, allocate funds from environment funds available with it, which may thereafter be recovered from the concerned defaulters.

- ix. The recommendations of the CPCB with regard to the compensation regime on the subject may be adopted, subject to further consideration of orders.
- x. The CPCB may oversee the compliance of these directions compile data from all quarters and furnish an interim compliance report before 15.04.2020 by email at judicial-ngt@gov.in.

List for further consideration on 28.04.2020

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Dr. Nagin Nanda, EM

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