

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

Original Application No. 512/2018

Shailesh Singh

Applicant

Versus

State of UP & Ors.

Respondent(s)

**WITH**

Original Application No. 621/2018  
(M.A. No. 1505/2018)  
(Earlier O. A. No.58/2017)

Mahendra Pandey

Applicant

Versus

Union of India & Ors.

Respondent(s)

**WITH**

Original Application No. 1001/2019

In Re: News items -The Indian Express - 5,000 illegal e-waste units being  
run in capital : Study

Date of hearing: 15.01.2021

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

Respondent(s): Mr. Pradeep Misra and Mr. Daleep Dhyani, Advocates for UPPCB  
Mr. Narender Pal Singh, Advocate for DPCC

**ORDER**

1. Common question for consideration in the three matters is the remedial action against unscientific disposal of e-waste resulting in contamination of ground water and soil acidification. E-Waste (Management) Rules, 2016 (EWMR) have been framed under the Environment (Protection) Act, 1986 (EP Act) and apply to manufacturer, producer, consumer, bulk consumer, collection centres, dealers, e-

retailer, refurbisher, dismantler and recycler involved in manufacture, sale, transfer, purchase, collection, storage and processing of e-waste or electrical and electronic equipment listed in Schedule-I, including their components, consumables, parts and spares which make the product operational.

2. Chapter II of the Rules specifies the responsibilities of manufacturer, producer, collection centres, dealer, bulk consumer, dismantler, recycler and State Governments.

3. Chapter III lays down the procedure for seeking and grant of authorization for management of e-waste.

4. Chapter IV deals with the procedure for storage of e-waste.

5. Chapter V provides for reduction in the use of Hazardous substances in the manufacture of electrical and electronic equipment and their components or consumables or parts or spares.

6. Chapter VI deals with the duties of authorities, preparation of annual report, transportation of e-waste, accident reporting, liability of manufacturer, producer, importer, transporter, refurbisher, dismantler and recycler. It is further provided that the collection, storage, transportation, segregation, refurbishment, dismantling, recycling and disposal of e-waste shall be in accordance with the procedures prescribed in the guidelines published by the Central Pollution Control Board from time to time. Implementation of e-waste (Management and Handling) Amendment Rules, 2011 shall be in accordance with the guidelines prescribed by the Central Pollution Control Board from time to time.<sup>1</sup>

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<sup>1</sup> Rule 23

7. Question for consideration inter alia is whether in terms of the said rules, there is due enforcement of the Extended Producer Responsibility (EPR), authorization regime, collection and dismantling and other steps.

8. **In first matter i.e. OA 512/2018**, this Tribunal first considered the matter on 10.08.2018 with reference to the grievance of unauthorized recycling/collection/dismantling units, burning, selling of E-waste and other solid waste on the road side/bank of rivers in violation of EWMR and EP Act resulting in groundwater contamination, air pollution and soil acidification. According to the applicant, the e-waste is responsible for 40% of lead and 70% of heavy metals found in landfills.

9. After considering the report in “Gadget 360” dated 04.06.2018, news item dated 02nd November, 2017, published in Hindustan Times under the title “What happens to e-waste: Your junked gadgets come back to you as toxic fumes” and report of the Comptroller and Auditor General of India, this Tribunal directed the MoEF&CC, UPPCB and the CPCB to prepare an action plan to ensure enforcement of e-waste and file compliance report.

10. Accordingly, compliance report dated 14.12.2018 was filed which was considered on 12.02.2019 as follows:

“

1. *A compliance report dated 14.12.2018 has been filed by the MoEF&CC. The report is to the effect that the India is fifth largest producer of e-waste. India produces two million tonnes of e-waste in 2016. The largest e-waste generating cities are Mumbai, Delhi, Bangalore, Chennai and Kolkata. **95% of e-waste is recycled by the informal sector and only 5% is recycled by the formal sector. Scrap dealers collect the e-waste and dispose of the same in unscientific manner such as burning, dissolving in acids and leaching. There is lack of awareness among the consumers. E-waste (Management and Handling)***

**Rules were framed which came into force on 01.05.2012 requiring the producers of electrical and electronic equipment listed in Schedule-I of the rules to seek authorisation from the State Pollution Control Boards (SPCBs). The Rules required producers to obtain authorisation from SPCB/Pollution Control Committees (PCCs) for implementing their EPR for effective channelization of ewaste to registered dismantlers/recyclers. E-waste (Management) Rules, 2016 were notified on 23.03.2016 and came into force from 01.10.2016. The said rules apply to all producers, manufacturers, consumers or bulk consumers, dealers, refurbishers, and e-retailers involved in the manufacture, sale, purchase and processing of electrical and electronic equipment namely (i) IT and Telecommunication equipment and (ii) Consumer electrical and electronics such as TVs, washing machines, refrigerators, and air conditioners (as per Schedule I of the Rules). Extended producers liability require EPR plan for collection and meeting his responsibility in which EPR authorisation is given. Status under e-waste (Management) Rules, 2016 is indicated as follows:**

*“Status under E-waste (Management) Rules, 2016*

<i>Estimated Generation in 2016 (projected)</i>	<i>20 lakh tonnes (as per UN Study)</i>
<i>Authorized EPR Producers</i>	<i>880</i>
<i>Registered dismantler/recycler</i>	<i>275</i>
<i>Dismantling/recycling capacity</i>	<i>5,10,290 MT</i>

*”*

7. The CPCB in a sanctioned plan has identified following challenges:

- a. Inventorization of e-waste generation;
- b. Identification of Producers who have not obtained EPR Authorisation;
- c. Verification of quantity of e-waste collected by producers;
- d. Verification of systems provided by producers for collection and channelisation of e-waste;
- e. Verification of facilities of dismantlers and recyclers for their infrastructure and records; and
- f. Checking of informal trading, dismantling, and recycling of e-waste.

8. The action plan proposed is as follows:

<b>Sl. No</b>	<b>Challenges/Activities</b>	<b>Stakeholder responsible for implementation</b>	<b>Action</b>
a.	Inventorization of e-waste generation	SPCBs/PCCs	SPCBs /PCCs to complete this activity within one year.
b.	Identification of Producers who have not obtained, EPR Authorisation	CPCB, Custom department, Ministry of commerce and Ministry of electronics telecommunication	This is a continuous activity for which support of SPCBs/PCCs/Custom department/ Ministry of commerce, Ministry of electronics and telecommunication is required.
c.	Verification of quantity of e-waste collected by producers	CPCB/SPCBs/PCCs	This is a continuous activity. All the EPR Authorised Producers will be verified per year.
d.	Verification of systems provided by producers for collection and provided by producers channelisation of e-waste	CPCB/SPCBs/PCCs	This is a continuous activity. All the EPR Authorised Producers will be verified per year.
e.	Verification of facilities of dismantlers and recyclers for their infrastructure and records	SPCBs/PCCs/CP	This is a continuous activity. All the dismantlers/recyclers will be verified per year.
f.	Checking of informal trading, dismantling, and recycling of waste	SPCBs/PCCs/District Administration	SPCBs/PCCs in coordination with District Administration has to carry out quarterly drive for checking of this activity.
g.	Facilitate collection and disposal of e-waste	SPCBs/PCCs/District Administration/CPCB	State Government to formulate mechanism for collection and for incentivising setting up of recycling facilities.
h.	Governance framework for monitoring compliance	SPCBs/PCCs/District Administration/CPCB	Monitoring to be ensured at city/district and state levels for which nodal officers (state environmental secretary, district collector, CMD/Commissioners) to be designated. Time Frame — Three (3) months.
i.	Capacity building at district/State/CPCB level	SPCBs/PCCs/District Administration	Special workshops to educate functionaries in government /

		/CPCB	NGOs be run over one year.
j.	IEC plan be firmed up and executed	SPCBs/PCCs/ District Administration /CPCB	State Government to firm up IEC plan for educating public at large about the system of collection, incentive structure and facilities for recycling. Time Frame — Three (3) months. The IEC Plan to be executed over one year.
k.	Strengthen system of enforcement	SPCBs/PCCs/ District Administration/ CPCB	Quarterly review of violations and enforcement actions at city/district/state level and quarterly reports to be filed with CPCB.

5. After consideration of the above, **the Tribunal directed the CPCB to clearly spell out parameters of compliance and methodology to review by developing appropriate software.** The Tribunal further directed that performance review be conducted by the CPCB on or before 30.04.2019 and report furnished before this Tribunal.

6. The matter was last considered on 02.09.2019 in the light of **further report filed on 28.08.2019 by the CPCB mentioning the action plan enforcement of EWMR.** The report stated that a review was conducted for identification of producers who had not obtained EPR and not taken other steps. Further monitoring was required in the light of feedback which was awaited. The Tribunal directed further follow up action for compliance of environmental norms. The relevant extract from the order is as follows:-

“1to5....xxx.....xxx.....xxx

6. Report of review on the performance & working of Parameters and Methodology developed for the compliance of continuous activities of Action Plan for enforcement of E-Waste (Management)

Rule, 2016 and Amendments thereof, in compliance of the order of this Tribunal dated 23.05.2019, has been filed on 28.08.2019 stating that **the draft parameters and methodologies were circulated to the State PCBs/PCCs. Review was conducted in respect of identification of Producers who have not obtained EPR Authorisation, verification of quantity of e-waste collected by producers, verification of systems provided by Producers for collection and channelisation of e-waste, and verification of facilities of dismantlers and recyclers for their infrastructure and records. The SPCBs/PCCs were required to furnish implementation status in respect of checking of informal trading, dismantling, and recycling of e-waste, collection and disposal of e-waste, governance frame work for monitoring compliance, capacity building at district/State/CPCB level, IEC plan and system of enforcement.**

7. **Software has been made live. The SPCBs/PCCs are given user ID for providing progress. The same will be upgraded, if required. Status of compliance by the SPCBs/PCCs has been given. Checklist has been prepared to comprehensively collect the entire relevant information in respect of the compliance of the units.**

8. **We are informed that inventorisation of e-waste generation will be completed by December, 2019 as against September, 2019, required under the Rules. From next year, the compliance will be as per the timelines prescribed under the Rules the CPCB has developed mechanism to identify producers who operate without EPR Authorization, for verification of quantity of e-waste collected by the producers, verification of systems provided by the producers, for collection and channelization, verification of facilities of dismantlers and recyclers for their infrastructure and records. With regard to items (f) to (k) of the action plan reproduced above, the SPCBs/PCCs are to take necessary action which is to be reviewed by the CPCB. The CPCB has carried out a review on 13.08.2019 and will continue to conduct such reviews quarterly.**

9. **Since the software is to be operationalized and implementation of the action plan is to be further observed, it will be appropriate that the next review and action taken report is placed before this Tribunal by 31.01.2020. The CPCB may workout mechanism for recovering compensation for delay in compliance as well as the violations.”**

7. **In O.A. No. 1001/2019 in Re: News items -The Indian Express - 5,000 illegal e-waste units being run in capital : Study**, a report was sought from the DPCC in coordination with the District Magistrates of East and North East Delhi with regard to the area in Delhi and the Uttar

Pradesh State PCB and District Magistrate, Ghaziabad with reference to the area in UP with reference to the allegation that five thousand illegal e-waste processing units were operating in and around Delhi as per study undertaken by 'Toxic Link'.

8. The matter was thereafter considered on 20.02.2020 in the light of report of the DPCC dated 19.12.2019 and report of the UP State PCB dated 18.02.2020 wherein violations were acknowledged. Accordingly, further action was directed to be taken. The extract from the order dated 20.02.2020 is as follows:-

*"2. Accordingly, a report has been filed by the DPCC on 19.12.2019 as follows:*

- "5. **That, the teams headed by the respective SDMs have inspected 130 premises till 16.12.2019 and 104 premises were found to be storing/handling E-Waste. 31 number of premises were closed effectively. The area in which these activities were being carried out ranges from 30 to 100 Square meters and are of a very tiny scale. In most of the premises, it was observed that the owner(s) themselves are carrying out the labour work. Environmental Compensation of Rs. 7.30 lakhs has been imposed on these 31 tiny handlers. The said drive is continuing till the entire area is covered.***
- 6. **That, apart from the above actions, Delhi Pollution Control Committee took suo-moto action against illegal e-waste handling units in Old Seelampur area and closed 57 premises effectively in the month of July 2019. It has been decided to levy EDC on these 57 tiny illegal e-waste handlers. The list of the said 57 units is enclosed as Annexure-2.***
- 7. **That, it is relevant to mention here that in compliance of the orders passed by this Hon'ble Tribunal regarding initiating action on e-waste handling units, in the matter of OA No. 20/2019 (Resident of Gali No. 11, Bhagirathi Vihar Vs NCT of Delhi), Delhi Pollution Control Committee had effectively closed 36 illegal E-waste storage/handling units in the area of Bhagirathi Vihar in the months of May and June 2019 and an Environmental Compensation (EC) of Rs. 7.20 lakhs was imposed on them as these were a very tiny entities. Till date 21 occupiers have deposited the EC imposed on them. Recovery Certificate has been issued to the Recovery Officer ie SDM (Yamuna Vihar) for***



recovery of EC as an arrears of land revenue. Recovery Officer has once again been requested to recover the EC.”

3. The UPPCB has also filed its report on 18.02.2020 inter alia as follows:

### **“3. Action Taken Against Illegal Industries**

A joint team of District Administration, Ghaziabad, Nagar Palika Parishad, Loni, Ghaziabad Development Authority, Electricity Department, Police and Uttar Pradesh Pollution Control Board has been taking action against industries in confirming as well as non-confirming areas in Tehsil Loni of District Ghaziabad. **Since August, 2019 the joint team has identified and closed/dismantled 315 illegal industries in the said area.**

#### **3.1 Action Taken against Illegal units Engaged in Handling and Processing of E-waste and other Related Items.**

Sub-Divisional Magistrate, Loni, Tehsildar, Loni, officers of Nagar Palika Parishad Loni, Regional Office, UPPCB, Ghaziabad, Electricity Department and Police carried out survey of the area from 09.09.2019 to 11.09.2019. During the survey, it was observed that a **number of illegal industrial activities majorly comprising of small furnaces for melting aluminum, iron, lead etc. for producing sheets, foils, ingots and electronic waste processing units are set up in a residential cluster of Amit Vihar, Sewa Dham, Loni, Ghaziabad.**

**During the survey, the joint team demolished 42 industries in Ghaziabad region of Amit Vihar area. The electrical connections of the industries were also disconnected by the officers of electricity department.**

Action Taken against Illegal E- Waste Processing units in Behta Hazipur and Tila Shahbajpur, Loni

Similarly, **regular survey of areas of Behta Hajipur, and Loni Border area is being carried out. During inspections between 17.08.2019 to 22.08.2019 by the joint committee 17 illegal units carrying out operations of wire drawing were found operating in the residential areas. All the 17 units were sealed during inspection. Further, Action under section**

151/107/116 of CRPC was taken against 12 persons found responsible for carrying out the illegal operations in the residential areas.

Further, drive was carried out from 19.11.2019 to 21.11.2019 in the area and electrical wires and e-waste was seized and **FIRs were registered against 15**

**individuals. During the said period public announcements were also made to sensitize the public about harm of burning wires and processing e-waste in open and warning was issued to deposit such items voluntarily with representatives from Nagar Palika's office. Another drive has been carried out on 6.2.2020 and 7.2.2020 in the said area and material has been seized.**

#### **Action Taken against Illegal E- Waste Processing units in Sewa Dham, Loni.**

**During regular survey, it was found by the joint committee that number of illegal e-waste processing units are operational in open area of Sewa Dham area of Loni. The common practice obtained by these illegal units was to recover the metals from the PCBs using acids like Hcl and H2SO4. After recovering the metals like copper, the waste PCBs were burnt in open causing air pollution. During inspection between 29.10.2019 till 31.10.2019, almost 80 illegal units were demolished by the joint committee. FIRs against 16 individuals carrying out the illegal activities were also lodged. The illegal materials like PCBs, Chips were seized and stored at Nagar Palika, Loni road, New Delhi on 02.11.2019 to ascertain the status of closure of units. The seized material is proposed to be disposed off as per rules.**

#### **4. Major Findings**

- i) Illegal units engaged in handling/processing of e-waste, primarily wires and PCBs have been identified in Behta Hajipur, Tila Shahbajpur, Krishna Vihar, Amit Vihar and Sewa Dham areas of Tehsil Loni which is adjoining North-East Delhi*
- ii) The said area is notified region of Ghaziabad Development Authority's Master Plan — 2021*
- iii) The activities with regards to e-waste handling/processing are primarily restricted to burning of wires, etching of PCBs and smelting.*
- iv) No electronic or electrical equipment's were found to be dismantled in the area, from which it is evident that dismantling of e-waste is being done outside Ghaziabad and only PCBs and wires are being brought for burning and processing.*

#### **Recommendations**

*In view of above findings and observations, following recommendations are made:*

- Ghaziabad Development Authority should demarcate the areas where units are operating against the land use as per Master Plan and take necessary action against these**

**units as per law/demolition of illegal units against the master plan.**

- **Ghaziabad Development Authority and District Administration should take action against owners of plots/land on which such illegal activities are being carried out under provisions of law.**
- **To stop the illegal clustering of industries in residential areas of Loni, it is mandatory that no industrial electricity connection to any industry in residential areas.**
- **It should be ensured that the illegal industries which are being closed down by the joint committee should not be allowed to operate again in the residential areas.**
- **Police should install a checking post and boom barrier at Loni-Delhi border and do mandatory checking of vehicles to stop transboundary movement of wires, PCBs and smelted ingots.**
- **All Dharam Kantas (weighing bridges) in the abovementioned areas of Loni should be stringently monitored by Weights and Measures Department and Police. They should be directed to report vehicles suspected to be carrying prohibited items like PCBs, wires etc.”**

4. In view of the above, let further action be taken in the matter after making inventory of all such units and a further report be filed before the next date of hearing by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). It may also be ascertained as to what is the destination of the e-waste involved so that remedial action is taken. The DPCC and the State PCB may also involve any other authority/agency found concerned with the matter.”

9. The matter was last considered on 30.09.2020 in the light of the report of DPCC dated 25.09.2020 and report of the UP State PCB dated 28.09.2020 finding large scale violations damaging the environment and public health. It was observed:-

“1to3...xxx.....xxx.....xxx

4. In pursuance to the above, the DPCC has filed its action taken report on 25.09.2020 inter-alia as follows:-

**“4. That pursuant to the above office order, 218 premises were surveyed by two teams till 23.9.2020 and 120 premises were found to be carrying out illegal e-waste storage/handling activity. Since the inspecting teams are required to follow social distancing norms, area being highly congested with narrow lanes, people's tendency to crowd the inspecting teams; the survey is progressing at a slow pace. While carrying out the survey, the teams have observed that the people engaged in the illegal handling of e-waste are operating from very tiny**

**premises with an area ranging from 20 to 50 Sqm, carrying out manual work without any machinery. Many of people have closed down the illegal operations due to lockdown & very dull economic activity. In most of the cases, it was observed that the owner(s) themselves are carrying out the labour work. Further action for effective closure of these illegal activities has been planned once the survey is completed. Delhi Police have been requested to provide sufficient police force for carrying out the task of effective closure to avoid any adverse law & order situation, as the areas are sensitive in this aspect.”**

5. The State PCB has filed its report dated 28.09.2020 mentioning as follows:-

“2. Chief Engineer (Distribution) Ghaziabad Zone, PVVNL, Ghaziabad has been submitted a report vide letter dated 25.06.2020. As per the report total 704 connections in Loni area have been verified in which 506 connections were not found, **64 connections could not be verified due to incomplete address, 23 connections have been permanent disconnected, 85 connections were found disconnected, 26 connections were found connected.** Copy of compliance submitted by PVVNL is annexed as Annexure IV.

3. Senior Inspector, Legal Metrology (Weight and Measures), Ghaziabad has submitted report on dated 25.06.2020 & 04.07.2020. As per report received total 12 Dharam Kantas (Weighing bridges) have been inspected, in which challan has been issued against defaulting 09 Dharam Kantas.

4. Further, in view of directions of District Magistrate, Ghaziabad, Sub-Divisional Magistrate, Tehsil, Loni vide order dated 09.09.2020 has constituted a Joint Team of officers from District Administration, UPPCB, District Industries Centre, Nagar Palika Parishad, Loni, Ghaziabad Development Authority, Labour, Electricity and Police to carry out regular survey in Loni area, not only for purpose of identifying and taking action against electronic waste units but all pollution causing activities.

5. The joint team has also surveyed the areas of Seva Dhaam, Behta Hajipur and Amit Vihar in Loni region and it has been found that unit which were closed/ demolished have not started any unauthorized activity again.”

**6. It is thus clear that as per report of the DPCC, the problem is continuing and time is sought for further action. As regards report of the UP PCB, necessary action has been taken but we are of the view that this needs to be reverified. Let further action be taken by the DPCC and the UP State PCB and compliance status as on 15.10.2020 be filed before**

***the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.***

10. **In O.A. No. 621/2018, Mahendra Pandey v. UOI & Ors.**, the Tribunal has considered the issue of violation of norms for disposal of e-waste at the bank of Ramganga River in UP on several occasions. The matter was last considered on 23.09.2019 in the light of the report of the Chief Secretary, UP and the status report filed on behalf of the UP State PCB as follows:-

***“2. Accordingly the Chief Secretary, UP, gave a report which was considered on 16.01.2019 to the effect that **an action plan was prepared to be executed in two stages. In Stage- I, there will be temporary storage and in Stage - II, permanent facility will be set up.*****

***3. Status report as on 03.08.2019 has been handed over during the hearing to the effect that **temporary storage has been ensured and several steps taken for permanent disposal in TSDF at Amroha. The entire process will be completed within three months.*****

***4. In view of the above status report, **steps for disposal of e-waste and black powder generated be processed in accordance with law. It may be ensured that there is no illegal dismantling of e-waste. Any dismantling/recycling has to be in accordance with the Rules. TSDF must also be compliant with the Rules. Such precautions of compliance of Rules are required by all handlers/recyclers of e-waste/hazardous or other waste throughout the country. This direction may be circulated by CPCB to all concerned and status of compliance may be filed before this Tribunal in pending matters dealing with the issue of e-waste/hazardous and other waste*****<sup>2</sup>.

***5. Let a final compliance report be filed before the next date by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).***

11. In pursuance of above orders in the three matters, following reports have been filed:-

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<sup>2</sup> Rajiv Narayan & Anr. Vs. Union of India & Ors. (Hazardous and other waste), O.A No. 804/2017 listed on 28.04.2020 and Shailesh Singh Vs. State of UP & Ors. (E-waste), O.A No. 512/2018 listed on 12.02.2020

1. CPCB reports filed on 11.02.2020 and 18.12.2020 in O.A. No. 512/2018, also covering OA 1001/2019 as per order dated 19.9.2020 in the said case.
2. DPCC reports filed on 16.10.2020 and 01.12.2020 in O.A. No. 1001/2019.
3. UP State PCB dated 10.02.2020 and CPCB dated 12.02.2020 and 16.10.2020 in O.A. No. 621/2018.
4. The Oversight Committee for environmental issues in the State of UP, constituted by this Tribunal has filed its reports dated 05.08.2020 and 25.11.2020 covering all the three matters in relation to the State of UP.

12. We proceed to consider the above reports *seriatim*.

**CPCB Reports:**

13. The report of the CPCB dated 11.12.2020 gives the summary of the review, action taken and to be taken as follows:-

***“Summary of the Review & Action taken Report and Actions to be taken:***

- i. Two review meetings with SPCBs/PCCs were carried out on 19-12-2019 and 27-01-2020 respectively.*
- ii. SPCBs/PCCs have started implementing the action plan. Twenty-nine (29) SPCBs/PCCs namely A.P., Assam, Bihar, Chandigarh, Chhattisgarh, Daman Diu & Dadra Nagar Haveli, Delhi, Goa, Gujarat, Haryana, Himachal, J & K, Jharkhand, Karnataka, Kerala, M.P., Maharashtra, Manipur, Meghalaya, Nagaland, Odisha, Punjab, Puducherry, Rajasthan, T.N., Telangana, Tripura, UP and West Bengal have initiated actions for implementation of the Action Plan.*
- iii. Two (02) SPCBs/PCCs namely Uttarakhand Environment Protection & Pollution Control Board and Mizoram SPCB have not initiated any action for the implementation of the Action Plan.*
- iv. Four (04) SPCBs/PCCs namely Arunachal Pradesh, Andaman & Nicobar, Lakshadweep & Sikkim have not provided any information on the details of actions carried out for implementation of Action Plan.*

- v. **Preparation of national level inventory on generation of e-waste has been completed the financial year 2017-18 and 2018-19.**
- vi. **A draft mechanism for levying environmental compensation (EC) charges for the violation of e-waste rules has been worked out which will be finalised in one week.**
- vii. **Some of the SPCBs/PCCs have informed that manpower constrained is an issue. During the two review meetings held through Video Conference on 19-12-2019 and 27-01-2020 SPCBs of Gujarat and Maharashtra suggested that third party should be used for verification owing to lack of manpower.**
- viii. **Software based portal has been upgraded to resolve technical issues.**
- ix. **More than four hundred verification reports have been received from SPCBs/PCCs. Examination of the same is under process.**

**Actions to be taken:**

1. **CPCB to take actions including levying of environmental compensation (EC) charges after examination of the reports as submitted by SPCBs/PCCs.**
2. **CPCB proposes to conduct hands on training on using software based E-Waste Management Review Portal in the last week of February 2020.**
3. **SPCBs/PCCs to adhere to the timeline for uploading the report on the portal.**
4. **Next review meeting is proposed to be taken by March 2020.**
5. **SPCBs/PCCs to regularly carry out continuous activities of the action plan and to complete the activity other than the continuous in the time line of the action plan.**
6. **SPCBs/PCCs to submit report with clear observations and recommendations.**
7. **SPCBs/PCCs to strengthen the e-waste management cell in their respective State/UT.”**

14. In the second report dated 18.12.2020 the summary of review, actions taken and to be taken as follows:-

**“SUMMARY OF THE REVIEW & ACTION TAKEN REPORT AND ACTION TO BE TAKEN (4th Quarter FY2019-20, 1<sup>st</sup> & 2<sup>nd</sup> Quarter FY 2020-21) In Compliance of the Directions of Hon’ble NGT (PB) in the Matter of OA No 512 Of 2018:**

1. **Twenty-five (25) SPCBs/PCCs namely A.P, Bihar, Chandigarh, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal, J & K, Jharkhand, Kerala, M.P, Maharashtra, Manipur, Meghalaya, Mizoram, Odisha, Punjab, Puducherry, T.N., Telangana, Tripura, Uttarakhand, UP and West Bengal have submitted their 4th Quarter(FY2019-20) report w.r.t implementation of the Action Plan in their respective States/UT.**

2. **Twenty-Seven (27) SPCBs/PCCs** namely A.P, Assam, A&N Islands Bihar, Chattisgarh, Delhi, Goa, Gujarat, Haryana, H.P, J&K, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Mizoram Odisha, Punjab, Puducherry, Sikkim, Tamil Nadu, Telangana, Tripura, Uttarakhand, U.P, & West Bengal have submitted their 1<sup>st</sup> Quarter (FY 2020-21) Reports w.r.t implementation of the Action Plan in their respective States/UT.
3. **Twenty-Nine (29) SPCBs/PCCs** namely A.P, Arunachal Pradesh, Assam, A&N Islands, Bihar, Chandigarh, Delhi, DD&DNH Goa, Gujarat, Haryana, H.P, J&K, Jharkhand, Karnataka M.P, Maharashtra, Meghalaya, Mizoram, Odisha, Punjab, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Telangana Tripura, UP & West Bengal have submitted their 2<sup>nd</sup> Quarter (FY 2020-21) Reports w.r.t implementation of the Action Plan in their respective States/UT.
4. **Two (02) SPCBs/PCCs** namely Lakshadweep & Nagaland have not submitted their quarter reports for any of the three quarters. i.e. 4<sup>th</sup> Quarter (FY2019-20), 1<sup>st</sup> & 2<sup>nd</sup> Quarter(FY2020-21)
5. Some of the SPCBs/PCCs have informed that manpower constrained and COVID Crisis for delay in progress and submission of progress reports.
6. Due to COVID-19 pandemic fewer verifications/inspections were carried out during 1<sup>st</sup> & second quarter (FY2020-2021).
7. **During verification of systems provided by Producers for collection & channelization of E-Waste, collection centres of 292 producers were found either non-complying with respect to the guidelines of CPCB or non-traceable. Accordingly, CPCB has issued notices to these producers show causing them why not their EPR Plan/EPR Authorisation be suspended and action as per e-waste rules be initiated.**

**1.0 MANAGEMENT STATUS OF E-WASTE (MANAGEMENT) RULES, 2016 DURING FY 2017-18 AND FY 2018-19. (Note: for FY 2019 - 20 the last date for receiving information from SPCBs/PCCs is 30<sup>th</sup> November 2020)**

- (i) Number of Producers having Extended Producer Responsibility Authorisation (EPRA) under E-Waste (Management) Rules, 2016 as on 26-11-2020 is **1630**.
- (ii) Number of Registered Producer Responsibility Organisation (PRO) as on 26-11-2020 is 44
- (iii) Number of authorised dismantlers/recyclers based on information received from SPCBs/PCCs are 312 having authorised capacity of 7,82,080. 62 tonne per annum
- (iv) Quantity of e-waste dismantled and recycled during FY 2017-18 and FY 2018-19 based on information from SPCBs/PCCs is 69413.619 tonnes and 164663 tonnes respectively.



- (v) Under the E-Waste (Management) Rules, 2016 the collection target for the FY 2017-18 & FY 2018-19 was 10% (effective 5% on pro rata basis) & 20% of total generation. **Accordingly the collection target given was 35,422.25 tonnes and 1,54,242.74 tonnes respectively. E-Waste collected against the collection target during FY 2017 – 18 and FY 2018-19 was 25,325.28 tonnes and 78280.995 tonnes respectively. For shortfall in collection target, CPCB has issued show cause notices to producers and the reply is under compilation.**

## **2.0 ACTION TAKEN BY CPCB:**

- (i) CPCB estimated the quantum of e-waste generated during the last three financial year and the estimated quantities for the FY 17-18, FY 18-19 & FY19-20 are given below:
- For financial year **2017-18**, the estimated generation of e-waste is **708445 tonnes for 21 types of EEE.**
  - For financial year **2018-2019**, the estimated generation of e-waste is **771215 tonnes for 21 type of EEE.**
  - For the financial year 2019-2020, the estimated generation of e-waste is **1014961.2 tonne for 21 types of EEE.**
- (ii) CPCB in compliance with Hon'ble NGT order dated 02-09-2019 submitted review report on 11.02.2020.
- (iii) **CPCB issued direction under section 18 (1) (b) of the Water Act 1974 and under the Air Act 1982 to UPPCB on 05-05-2020 for taking action against three dismantlers and recyclers for violation of e-waste rules and guidelines of CPCB. Accordingly, UPPCB ordered for closure of these units.**
- (iv) CPCB recommended to MoEF & CC for inclusion of 75 numbers electrical and electronic equipment in addition to the existing 21 number of electrical and electronic equipment in the schedule – 1 of the E-Waste (Management) Rules, 2016
- (v) **CPCB has prepared the guidelines for Environmental Compensation Charges (ECC) under E-Waste Rules in compliance of the Hon'ble NGT order dated 02-09-2019 and the same has been enclosed at Enclosure - A.**
- (vi) A review meeting for reviewing the progress made with regard to implementation of action plan through video conference was organised by CPCB on June 17<sup>th</sup>, 2020. In the review meeting the progress made during the 4<sup>th</sup> Quarter of the FY 2019-20 by the SPCBs/PCCs was reviewed.
- (vii) CPCB also organised two-day training programme on “E-waste Management Portal” for official of all SPCBs/PCCs engaged in activity related to uploading of quarterly reports at E-Waste Review portal on 06.08.2020 and 07.08.2020 respectively.

- (viii) **CPCB issued show cause notices to 186 producers on 16.09.2020 for not meeting the collection targets for the FY 2018-19. The reply of producers are under compilation.**
- (ix) **CPCB issued show cause notice to 523 producers on 06.10.2020 for not submitting their annual returns for the FY 2018-19. The reply of producers are under compilation.**
- (x) *A review meeting with all SPCBs/PCCs via video conference was organised on 09.10.2020 to review status of implementation of action plan during 1st & 2nd quarter of FY 2020-21.*
- (xi) *(xi) CPCB has issued show cause notices to 292 producers on 26-11-2020 whose collection centres were found non-complying or non-traceable and show cause them why not their EPR Plan/EPR Authorisation be suspended and action as per e-waste rules be initiated.*

### **3.0 ACTION TO BE TAKEN BY CPCB & SPCBs/PCCs:**

1. *CPCB to compile all the reply of show cause notices and to give opportunity for presenting their cases to defaulting producers as required in the rule 14 (2) of the E-Waste (Management) Rules, 2016 and then take again against defaulting producers.*
2. *SPCBs/PCCs to reassess the authorised capacity of dismantlers/ Recyclers in their states/UTs in accordance with the area criteria mentioned in CPCB's guidelines.*
3. *SPCBs/PCCs to submit report with clear observations and recommendations.*
4. *SPCBs/PCCs to strengthen the e-waste management cell in their respective State/UT.*

### **4.0 HON'BLE NGT (PB) DIRECTION IN THE MATTER OF OA NO. 1001 of 2019 (News Item – The Indian Express – 5000 illegal e-waste units being run in capital; Study)**

*In the matter of OA, no 1001/2019 (News Item at Indian Express dated 18.10.2019 titled “5000 Illegal E-Waste Units Being run in and around Delhi”), the issue for consideration is the remedial action against unscientific disposal of e-waste causing damage to the environment, with potential threat to public life. In the said matter taking note of reports submitted by UPPCB & DPCC, the Hon'ble NGT vide its order dated 30.09.2020 has issued following directions for CPCB.*

*“The CPCB may consider the suggestion of the State PCB with regard to the EPR clause and regarding PROs and give its response thereto in OA 512/2018, Shailesh Singh v. State of UP & Ors”.*

And

*“The CPCB may also consider incorporating requirement with regard to all the States/UTs to locate such units in identified industrial areas where such units can operate in environment friendly manner in terms of conditions of authorization/registration”*

**5.0 CPCB’S SUBMISSION IN THE MATTER OF OA NO. 1001/2019 – IN COMPLIANCE WITH HON’BLE NGT (PB) ORDER DATED 30-09-2020**

- (i) *Under the E-Waste (Management) Rules, 2016, Producers of notified electrical and electronic equipment (21 equipment as listed in schedule – I of the above said rules) have been given collection target for collection of e-waste under the policy instrument namely Extended Producer Responsibility (EPR). The producer have to collect e-waste as per the specified target and get it dismantled and recycled in an environmentally sound manner through an authorised dismantlers and recyclers.*
- (ii) *For managing its EPR, Producers have to obtain EPR Authorisation (EPRA) from CPCB. For obtaining EPRA, the producers have to submit their EPR Plan. EPR Plan details out producer’s awareness plan, system of collection, storage, transportation, dismantling, recycling, its service providers/channel partners (logistic partners, PROs, dismantlers and recyclers) and budget for EPR.*
- (iii) ***CPCB approves the EPR Plan of the producers and grant them EPRA. EPRA contains information on yearly collection target. So far 1630 producers have been granted EPRA.***
- (iv) *Under the EPR regime, the producers are required to fulfil its annual collection target. Based on the evaluation of EPR Plan of the producers it submitted that producers are mostly engaging authorised dismantlers, recyclers or registered PROs for collection of e-waste and the collected e-waste is being dismantled at dismantlers and recyclers premises. Based on the certification from the authorised dismantlers & recyclers the producers submits their annual returns specifying the amount of e-waste collected and recycled.*
- (v) *UPPCB in its report submitted that process of unauthorised dismantling and recycling has not been found in the area. Unauthorised units are small establishment engaged in burning, etching or smelting only. **From the report of UPPCB it appears that only populated waste printed circuit boards (WPCB) are coming to the Loni region and after removing of all the useful and valuable materials from the WPCB the bare waste printed circuit boards are dumped in the area.***
- (vi) ***Absence of dismantling activities and presence of populated waste printed circuit board in Loni area***

**establish the fact that these material are coming from dismantlers and recyclers of e-waste having their dismantling and recycling facilities elsewhere. This establishes the fact that materials are leaking from dismantlers and recyclers as Producers are getting their collected e-waste dismantled and recycled through the authorised dismantlers and recyclers and do not dismantled and recycled the collected e-waste themselves.**

- (vii) *The leakage of e-waste from dismantlers and recyclers is the reason for e-waste reaching to these areas. It has been observed that dismantlers and recyclers have been given processing capacity beyond their actual processing capacity by the SPCBs/PCCs.*
- (viii) **CPCB has observed that SPCBs/PCCs are not observing the guidelines of CPCB on capacity of the dismantlers and recyclers. The capacity has been linked with shed area available with the dismantlers & recyclers. For dismantlers it is 300 square meter for capacity of 1 tonne per day and for recyclers it is 500 square meter for capacity of 1 tonne per day.**
- (ix) *In one instance, CPCB has noted that capacity of one dismantlers increased to eight (8) times of its original capacity without any increase in corresponding shed the area. **This increase in the capacity in excess of its actual processing capacity results in such leakage.** In this regard, CPCB through review meetings regularly asking the SPCBs/PCCs for revising the capacity of dismantlers and recyclers in accordance with CPCB guidelines.*
- (x) *Under the E-waste (M) Rules, dismantlers/ Recyclers are authorized by SPCBs/PCCs. **Hence, SPCBs/PCCs while issuing authorizations to the dismantlers/recyclers should strictly follow CPCB's guidelines w.r.t to required facilities, pollution control equipment and availability of areas with the dismantlers & recyclers and on the basis of same should grant authorization and authorized capacity.***
- (xi) *EPR regime is in place and most of the producers have engaged the authorized dismantlers/recyclers/PROs for collection of e-waste for meeting their collection targets. So we need to prevent leakage from dismantlers/recyclers.*
- (xii) **Leakage of e-waste from authorised dismantlers/recyclers can be prevented by monitoring the authorised dismantlers/recyclers regularly & continuously for material balance, material movement and for tracing the destination of dismantled materials.**
- (xiii) *Bulk consumers (MNC, Govt. Departments, Ministry companies, etc.) generate large quantity of e-waste. **They auction the waste to highest bidder who in turn is an authorised dismantlers/recyclers. The auctioned waste***

**reaches to informal processors for recovery operations from these authorised dismantlers/recyclers. Bulk Consumers should be directed for auctioning their e-waste only to Producers system of collection.**

- (xiv) *For disposal of bare board dumped in the Loni Region after removal/recovery of useful and valuable material, we need to first assess the quantity of bare boards and to identify recyclers/processors who are willing to convert this bare board into some useful material. **The cost of collection, storage and processing may be thought off from Producers EPR budget if we consider the quantity of collected board as part of their collection target for which CPCB will have interaction meeting with Producers.***
- (xv) *Under Rule 12 of the E-waste(M) Rules Department of Industry in State or any other government agency authorised in this regard by the State Government, are to ensure earmarking or allocation of industrial space or shed for e-waste dismantling and recycling in the existing and upcoming industrial park, estate and industrial clusters.*
- (xvi) *In view of the above, the authorised government agency may provide space within the existing and upcoming industrial park, estate and industrial clusters for carrying out dismantling operations.*
- (xvii) *In the above space, **shed and other hand held tools be made available for carrying out manual dismantling operation.** This space will be a common space where different groups can carry out dismantling of their equipment.*
- (xviii) *Once equipment dismantled, it should be given to different recycler for recovery operation through sale & purchase.*
- (xix) *Any gap in the price expected & paid to dismantlers may be met from Producers and he in turn can claim the quantity of waste for which he made payment as part of his collection target.”*

### **Reports of DPCC**

15. In O.A. No. 1001/2019, the DPCC filed its report on 16.10.2020 as follows:-

#### **“ACTION TAKEN REPORT ON BEHALF OF DELHI POLLUTION CONTROL COMMITTEE WITH RESPECT TO ORDER DATED 30.09.2020”**

1. That Hon'ble Tribunal took up the matter on 30.09.2020 and directed DPCC to take further action against illegal E-Waste

*processing units and file compliance status before the next date of hearing.*

2. *That, earlier DPCC in co-ordination with East Delhi Municipal Corporation, Revenue Department and Delhi Police filed report action taken on 19.12.2019 and 25.09.2020 against the illegal E-Waste units being operated in non-conforming areas of Delhi. The reports are available on the record of this Hon'ble Tribunal.*
3. ***That Hon'ble Supreme Court had passed a judgment on 07.05.2004 in WP(C) No. 4677 of 1985 titled as "M.C. Mehta Vs. Union of India & Others" for closure of all the illegal units from the residential / nonconforming areas in NCT of Delhi. As per the said judgment, all illegal/unauthorized industrial units that have come up in residential / nonconforming areas in Delhi on or after 1<sup>st</sup> August 1990 shall close down. Illegal e-waste handling activities are also non-conforming to the land use as per the Delhi Master Plan -2021 and so are liable for closure.***

*Hon'ble Supreme Court of India has also constituted a Monitoring Committee under the Chairmanship of the Chief Secretary of Delhi. The Monitoring Committee would be responsible for stoppage of illegal industrial activity. This Monitoring Committee is filing regular progress reports before the Hon'ble Supreme Court of India through the Commissioner of Industries.*

4. ***That, as per the decision taken by the Chief Secretary, Govt. of NCT of Delhi in the meeting held on 05.06.2015, it has already been decided that action on all the industries operating in residential/non-conforming areas of NCT of Delhi and violating the Master Plan of Delhi will be taken by the land owning agencies.***
5. *That, as per the Master Plan of Delhi-2021, an industry is permitted only in designated areas i.e. Industrial Areas / Estates & Redevelopment Areas. An industry operating outside these areas are patently illegal irrespective of the fact whether that is polluting or not.*
6. ***That Hon'ble Supreme Court of India, vide its order dated 04.11.2019, in the above mentioned petition, clearly cast the responsibility of taking action against the illegal units in residential/non-conforming areas on the concerned Zonal Deputy Commissioners of the Municipal Bodies. Copy of the order dated 04.11.2019 passed by Hon'ble Supreme Court of India is annexed herewith as Annexure-1.***
7. ***That, illegal storage, dismantling, refurbishing & recycling of E-Waste are not permissible in residential/ non-conforming areas of NCT of Delhi and action for***

**closure of such entities is the responsibility of the concerned municipal authority. The teams consisting of East MCD, Executive Magistrate of Revenue department, DPCC and Delhi Police were constituted for taking action for effective closure and disconnection of power supply of such units/occupiers which are indulged in illegal activities of E-Waste handling & processing.**

8. That, a copy of the order passed by this Hon'ble Tribunal dated 30.09.2020 was forwarded to DSIIDC for taking necessary action and submit the action taken report to identify industrial areas where such unit can be allowed to operate in an environment friendly manner. **DSIIDC has submitted a letter on 16.10.2020 and informed that e-waste units can be set up in any of the approved industrial areas provided they take suitable measures for the prevention and control of environmental pollution as per the norms and provisions of various environmental laws.**

EDMC has been directed to take necessary action against illegal e-waste handling units in residential/ non conforming areas, of East DMC, till all the illegal units are closed down.

**Deputy Magistrates (Revenue) of three revenue districts have also been directed to take necessary action on the issue as closure of illegal units in terms of orders passed by this Hon'ble tribunal dated 18.10.2019.**

**DCPs of all the three districts i.e. East, North East and Shandara have also been requested to provide adequate police force for carrying out drive of effective closure.**

9. That, an order dated 07.10.2020 was issued by DPCC urging the Commissioner of EDMC and Deputy Magistrates of (East), (North East) & (Shandara) of Revenue department to continue the drive till all the illegal e-waste handling units are closed down. Police authorities were also asked to provide adequate force for carrying out the drive carried for closure of all the illegal units. Copy of the order dated 07 October 2020 is enclosed as Annexure-2.

10. That, following is the gist of the actions taken in the month of September and October 2020 by the DPCC in coordination with EDMC, Revenue department, Delhi Police and BSES Yamuna Power **Ltd:**

- **251 number of premises were surveyed till 15.10.2020**
- **Out of 251, 142 premises were found to be carrying out illegal e-waste handling activities. List of the 142 premises is enclosed as Annexure-3.**
- **99 number of premises have been vacated by the violators and stopped illegal e-waste processing**

**activities/ found locked. List of the violators who have vacated the premises is enclosed as Annexure-4.**

- **43 number of premises have been effectively closed by the joint teams of EDMC, Revenue Department, Delhi Police and BSES Yamuna Power Ltd.”**

16. DPCC report dated 01.12.2020 is as follows:-

**“3. That, in continuation to report dated 16.10.2020 it is most respectfully submitted that, joint teams have again carried out drive during 20-25 November 2020 to check the operational status of the premises which were sealed earlier or found vacant/locked during the earlier drives in December 2019 & October 2020. The teams have effectively closed down 29 more premises during the said drive and process of imposing Environmental Compensation (EC) is being initiated.”**

17. **Report of UPPCB** dated 28.09.2020 is as follows:-

**“Compliance and Action Taken report is as follows:-**

1. Ghaziabad Development Authority, Ghaziabad has submitted compliance report vide letter No-65/Pravartan Zone-8/2020 dated 04.07.2020. As per report joint survey of Loni area has been done by officers of GDA and Tehsil Loni for, identification of Khasra numbers on which illegal industry is established against prescribed land use in Master Plan of GDA. During the said survey, **80 illegal units were identified and action has been taken against them under the relevant sections of Uttar Pradesh Town Planning and Development Act 1973. This process of action is Quasi-judicial nature in which action is completed by passing an order by the competent authority providing an opportunity for hearing.** Further, joint survey of the area is being done by the said team to identify unauthorized units. Copy of compliance submitted by Ghaziabad Development Authority is annexed as Annexure III
2. Chief Engineer (Distribution) Ghaziabad Zone, PVVNL, Ghaziabad has been submitted a report vide letter dated 25.06.2020. **As per the report total 704 connections in Loni area have been verified in which 506 connections were not found, 64 connections could not be verified due to incomplete address, 23 connections have been permanent disconnected, 85 connections were found disconnected, 26 connections were found connected.** Copy of compliance submitted by PVVNL is annexed as Annexure IV.



3. Senior Inspector, Legal Metrology (Weight and Measures), Ghaziabad has submitted report on dated 25.06.2020 & 04.07.2020. **As per report received total 12 Dharam Kantas (Weighing bridges) have been inspected, in which challan has been issued against defaulting 09 Dharam Kantas.** Copy of compliance submitted by the department is annexed as Annexure V.
4. Further, in view of directions of District Magistrate, Ghaziabad, Sub-Divisional Magistrate, Tehsil, Loni vide order dated 09.09.2020 has constituted a Joint Team of officers from District Administration, UPPCB, District Industries Centre, Nagar Palika Parishad, Loni, Ghaziabad Development Authority, Labour, Electricity and Police to carry out regular survey in Loni area, not only for purpose of identifying and taking action against electronic waste units but all pollution causing activities. Copy of the order is annexed as Annexure VI.
5. The joint team has also surveyed the areas of Seva Dhaam, Behta Hajipur and Amit Vihar in Loni region and it has been found that unit which were closed/ demolished have not started any unauthorized activity again. Report of Joint Committee dated 23.09.2020 in this regard is annexed as Annexure VII.

### **3. Recommendations**

It is again submitted that process of unauthorized dismantling and recycling has not been found to be done in Loni region. Unauthorized units are small establishments engaged in burning, etching or smelting only.

**Waste Printed Circuit Boards (WPCBs) are a 'high-value' commodity to both the formal and informal e-waste recycling industry. WPCBs contain a variety of metals ranging from base metals like copper and aluminum to precious metals like gold, silver, platinum and palladium as well as critical metals of rare earth metals among others. Once the WPCBs reach the informal sector, all the components on the boards are removed using screwdrivers, pliers, and gas torches. Also, the board itself has considerable amount of metal, primarily copper and tin, thus to extract copper the boards are dipped in acid baths for purpose of leaching and what remains.**

**This is the type of waste in Loni region of Ghaziabad, the board above is bereft of most metallic fractions and represents what is known as the nonmetallic fractions, which might constitute of Epoxy resin, glass fiber and some copper with impurities. Since economic benefit of recovering any material from these boards is minimal and the recovery process complex, same has been left in the region in form of waste. These boards possess an environmental risk and need to be disposed off by means of fine-pulverization and used further as fillers. Incineration or landfilling such waste is a short term and capital-intensive process.**

Also, considering the amount of waste not only in Loni region but elsewhere as well, **Central Pollution Control Board may consider to tap the Producers under Extended Producer Responsibility (EPR) clause as dumping and channelization of electronic waste from different parts of the country is a result of the failure of the Producers to bring back the e-waste into the formal collection channels as per E-Waste Management Rules, 2016.** As stated earlier, the disposal and recycling of non-metallic fractions and thereby the bare and de-populated boards is not an economically attractive process. However, it is precisely to incentivize the proper and environmentally safe disposal of such 'low value' components or parts of e-waste that the producers pay their respective PROs and e-waste recyclers a 'Recycling Fee'.

Thus, for purpose of disposal of bare PCBs, CPCB may consider setting up a pilot fine pulverization unit or a unit based on any other, technology that CPCB may deem fit in discussion with expert agencies and stakeholders and financial assistance may ideally be provided by the producers as part of their quantities of WPCBs that is cleared and processed from the dumpsite must be counted as a part of their collection targets.”

#### **Reports of Oversight Committee for UP**

18. The report of the Oversight Committee for the State PCB filed on 05.08.2020 mentions the meetings held with the Administrative Authorities and gives status of compliance in the State of UP followed by its recommendations as follows:-

#### **“Recommendations:**

##### ***In view of above, we recommend as follows:***

1. ***After the enforcement of e-waste Rules in 2016, India has a very strict statutory regime for e-waste collection and recycling through formal sector. All the producers have to take EPR Authorisation, failure to do so can result in penalty under EPA Rule 5(7), forfeiture of sale rights Rule 13(iv) and ineligibility for imports Rule 16(6). If still adequate channelization of EoL electronic products is not being achieved through the formal channels, it indicates major gaps in our implementation/ enforcement system.***
2. ***When Oversight Committee reviewed the enforcement effort it was found that both at CPCB and SPCB, the number of inspections is very small. The Regional Officers of SPCB did not appear to be fully aware about the contact details of the authorized producers and their collection centres. It could be because of some communication gap between CPCB***

*and SPCB on the subject of e-waste. While there is some information available on CPCB website, it needs to be reinforced. CPCB should endeavour to actively involve the SPCBs by regularly communicating relevant informations to SPCBs, insisting on quarterly progress review and regular capacity-building workshops for SPCBs technical and field staff.*

- 3. Illegal e-waste recycling and processing are concentrated in a few hotspots. Seelampur in New Delhi is the hub and in UP, Loni, Baghpat and Moradabad are the hot spots. We need to step up enforcement at these hot spots, combining local enforcement with supervision from task force to obviate local vested interests. A lot of illegal refurbishing/ recycling activities go on in Loni. Loni has been notified as a regulated area under GDA. Chief Secretary UP should be directed to ensure that GDA comes out with proper urban planning of Loni which would certainly ensure that no industrial activity takes place in regulated residential areas.*
- 4. Unlike other countries, India has a highly developed informal sector in the scrap market. It could be a bane or boon. If done in an unscientific way, it could be a big environmental sore point. However, if it is properly integrated with the formal sector in a scientific way, it could be very useful. There are provisions for integration of informal sector with formal sector in Rule 15 (c) of SWM Rules, 2016. Similar efforts can be done in the E-Waste sector. If a mechanism is developed in a scientific and environmentally clean way to ensure that authorized producers integrate them in their collection and reprocessing cycle, it will be very helpful.*
- 5. The biggest area of work is in awareness generation. Still, most of the consumers do not know what to do about their electronic products like, computers, mobiles etc which have completed their life. We must focus on IEC efforts to spread awareness amongst the consumers. In fact some steps like making statutory provisions for mandatory stamping/labelling on products itself for guiding the consumers about the disposal mechanism of EOL products could also be considered.*
- 6. In many countries, there are separated waste deposition centers for domestic E-Waste which helps in easy segregation of E-Waste. In India, there is also provision under rule 15(i) of SWM Rules for waste deposition center for domestic E-Waste which should be implemented strictly.*

7. ***Though Noida/Greater Noida has become the mobile manufacturing hub of India, there are no facilities for E-Waste dismantling/recycling. Rule 12 of E-Waste Rules, 2016 categorically directed that the State Govt shall ensure E-Waste dismantling/recycling sheds in upcoming industrial parks/estates/clusters. This condition should be made mandatory in the allotment letter itself to be issued by the State Industrial Development Authority, who may also allocate space for same accordingly. Chief Secretary, UP may be directed to ensure the compliance of these directives.***
8. ***Though in Moradabad pursuant to the NGT Order, 25000MT of black powder (Leachate Residue of E-Waste) has been temporarily shifted from the banks of River Ramganga to a temporary dump, it needs to be shifted to a permanent TSDF at Amroha. Still, the work of construction of TSDF has to start. Chief Secretary, UP may be directed to expedite the construction of TSDF at Amroha or otherwise ensure shifting at available TSDFs at Kanpur or Unnao (which are at a greater distance). He should also fix responsibility for the delay.***
9. ***Although, India has completely banned import of solid plastics in Hazardous Waste Rules 2016 and trans-boundary movement of hazardous waste is being kept in check under Basel Convention 1992, still, large amount of plastic waste and refurbished Medical equipment/computers/mobile phones are being imported into India. All these types of imports are in the name of cheap raw materials including hazardous and toxic wastes. Thus, there is an urgent need for a detailed assessment of the E-waste including quantification, characteristics, existing disposal practices, environmental impacts and the establishment of e-waste collection, exchange and recycling centers in partnership with private entrepreneurs and manufacturers. There is need of an effective take-back program providing incentives for producers to design less wasteful products which contain fewer toxic components, and are easier to disassemble, reuse, and recycle. This may help in reducing the wastes. Deposit/refund schemes can encourage consumers to return electronic devices for collection and reuse/recycling. There is need for more recycling facilities and development of infrastructure to handle e-waste effectively. Each state should develop its own scrap yards in the respective cities to warehouse e-waste.”***

19. The report of the Oversight Committee dated 25.11.2020, in continuation of the earlier report, mentions further steps taken with following further recommendations:-

#### **“RECOMMENDATIONS**

##### ***In view of the above, we recommend:***

1. *All the producers must take EPR authorization as per E-waste (Management) Rules, 2016. After the enforcement of E-waste (Management) Rules, 2016, India has a very strict regime for e-waste collection and recycling through formal sector. Failure to obtain EPR authorization can result in penalty under EPA Rule 5(7), forfeiture of sale rights Rule 13(4) and ineligibility for imports Rule 16(6). In case of inadequate collection and channelization of e-waste generated from the end-of-life of their products, it indicates major gaps in our implementation/ enforcement system. UPPCB to identify the e-waste generating industrial units and check if they have EPR authorization. In case of default, penalty be imposed within the shortest possible time.*
2. *For environmentally sound management of e-waste, **State must ensure allocation of proper space to the existing and upcoming industrial units for e-waste dismantling and recycling, recognition and registration of workers involved in dismantling and recycling, undertake industrial skill development activities for the workers involved in dismantling and recycling, and undertake annual monitoring to ensure health and safety of workers involved in such activities.***
3. *Several countries have separate waste deposition centers for domestic E-waste which helps in easy segregation of E-waste. In India, the provision for waste deposition center for domestic E-waste is mentioned under Rule 15(i) of SWM Rules which should be implemented strictly. The Committee recommends that Urban Development Department/concerned authority to ensure e-waste removal from dump sites as well as its segregation in the State without further delay.*
4. *Illegal recycling and processing of e-waste is concentrated in few hotspots in the State such as Seelampur in New Delhi is a hub and Loni, Baghpat and Moradabad in UP are the hotspots. **We need to step up enforcement of e-waste management rules in these hotspots combining local enforcement with supervision from task force to obviate local vested interests.** Lots of illegal refurbishing/recycling activities are reported in Loni, Ghaziabad which has been notified as a regulated area*

under GDA. Chief Secretary, UP should be directed to ensure that GDA comes out with proper urban planning of Loni which would certainly ensure that no industrial activity takes place in regulated residential areas.

5. *In pursuance of the order of Hon'ble NGT, **25000MT of black powder (Leachate Residue of E-waste) in Moradabad has been temporarily shifted from the banks of River Ramganga to a temporary dump. This dump needs to be shifted to a permanent TSDF that is likely to come up at Amroha. However, the construction work for TSDF is yet to start, hence, the Chief Secretary, UP may be directed to expedite the construction of TSDF at Amroha or otherwise ensure shifting at available TSDFs. At present, the nearest TSDF are at Kanpur or Unnao (which are at a greater distance). He should also fix responsibility for the delay.***
6. *In many countries, **Deposit Refund Schemes** have proved to be the most effective and sustainable way to ensure that no waste is leaked into the environment. In India, there is also a provision for implementation of Deposit Refund Scheme under Schedule-I of E-waste (Management) Rule, 2016 which ensures the collection and channelization of e-waste generated from the end of life of their products to authorized dismantlers or recyclers. It is suggested that such schemes are implemented strictly and effectively in the State.*
7. *An alternative way to improve the environment is the implementation of the tool **Life Cycle Assessment (LCA)** which can be used during the design phase of new electronic products to design environmental friendly products, minimize the amount of waste generated at their end of life, estimate the influence of material consumptions as well as evaluate the environmental and economic aspects. The Committee recommends that manufacturer or producers consider it while designing electronic products.*
8. *The major drawback in e-waste management is in awareness generation. Most of the consumers are unaware about how to dispose their electronic products once their life is completed. In such case, we must focus on IEC efforts to spread awareness amongst the consumers. In fact, some steps like information on hazards of improper handling, disposal or recycling of e-waste, instructions for handling and disposal of the equipment after its use, and affixing a clear and indelible symbol on the product or product user manual to prevent e-waste from being dropped in garbage bins containing waste destined for disposal could also be considered. Campaigns such as launched by Tech-lifestyle accessory player Adcom India titled, "Hum E-waste Le Jayenge", to spread awareness about e-waste while making individuals more informed*

*about the social implications of e-waste and the importance to efficiently manage e-waste in an organized manner.*

9. *State be directed to ensure the compliance of Rule 12 (1) of E-Waste Management Rules 2016 with regard to existing as well as the upcoming industrial parks.”*

#### **Further report of CPCB**

20. In O.A. No. 621/2018, report of CPCB dated 12.02.2020 is as follows:-

#### **“1.1 Compliance with regard to 'Dismantling and Recycling of e-waste as per the rules'**

As per CPCB record there are three hundred twelve (312) numbers of dismantlers/recyclers in eighteen (18) states of the country. Out of eighteen (18) SPCB/PCC seventeen (17) have provided verification report on the dismantling and recycling facilities authorised in their state. One (01) state that is Uttar Pradesh has not provided any information so far in this regard.

Verification reports of two hundred and sixty-three (263) dismantling and recycling facilities are available and out of these two hundred and seven (207) facilities were found operational. twenty-seven (27) were found non-operational, sixteen (16) were found closed and status of operation of thirteen (13) facilities were not provided by SPCBs/PCCs.

Out of two hundred and sixty-three (263) dismantling and recycling facilities, ninety-nine (99) facilities were found complying, one hundred and six (106) facilities were found non-complying and the status of fifty-eight (58) facilities were not provided.

#### **1.2 Compliance with regard to 'no illegal dismantling and recycling of e-waste'**

Sixteen (16) SPCBs as per the list below have informed that they have initiated drive against illegal dismantling and recycling of e-waste. As per the report no such activity was reported in the state AP, Bihar, Chandigarh, Chhattisgarh, Haryana, H.P, Jammu & Kashmir, Karnataka, Maharashtra Meghalaya, Punjab, Puducherry and Telangana. Delhi PCC and SPCBs of Kerala and UP has reported actions against illegal dismantling and recycling of e-waste.

The details are given below:

S.No	SPCB/PCC	Action taken
1.	Delhi	DPCC has carried out checking of, dismantling and recycling of e-waste in Delhi, 09 teams were constituted with representation from Revenue, MCD, Delhi Police and DPCC. The said teams have identified 31 occupiers engaged in illegal e-waste storage/ handling in eastern & northern zones of Delhi
2.	Kerala	Kerala SPCB has initiated actions for checking informal trading dismantling and recycling of e-waste in its State. During the drive, Kerala SPCB disposed 199532.2 Kg of e-waste from informal sector to registered recyclers.
3.	UP	UP SPCB informed that regular drives are being conducted against illegal processing and dumping of e-waste. Action has been taken by UPPCB against illegal e-waste processing units. Eighty (80) such illegal melting furnace units were dismantled in Loni District of Ghaziabad in Nov, 2019 and FIR has been lodged against 16 persons. Further illegal E-Waste of 6.850 ton was seized and 05 illegal godown were sealed by district administration in district Moradabad. Environmental compensation of 60 Lakhs is imposed and closure orders have been issued against 04 illegal E-waste Processing Units.

*Fifteen (15) SPCBs have not yet started drive against illegal dismantling and recycling of e-waste.”*

21. Second report of CPCB filed on 17.10.2020 is as follows:-

**“3.0 State wise Compliance Reports on E-Waste Management:**

*The issues covered in the matter of OA No. 621/2018, (Mahendra Pandey Vs. Union of India & Others) are also being dealt under OA No. 512/2018, (Shailesh Singh Vs. Govt. of U.P & Ors) regarding E-waste.*

*In the Hon’ble NGT orders dated 23.09.2019 in the matter of OA No. 621/2018, there were two issues related to E-Waste Managements:*

- (i) Ensure that there is no illegal dismantling of e-waste*
- (ii) Any dismantling/recycling has to be in accordance with the Rules*

*Based on information furnished in the matter of OA No. 621/2018 and also in the matter of OA No. 512/2018, status has been reported for 33 SPCBs/PCCs namely; Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Dadra Nagar Haveli and Daman & Diu, Goa, Gujarat, Haryana, HP, J&K, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, UP, Uttarakhand & West Bengal have submitted their reports on*



compliance of NGT directions. Reports of 26 SPCBs/PPCs has been compiled and placed at **A2**.

### **3.1 Observations**

Based on Progress reports submitted in the matter and also reports submitted in the matter of OA No. 512/2018 (Shailesh Singh Vs. UoI & Ors) following are the observation:

- **Seventeen (17) SPCBs/PCCs namely; AP, Delhi, Goa, Gujarat, H.P, Haryana, J&K, Kerala, Karnataka, Meghalaya, Odisha, Puducherry, Tamil Nadu, Telangana, Tripura, U.P & West Bengal** have conducted drives during last six months for checking informal trading, dismantling & recycling of E-Waste in their respective States/UTs.
- **Six (6) SPCBs/PCCs namely; Delhi, J&K, Kerala, Meghalaya, Puducherry, & U.P** have identified informal E-Waste units and actions have been initiated against such informal units.
- **Out of 33 SPCBs/PCCs, eleven (11) SPCBs/PCCs namely, Arunachal Pradesh, Bihar, Chandigarh, Dadra Nagar Haveli and Daman & Diu, Kerala, Manipur, Mizoram, Nagaland, Puducherry, Sikkim & Tripura** have informed that there are no authorized dismantlers/ recyclers of E-waste in their State /UT.
- Out of 22 SPCBs/PCCs having authorized dismantlers/ recyclers in their States/UTs, **thirteen (13) SPCBs/PCCs namely AP, Assam, Chattisgarh, Delhi, Goa, Gujarat, Haryana, HP, MP, Odisha, Telangana, Uttarakhand & West Bengal** have reported that all the operational dismantling/recycling units in their State/UT are complying as per CPCB guidelines and consent conditions, **One (01) SPCB namely Rajasthan** has reported that they inspected 04 units out of 30 units and the same were found complying and **six (06) SPCBs namely Jharkhand, Karnataka, Tamil Nadu, Punjab, Maharashtra & J&K** have reported non-complying dismantling/recycling units in their state. **Four (04) SPCBs namely J&K, Karnataka, Maharashtra & Punjab** have reported actions against non-complying units. However, in case of **Jharkhand & Tamil Nadu** no actions have been reported against noncomplying units.
- Status of compliance is not provided in case of **Two (02) SPCBs/PCCs namely, Meghalaya & U.P.**
- **Two (02) PCCs namely A&N Island, Lakshadweep** have not submitted any report

### **3.2 Conclusion:**

- **Drives** to check informal trading, Recycling & Dismantling of E-Waste has been initiated in **seventeen (17)** States and UTs.
- Seven SPCBs/PCCs have identified informal units/ activities of E- waste in their States/UTs and actions have been taken

*by all the SPCBs/PCC other than Meghalaya against such informal units.*

*Most of the Dismantling/Recycling units are found to be complying as per CPCB guidelines & Consent Conditions.”*

22. Report of the UPPCB filed on 10.02.2020 gives *“Progress Status of Action Plan with Timeline for Disposal of Hazardous Waste lying on the banks of river Ram Ganga in Moradabad.”*

23. The above reports show the magnitude of problem. There are huge gaps in compliance of rules which are being more held in breach than observance showing the authorities charged with the obligation of ensuring pollution free environment in poor light. There are clear governance deficits on the subject and higher authorities are not adequately concerned about the plight of the citizens on account of such serious violations to the detriment of health of the citizens. Environmental crimes are as serious, if not more, as cases of assaults but there is no adequate action. Coordinated approach is required but unless there is monitoring at higher levels and leadership is provided, leaving the matter to lower levels or issuing paper directions cannot result in improvement of the situation. Unfortunately, it appears that violation of environmental law is not the priority. Such neglect can prove very costly. For petty benefit of retrieving metals etc., poor labour class is engaged in burning electronic wires or other wastes to the detriment of their own health and also the health of others which is not being duly checked by creating awareness of taking stringent action or preparing other effective policies. Above all, constant vigilance is required. Liability of manufactures is not being enforced.

24. CPCB has highlighted the status of enforcement of EPR regime, status of collection and channelization of e-waste, verification of facilities

of dismantlers and recyclers, informal trading, dismantling and recycling, collection and disposal and monitoring of compliance. CPCB has finalized software and conducted exercise of reviewing status of compliance. It has also devised compensation regime.

The overall status provided by the CPCB is given below in a tabulated form:

	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>
<b>E-waste Generation (in tonnes)</b>	708445	771215	<b>1014961.2</b>
No. of Producers with EPRA	1630		
No. of PROs	44		
No. of dismantlers	312		
<b>Dismantling capacity</b>	<b>782080.62 t/a</b>	-	-
E-waste dismantled in tonnes	69413.619	164663	-
<b>Collection target</b>	<b>35422.25</b>	<b>154247.74</b>	-
<b>Collection</b>	<b>25325.28</b>	<b>78280.995</b>	-

The statistics given above indicates that there is a gap between collection target and the collection and the installed dismantling capacity has to be adequate against the E-waste generation.

25. As already noted, the EWMR provide for specific responsibilities of the Manufactures, Producers, Collection centres, Dealers, Consumers, Dismantlers, Recyclers, Refurbisher and Departments of Industries and Labour in the States apart from the PCBs/PCCs and the CPCB. Finally, annual reports have to be compiled. The actions to be taken also cover Transportation, Accident reporting, Accountability of Manufacturers, Producer, Importer, Transporter, Refurbisher, Dismantler and Recycler for any damage to the environment or to the third parties. The same need to be enforced.

**DIRECTIONS:**

26. We direct that further steps be now taken for scientific enforcement of EWMR in the light of the reports of the CPCB and the Oversight Committee for the State of UP. The major areas to be focused are:

- enforcement of EWM Rules,
- implementation of authorization regime,
- implementation of EPR regime,
- bridging the gap between collection target and collection,
- enhancing the installed dismantled capacity to match the e-waste generation,
- implementation of environmental compensation regime,
- constant Vigilance and monitoring,
- creation of awareness amongst masses and collectors/handlers/dismantlers/recyclers.

27. CPCB needs to update the status periodically atleast once in six months and issue appropriate directions in the light of the reports received. The CPCB may inter-alia consider steps for compliance of Rule 16 requiring reduction in the use of Hazardous substances in the manufacture of electrical and electronic equipment and their components or consumables or parts or spares.

28. It is further clear that large number of accidents take place in residential areas on account of unscientific handling of e-waste. This needs special attention for constant vigilance in such hot spots. This also requires review and updation of siting norms for e-waste by the CPCB which may be done within three months.

29. We also direct the acceptance of recommendations of the Oversight Committee for the State of UP. We record statement of learned counsel for the State PCB for TSDF at Amroha will be functional by 01.03.2021.

The State PCB may ensure in setting up of TSDF and its operationalization CPCB guidelines are duly followed. The e-waste on the bank of River Ramganga may be duly shifted in an environmentally sound manner. Banks of river Ramganga should be cleaned and no deposition of e-waste/black powder observed.

30. DPCC may continue further efforts in coordination with the concerned Authorities including Delhi Police and East Delhi Municipal Corporation. It is not enough for the DPCC to be content by simply giving directions to other statutory authorities instead of coordinating with them to ensure compliance. Dismantlers and recyclers may be located in the conforming areas and provided with proper infrastructure facilities.

31. All the State PCBs/PCCs need to identify the hotspots by constant vigil and to coordinate with the District Administration at local levels to prevent damage to the environment and public health and meaningful enforcement of rule of law. The E-waste needs to be shifted to the nearest TSDFs for safe disposal. Dismantlers and recyclers may be located in the conforming areas and provided with proper infrastructure facilities.

A copy of this order be forwarded to the Chief Secretary, UP, CPCB, all the State PCBs/PCCs by e-mail for compliance.

The applications are accordingly disposed of.

Pending M.A. No. 1505/2018 also stands disposed of in view of the order passed in main matter.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

January 15, 2021

O.A. Nos. 512/2018, 621/2018 & 1001/2019

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