

Item No. 01

(Court No. 1)

BEFORE THE NATIONAL GREEN TRIBUNAL

(By Video Conferencing)

Original Application No. 909/2018

(With reports dated 30.07.2021, 13.08.2021 and 12.08.2021)

Confederation of Trans Hindan RWA's Ghaziabad

Applicant

Versus

U. P. State Pollution Control Board & Ors.

Respondent(s)

Date of hearing: 22.10.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE BRIJESH SETHI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Respondent: Mr. Vishwajit Singh, Advocate for Ghaziabad Nagar Nigam
Mr. Pradeep Misra, Advocate & Mr. Daleep Dhyani, Advocate for
UPPCB
Mr. Saurabh Balwani, Advocate for CPCB

ORDER

1. This is yet another instance of disappointing performance of statutory authorities in scientifically managing the waste at Indirapuram, Vasundhara and Vaishali, Ghaziabad, to the prejudice of Rule of Law and the environment and public health. This is so inspite of continuous monitoring by this Tribunal for the last about three years.

2. The application has been filed by the Resident Welfare Associations. After noticing the allegation of failure of the statutory authorities, vide order dated 19.11.2018, the Tribunal constituted a Joint Committee of District Magistrate, Ghaziabad, Ghaziabad

Development Authority, Municipal Corporation Ghaziabad and State Pollution Control Board to prepare an action plan and execute the same. The matter has been thereafter reviewed and monitored on 28.05.2019, 21.08.2019, 03.03.2020, 02.09.2020, and 15.04.2021 and each time the Tribunal has noticed continuing failure and issued directions for remedial action.

3. When we have taken up the matter for review of the compliance status today, the situation remains far from satisfactory. There appears to be failure of the higher authorities in taking action against the erring officers so as to enforce the right of the citizens to clean environment. As already mentioned, steps so far taken are not adequate. There is huge gap in the mandate of law and the compliance level on the ground. This calls for stringent coercive measures by the higher authorities in the State as well as by this Tribunal, for protection of environment and public health.

4. We may notice the factual situation found in the earlier orders:

Order dated 19.11.2018

***“2. According to the applicant, no site is specified as dumping ground in the Master Plan of Ghaziabad 2021. The garbage is being dumped and burnt. There was a huge fire in the garbage on 20.10.2017. The area is now regulated by the Municipal Corporation, Ghaziabad. Garbage collected from Indirapuram, Vasundhara and Vaishali is dumped at Shakti Khand, adversely affecting the air quality. The sanitary landfill is stinking, unhygienic and unscientific. There is non-compliance of the Solid Waste Management Rules, 2016. The waste generators are not segregating the waste as required nor are they storing the construction and demolition waste or the horticulture waste or garden waste. No State Policy or Waste Management strategy has been prepared by the State for reduction, reuse and recycling. The applicants have also annexed news articles published in Dainik Jagaran, Amar Ujala, Hindustan Times, Nav Bharat Times and coloured photographs of the collected garbage.*”**

“3.....xxx.....xxx.....xxx

4. Accordingly, we constitute a joint committee of representatives of the District Magistrate, Ghaziabad, the Ghaziabad Development Authority and the Municipal Corporation Ghaziabad and the State Pollution Control Board to prepare an appropriate action plan in the matter and execute the same. The District Magistrate, Ghaziabad will act as a Nodal Agency for the purpose.”

28.05.2019

“4. As per report dated 22.04.2019 received by this Tribunal on 06.05.2019 from the State PCB, it is acknowledged that garbage was being dumped in Shakti Khand. There is no segregation of garbage. GDA has constructed approach road for setting up the plant. Land has been arranged and handed over to GDA. Approach road work is to be completed till 27.05.2019 (which date is already over).

5. Having regard to the seriousness of the situation and adverse effect on the public health, **Municipal Corporation Ghaziabad is to be held accountable. By way of an interim arrangement, we direct the Municipal Corporation Ghaziabad to deposit a sum of Rs. 25 lakhs towards compensation for damage to the environment within one month with the CPCB.**

6. In spite of orders of this Tribunal, **no adequate steps are shown to have been taken in the last six months. It will be necessary to require the Municipal Corporation Ghaziabad to furnish a Performance Guarantee in the sum of Rs. 25 lakhs within one month to the satisfaction of the CPCB to ensure further satisfactory action within next two months. In case satisfactory steps are not taken, the amount will be forfeited.**

7. **The CPCB may assess the extent of damage and give its report to this Tribunal about the status after two months.**

8. **In the meanwhile, fencing may be done around the dumps and green belt may also be set up to ensure that cows do not enter and consume bio non-degradable garbage as appears to be happening from the photographs annexed to the application. It will be desirable that the garbage dumps be shifted to any other appropriate site in a scientific manner. In case it is so shifted, all precautions be taken for protection of environment in accordance with the statutory rules.**

21.08.2019

“4. A report was filed by the PCB observing and recommending as follows:

“Observations: -

The following were the observation during inspection of dumpsite at Shakti Khand-4, Indirapuram:

1. *Mixed Municipal Solid Waste(MSW) is being dumped at 30,000 Sq. m. plot area which is part of land allocated for STP. The height of the dumpsite varies from 5 to 15 feet at different places.(Photo-1 of Annexure-1)*
2. *As per UPPCB report, **MSW is being dumped at this site from last 2-3 years.***
3. ***The aesthetics of the site has become displeasing and the presence of bad odor, rodents, pests etc. hinders the life of people living in adjoining areas.***

Recommendations:

Dumpsite at Shakti Khand-4, Indirapuram, Ghaziabad is not a scientific landfill. If dumping of MSW is continued, then generated leachate shall percolate to ground water and will lead to further contamination of ground water. As the dumpsite is located in a thickly populated area, further dumping of waste by Ghaziabad Development Authority (GOA) has to be stopped immediately so as to curtail any further damage to the environment and to avoid situation similar to dumpsites in Delhi and elsewhere in the country.”

5. *During the course of hearing we have been informed that since the area has not been handed to the Municipal Corporation Ghaziabad, further steps are to be taken by the GDA.*

6. ***Since the garbage dumped is a hazard for the environment and the public health, the same must be scientifically remedied. In this regard, we may refer to the order of this Tribunal dated 17.07.2019, O.A. No. 519/2019, News item published in "The Times of India" Authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes", wherein directions have been given for scientific handling of all waste dumps in the country. In the light of the said order, following Committee is constituted to deal with the matter in Ghaziabad:***

i. District Magistrate, Ghaziabad

Chairman

ii.	Vice-Chairman, GDA	Member
iii.	Municipal Commissioner, Ghaziabad	Member
iv.	Representative from State PCB	Member
v.	Representative from CPCB	Member

7. The Committee may meet within a month and prepare an action plan in terms of order of this Tribunal dated 17.07.2019 and ensure clearance of the dumps within a reasonable time and furnish a progress report before the next date by e-mail at judicial-ngt@gov.in.”

03.03.2020

“10. We may observe that non-compliance of rules relating to waste disposal results in damage to the environment and public health. **Any failure needs to be visited with assessment and recovery of compensation for such damage from the persons responsible for such failure.** A study was recently got conducted by CPCB, under orders of this Tribunal requiring such a study by a joint Committee comprising CPCB, NEERI and IIT, Delhi about the monetary cost of damage caused to the environment on account of existence of legacy waste dump site at Gurgaon (Bandhewadi) vide order dated 05.03.2019 in O.A. No. 514/2018. The report of the CPCB filed on 13.02.2020 is that damage on account of the said legacy waste dump site was Rs. 148.46 crore, on account of damage to the air quality, soil and water quality, climate change and disamenity (aesthetic). The damage has been assessed in terms of impact on health due to release of pollutants in air atmosphere, release of leachate into ground /surface water and soil, due to pollution from the landfill site, damage cost associated with climate change due to carbon di-oxide and methane, damage caused due to aesthetics loss, price depreciation due to disamenity cost etc.

11. **Thus, monetary cost of every legacy dump site is expected to be huge depending upon the location, quantity of waste and area covered. Needless to say that there is huge cost for non-compliance of other provisions relating to waste management – Solid as well as Liquid. Loss to the environment and public health is taking place not only on account of delay in clearing legacy waste but also for not complying with other provisions of the Rules resulting in huge gap in generation and processing of waste. It may be necessary to determine such cost for delay in clearing legacy waste at every dump site as well as for delay in complying with other rules and failure to treat sewage and recover the same from the persons responsible for action in the matter.**

12. The damage, thus, is about Rs. 500 per metric tonne in five years (as in Gurgaon dump site quantum of waste was about 25 lac tonnes) which is far less than the cost involved in clearing the legacy waste site or processing the waste. There is clear deficit in governance in performing constitutional obligations, resulting in huge

damage to the environment. Citizens are suffering in terms of health on account of such failure. Even if State is not to spend, least the State must do is to have the waste properly managed even at the cost of the citizens so that their health is protected. CSR funds are also available under Section 135 of the Companies Act, 2013. It is only a matter of governance and management. The procedures need to be curtailed and the work executed swiftly in the interest of public health and environment and liability of officers fixed for delay, causing huge loss.

13. This Tribunal has already interacted with the Chief Secretary, UP recently on 10.01.2020 in O.A. No. 606/2018 and issued following directions in the light of earlier directions of the Hon'ble Supreme Court and this Tribunal and the constitutional and statutory provisions:

“36. We accordingly direct:

a. In view of the fact that most of the statutory timelines have expired and directions of the Hon'ble Supreme Court and this Tribunal to comply with Solid Waste Management Rules, 2016 remain unexecuted, **compensation scale is hereby laid down for continued failure after 31.03.2020. The compliance of the Rules requires taking of several steps mentioned in Rule 22 from Serial No. 1 to 10 (mentioned in para 12 above). Any such continued failure will result in liability of every Local Body to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body from 01.04.2020 till compliance. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal.**

b. Legacy waste remediation was to 'commence' from 01.11.2019 in terms of order of this Tribunal dated 17.07.2019 in O.A. No. 519/2019 para 28¹ even though

¹ The Chief Secretaries may ensure allocation of funds for processing of legacy waste and its disposal and in their respective next reports, give the progress relating to management of all the legacy waste dumpsites. Remediation work on all other dumpsites may commence from 01.11.2019 and completed preferably within six months and in no case beyond one year. Substantial progress be made within six months. We are conscious that the SWM Rules provide for a maximum period of upto five years for the purpose, however there is no

statutory timeline for 'completing' the said step is till 07.04.2021 (as per serial no. 11 in Rule 22), which direction remains unexecuted at most of the places. **Continued failure of every Local Body on the subject of commencing the work of legacy waste sites remediation from 01.04.2020 till compliance will result in liability to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal.**

- c. Further, with regard to thematic areas listed above in para 20, steps be ensured by the Chief Secretaries in terms of directions of this Tribunal especially w.r.t. plastic waste, bio-medical waste, construction and demolition waste which are linked with solid waste treatment and disposal. Action may also be ensured by the Chief Secretaries of the States/UTs with respect to remaining thematic areas viz. hazardous waste, e-waste, polluted industrial clusters, reuse of treated water, performance of CETPs/ETPs, groundwater extraction, groundwater recharge, restoration of water bodies, noise pollution and illegal sand mining.
- d. The compensation regime already laid down for failure of the Local Bodies and/or Department of Irrigation and Public Health/In-charge Department to take action for treatment of sewage in terms of observations in para 31 above will result in liability to pay compensation as already noted above.
- e. **Compensation in above terms may be deposited with the CPCB for being spent on restoration of environment which may be ensured by the Chief Secretaries' of the States/UTs.**
- f. **An 'Environment Monitoring Cell' may be set up in the office of Chief Secretaries of all the States/UTs within one month from today, if not already done for coordination and compliance of above directions**

reason why the same should not happen earlier, in view of serious implications on the environment and public health.

which will be the responsibility of the Chief Secretaries of the States/UTs.

- g. *Compliance reports in respect of significant environmental issues may be furnished in terms of order dated 07.01.2020 quarterly with a copy to CPCB.”*

14. Compensation for damage to public health and environment needs to be recovered from the officers who have failed in performing their duties and current responsibility must be discharged by the officers in position failing which they must be made accountable. Compensation in terms of order dated 10.01.2020 is liable to be paid by each local body and other State authorities. Standard Operating Procedure (SoP) for legacy waste clearance has already been laid down by the CPCB which is available on its website. Even in the State of UP several service providers have been hired and there is no justification for wasting time in separate DPRs where problems are identical. Available DPRs can be utilized. Rates can be standardised. All the legacy wastes have to be cleared and sewage treatment ensured to give effect to environmental laws including Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986 and Constitutional provisions under Article 243(W) and 12th Schedule. The cost can be recovered as per applicable norms or laying down further norms on ‘Polluter pays’ principle. Right to breathe fresh air and access to water being right to life, non-availability of funds cannot be a defence for inaction. Enough power is available with the State to raise necessary funds for the purpose. Damage to the environment caused, calculated at the rate of the expert Committee report referred to above, in the last five years for one legacy site itself may be more than Rs. 8 crores. It may be necessary to fix liability in this regard.

15. In view of above, we direct the Municipal Corporation, Ghaziabad and GDA to ensure clearance of legacy waste and compliance of Solid Waste Management Rules, 2016, apart from ensuring treatment of sewage. Pending long term action, interim steps by way of phyto/bio remediation for treatment of sewage must be taken and the drains must be remedied and cleaned. In short, our directions are:

- i. Clearance of legacy waste dump site at Indirapuram must commence within one month from today which will be responsibility of the Commissioner, Municipal Corporation, Ghaziabad. GDA is at liberty to either take responsibility or transfer the cost to an ESCROW account. Tentative cost is assessed at Rs. 4 crore.**
- ii. All legacy waste dump sites may be identified within one month by the Committee already constituted**

namely District Magistrate, Ghaziabad, Vice-Chairman, GDA, Municipal Commissioner, Ghaziabad, Representative from State PCB and a representative from CPCB. On such identification, the legacy waste clearance may commence within one month thereafter.

- iii. Sewage management and remediation of drains may start within one month atleast by way of phyto/bio remediation which will be the responsibility of the Municipal Commissioner, Ghaziabad. Any deficiency of funds may be made up in consultation with the Secretary, Urban Development, UP as well as Secretary, Housing and Urban Planning, UP.**
- iv. CPCB may recover the damage to the environment after making appropriate assessment.”**

02.09.2020

“5. Accordingly, a report has been filed on 28.08.2020 by the District Magistrate, Ghaziabad which does not show any meaningful progress. Report has also been filed by Ghaziabad Nagar Nigam on 27.08.2020 which merely refers to some paper work. The Tribunal records its disapproval at such attitude of the statutory authorities in dealing with such important and sensitive issue of garbage management, affecting the environment and public health which are basic needs of the citizens.

6. Status of compliance is reported as follows:

S.No.	Hon'ble Tribunal's Directions	Compliance Status
1	Clearance of legacy waste dump Site at Indirapuram must commence within one month from today which will be responsibility of the Commissioner, Municipal Corporation, Ghaziabad. GOA is at liberty to either take responsibility or transfer the cost to an ESCROW account. Tentative cost is assessed at Rs. 4 Crore.	Process for clearing legacy waste from concerned site shall commence once the tender is awarded, Tender for technical bids has been opened on 10.07.2020. Technical assessment of two bids received has been held. Since the expenses are being borne by GDA, the technical bids received are being examined at their level as well. Vice Chairman, Ghaziabad Development Authority vide her letter dated 16.03.2020 has committed to transfer the amount of Rs. 4 crores in account of Ghaziabad Nagar Nigam, copy of said letter is annexed as Annexure II. Same has been reiterated in GDA's letter dated 10.07.2020 annexed as

		<i>Annexure III.</i>
2	<i>All legacy waste dump sites may be identified within one month by the Committee already constituted namely District Magistrate, Ghaziabad, Vice-Chairman, GDA, Municipal Commissioner, Ghaziabad, Representative from State PCB and a representative from CPCB. On such identification, the legacy waste clearance may commence within one month thereafter</i>	<i>Besides, Shakti Khand IV site, another legacy waste site has been identified at Pratap Vihar, Ghaziabad. Estimated Municipal Solid Waste on said side is around 4 lakh MT. Presently no dumping is being done on the said site. As per Municipal Corporation, Ghaziabad, the DPR for remediation on said site has been prepared and handed over to UP Housing & Development Board, the land- owning agency for said site. Site surveys are still being done to identify other legacy waste dump sites.</i>
3	<i>Sewage management and remediation of drains may start within one month at least by way of phyto/bio remediation which will be the responsibility of the Municipal Commissioner, Ghaziabad. Any deficiency of funds may be made up in consultation with the Secretary, Urban Development, UP as well as Secretary, Housing and Urban Planning, UP</i>	<p><i>Survey of drains has been done, 10 drains have been identified for treatment that outfall into River Hindon, namely:</i></p> <ol style="list-style-type: none"> <i>1. Karhera Drain</i> <i>2. Hindon Vihar drain</i> <i>3. Kaila Bhatta Drain</i> <i>4. Arthala Drain</i> <i>5. Sarvodaya Nagar Drain</i> <i>6. Rahul Vihar Drain</i> <i>7. Indrapuran Drain</i> <i>8. Dasna Drain</i> <i>9. Nandgram Petrol Pump Drain</i> <i>10. City Forest Main Gate Drain.</i> <p><i>In Phase - I, it is proposed to remediate 05 drains listed at S. No. DPR for same has been prepared and has been assessed by NEERI, Nagpur.</i></p> <p><i>NEERI has been appointed to assess the viability and suggest changes, if needed. Their team is proposed to carry out field survey on 22.7.2020 and 23.07.2020. Work with regards to phyto/bio remediation shall be carried out accordingly. Letter from Municipal Corporation, Ghaziabad is annexed as. Annexure IV.</i></p>

4	CPCB may recover the damage to to the environment after making appropriate assessment.	CPCB's report with regard to said assessment not received
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7. Let meaningful steps be now taken by the statutory authorities expeditiously and compliance report filed by e-mail, failing which there will be no other option except to take action personally against the Senior Officers on further failure. We also request the oversight Committee headed by Justice SVS Rathore, former Judge of Allahabad High Court to look into the matter and give its independent report in the matter by e-mail.”

15.04.2021

“7. Accordingly, GNN has filed its compliance affidavit dated 16.01.2021. The Oversight Committee has filed its independent reports dated 15.01.2021 and 09.04.2021. It will suffice to refer to the last report of the Oversight Committee dated 09.04.2021 wherein, after review of progress in the matter, following recommendations are made:

“Recommendations:

In view of the above we recommend as follows:

- I. Already the work of legacy waste clearance at Shakti Khand has been delayed. The Municipal Corporation should ensure that it positively completes it by June 2021. Similarly, the work of legacy waste clearance at Pratap Vihar should be completed on priority by year end. No further extensions be given in these works**
- II. Already Ghaziabad Municipal Corporation is working on completing a number of decentralized waste processing plants. They should be fully made operational in the next three months to obviate the necessity to fill the solid waste in land fill sites.**
- III. The issue of bioremediation/phytoremediation has been pending for quite some time. Municipal Corporation should ensure that the work is complete in all the 11 drains in the next 3 months.**
- IV. The performance of one city one operator scheme be regularly monitored and it should be ensured that payments are linked with performance.”**

8. ***In view of above, GNN may take further action expeditiously for remediation of legacy waste, operationalizing decentralized waste processing plant and remediation of 11 drains as recommended by the Oversight Committee. The GNN may give its progress report within next three months to the Oversight Committee.***

9. ***Legacy waste site at Shakti Khand is spread in 30,000 sq.m. area having 1.5 tonnes of waste piled to the height of 5 to 15 feet. The works awarded are with stipulation of time schedule and correspond to waste bio-mined and area reclaimed. The report of GNN is not specific on this aspect. Further, out of ten drains to be remediated, work of bio-remediation has commenced only for one Arthar drain. Results mentioned need to be checked by the State PCB. Ultimately, drains are to be intercepted and diverted to STPs. While noticing the delay in bio-mining at Shakti Khand site and no progress at Pratap Vihar and slow or no progress on other issues, a Joint Committee of CPCB and SPCB is constituted to give factual compliance report on bio-mining of legacy waste at different sites with adoption of SoP and Guidelines of CPCB and routing of recovered material to authorized agencies, adequacy of existing and proposed facilities mentioned for solid waste processing and diversion of drains to identified STPs. Report may also indicate performance of bio-remediation of one drain and progress with respect to remaining drains. The report may be filed by 31.07.2021 at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.***

10. ***Meanwhile, Oversight Committee is requested to review progress made by State government in resolving inter-departmental issues of UP Aawas Nigam and operation of STPs under one city one operator system. Performance of STPs at Indirapuram has been dealt in O.A. No. 648/2019, M/s Hindon River Resorts Pvt. Ltd. & Anr. v. Ghaziabad Development Authority & Ors. as follows:-***

“1to6...xxx.....xxx.....xxx

7. ***In view of the above, without commenting about the technology to be used, we direct that further remedial action be taken by the GNN, UP Jal Nigam and UP SIDC in coordination with each other and if necessary, the District Magistrate, Ghaziabad may facilitate inter-se coordination by holding joint meetings as and when necessary.***

8. ***Learned counsel for the State PCB states that the GNN has taken up only one drain as a pilot project for phyto-remediation which will result in neglecting other drains. Learned counsel for the GNN states that work***

will be taken up simultaneously for all the drains. Let this aspect be also addressed by the above joint Committee, in case of any difficulty.”

5. In pursuance of above, reports filed are : report dated 30.07.2021 by the Ghaziabad Nagar Nigam (GNN), report dated 13.08.2021 by the State PCB and report dated 12.08.2021 of the Oversight Committee constituted by this Tribunal. Since all the three reports are covered by the report of the Oversight Committee, it will suffice to refer to the said report which is as follows:-

“The current status of the garbage management on-going actively at the following sites is as follows:-

S No.	Location	MSW Type	Waste Qty/ Capacity	Current Status
1	Indirapuram	Legacy Waste	1 lac ton waste qty and plant capacity 500-600 TPD	Approx. 50% land cleared. Target clearance of balance 50% land before November 2021
2	Sihani Garbage Factory	Fresh MSW	150 TPD	Operational
3	Hindon Vihar Garbage Factory	Fresh MSW	300-250 TPD	Under Construction. Civil works completion expected by August 2021
4	Pratap Vihar	Legacy Waste	4-5 lac ton	Legacy waste processing ongoing. Machineries to be increased during the rainy season. One Ballastic Separator and Three Trommel to be added to increase daily processing capacity to 1500-2000 TPD. Targeting completion by March 2022.

Apart from the above sites, GNN has planned to establish two more garbage factories, one at Indirapuram legacy waste site (after the land is cleared) with capacity of 500-700 TPD and another at Govindpuram with 100 TPD capacities. With all four garbage factories operational, the garbage of the entire city will be managed in a decentralized manner having daily handling capacity of 1000-1200 TPD. The Municipal Commissioner assured this committee that with in next 6 months 100% processing of the waste being generated

will be done without any dump yard with in these Garbage factories.

Under the Jal Sansthan Department Bio-remediation section work of bio-remediation is in process for 10 drains. A detailed report of the progress being made by Ghaziabad Nagar Nigam in cleaning the drains through their innovative solutions is annexed as Annexure 1.”

“Site 1 - Inspection of Legacy Waste Processing Project at Shakti Khand Indirapuram, Ghaziabad

*First I inspected Shakti Khand legacy waste site. Work of clearing the legacy waste was going on in full swing. Some fresh waste was also lying there. Windrows were made; Trommels and blast segregators were also functional. I was informed that about 50% of the legacy waste has been cleared and the remaining waste shall be cleared positively within three to four months after the rainy season. It was informed that due to Covid-19 no workers were available due to which the work has been delayed by few months and again the rainy season shall also further delay the process. On one side of this legacy waste there is a complex in which three STPs are situated and there is a water body in between the STPs and this legacy waste site. There was a dump of compost and I was informed by the representative of M/S Geron India that there is huge demand of this compost by the fertilizer companies like Kribhco and NFL. RDF in small quantity was also lying there. There were some plastic contents in it also. Representative of M/S Geron India informed that they ensure that the plastic content in RDF remains within permissible limits. If they get the permission to dispose it off with plastic content within permissible limits then it can be used as a fuel in the furnaces of the factories and it shall be quite easy for them to dispose it off quickly. I was also informed by the Municipal Commissioner that they propose to establish a garbage factory once this site once it is cleared and all around the border they shall develop a green belt so that the Garbage factory is not visible to anyone from outside. The pace at which the clearing work was going on at the time of inspection I am of the view that the time line as told shall be achieved. **However, the timeline fixed by Hon’ble Tribunal shall stand expired.***

The total land on which legacy waste had been dumped at Shakti Khand, Indirapuram is approx. 11 acres. The waste from Indirapuram and nearby areas was being dumped at the site for the last several years. The estimated waste quantity was approx. 1 lac metric tonnes at the time when the work started. The below pictures show the situation of the site before bioremediation of waste started.

The project for Bioremediation of Legacy Waste was awarded to M/s Geron Engineering Pvt Ltd in October 2020. The firm cleared the area from existing waste and established the plant for bioremediation and bio-mining. It took them 3 months to setup the plant at the site. The plant has installed capacity of 500-600 TPD with one ballistic separator and two trommels. During this period the firm also

undertook the activity of forming required number of windrows at the site. Subsequently, the legacy waste treatment commenced in mid Jan 2021.

The bio-remediation process is carried out as per the CPCB guidelines. The plant is established to segregate the waste into the different fractions like compost / bio earth, RDF, plastic waste, inert material etc. The plant is operational since mid-Jan 2021 and approx. 50% of the land area has been cleared as shown in the pictures below.

All the different segments once segregated are disposed off separately in a scientific manner. The compost / bio earth has been tested at government approved lab and is found to comply with FCO 1985 norms. The firm has tied up with fertilizer companies like Kribhco, NFL etc. to market the compost on a larger scale across UP. As of now the compost is being taken by local farmers and also used by Ghaziabad Nagar Nigam for plantation etc.

The firm has tie ups with several cement companies, waste to energy companies, recyclers and local industrial units for disposal of RDF. Approx. 4,400 ton of RDF (including plastic waste) has been disposed off.

The inert material has been used for local land filling. More than 95% material has been reused and almost no material is left for disposal.

Due to corona and intermittent rains, the project got delayed by 2-3 months. The rainy season is expected to cause further delay. Post the rainy season, it is expected to take around 3-4 months to clear the balance land.

It was also informed that they have ensured that there is no garbage below the ground level at this site.

I was informed that GNN has planned to establish four garbage factories, one at Indirapuram legacy waste site (after the land is cleared) with capacity of 500-700 TPD and another at Govindpuram with 300 TPD capacity where the work has not yet started. At present work in one garbage factory is complete and it is fully functional. While the work at the other is 75% complete and it shall start functioning at full capacity very soon. When all the four garbage factories becomes operational, the garbage of the entire city will be managed in a decentralized manner having daily handling capacity of 1000-1200 TPD which shall meet the entire requirement of the city.

*Out of four garbage factory projects, two were inspected by me during inspection because **work on the other two has not yet started.***

Site 2 – Sihani Garbage Factory

The Garbage Factory at Sihani was conceived by GNN in October 2020. In less than 6 months (including 2 months lost due to covid, as told), the project was completed, and factory was operational with garbage handling capacity of 150 TPD. The capacity of this garbage factory can go upto 200TPD if needed in future. The land used by GNN for establishing this garbage factory was an existing dumpsite. It has been converted into a beautiful structure which is covered from all sides to avoid any foul odour and ugly sight of garbage from outside.

The garbage factory is being operated by Geron Engineering Pvt Ltd in a PPP model where the concessionaire shall bear the operation cost of the factory and shall use the sale proceeds from the output products like RDF and Compost to recover its cost.

At the time of inspection I was impressed by the cleanliness there. Without going inside no one can say that work of garbage treatment is being done there. It was fully covered by tin shades. Wherever there was vacant land available, work of plantation has been done. One canteen, conference room and administrative room has also been established. I was informed that it has been done only by doing some cosmetic changes in the existing structures. Since the roof of tin is very high so the foul smell was also not there.

At the Garbage Factory, the segregated waste is received from GNN vehicles, weighed and further segregated into different fractions using mechanical segregators and manually using integration of rag pickers. The final products include plastic, paper, glass, RDF and compost etc. I was informed by the Municipal Commissioner that the running cost of this plant is managed only through the income generated by the sale of by-products. They have to bear the cost only to establish it.

Usually at the time of such inspections public living in the nearby areas come to make complaint of foul smell or other related problems, but during the inspection not even a single person appeared before me to make any complaint.

Site 3 – Ret Mandi Garbage Factory

At Ret Mandi, Hindon Vihar, a bigger garbage factory is being constructed with capacity of 300-350 TPD. The major portion of the project has been constructed and it is informed that the project will be complete by August 2021. The capacity of this garbage factory may go upto 500TPD in future if needed.

Site 4 – Pratap Vihar Legacy Waste Processing

The Pratap Vihar legacy waste site has been an old dumping site of Ghaziabad where garbage was being dumped for more than 10 years. The estimated waste quantity at the site is approx. 4-5 lac ton. The height of accumulated garbage varies from 8 meter to 20 meter across the land. The land is approx. 50,000 sq mt and belongs

to Awas Vikas while GNN is working on remediating the legacy waste present at the land site. **The legacy waste processing work has commenced at the site, however at a very slow pace.** The additional machinery shall also be installed at the site to increase the daily processing capacity to 1500-2000 TPD so that the remediation work can be completed by March 2022. I was also informed that there are all the chances that the garbage may be present below the ground level because they have gathered information from the public that it was a low lying area. I was also informed that in case garbage is present under surface level then it may take further time depending on the additional quantity of garbage present below the ground level. I was informed that it can be ensured only after some part of the legacy waste is cleared.

Status of Treatment of Drains

Ghaziabad Nagar Nigam has identified 10 drains for the purpose of treatment/ remediation by means of Integrated Solar Smart Floating Aeration/Barrier/ Treatment Island System. During inspection of the Brij Vihar drain area where same practice was being carried out was inspected. Major components for treatment of drains by this method are:

1-Power House: Bamboo Hut with Solar Panel

2-Air Pumps: Energy Efficient Diaphragm/Magnetic Pump (80 Watt for 150 KLD Aeration capacity)

3-Floating Air Dozer: (Using flexible closed cell foam (EPE) as Floating Material and Bamboo as Skelton and Oxitube/air stone as Air dozer)

4-24x7 Monitoring System: 4 HD CCTV Camera with 15 Days Recording System with HD Live Streaming using Solar Energy/ Internet Connectivity (Fiber and Wifi)

5-Floating Treatment Island: For root zone treatment & beautification of site using flexible closed cell foam + Plastic net+Canas/typha/phragmitis wetland plants

6- Floating Barrier:- Using flexible closed cell foam +Net+ Bamboo Sticks floating Barriers to Stop and Collect floating material (bottles/poly bags/thermocool etc)

7- Smart IOT based Control System- 24x7 remotely controlling the whole system we are using latest cutting age cheap Alexa/google ready IOT technology based switches.

The system has been customized and designed for Brij Vihar drain only. GNN is testing the above mechanism on pilot scale presently and success of present project shall determine its utility and thereafter it shall be replicated in other drains as well. **Although the project is low cost and engineering alterations have been**

made in order to make it suitable to present scenario, success of same is not yet quantifiable. GNN should assess its performance closely and submit a detailed report in terms of its utility, cost, performance and efficacy. I was informed that system has shown some improvement in the water quality.

RO Ghaziabad was directed to get the collect water samples collected from a point before and after this project and after its analysis send a comparative report to assess the success of this plant. I was informed that it is a very low cost plant and they are working to further reduce its cost by using the waste plastic to convert into floating beds and barriers. The idea itself is appreciable because if it is successful then it can be replicated in other drains too.

While going to this location, I had to travel along the drain. I found that at several places, the entire drain was covered with floating solid waste. Its quantity was so much that the drain water was not even visible. No work of cleaning it was going on.

Besides this, during inspection drain's silt was found deposited by side of the drains. It is necessary that compaction of this silt is done and it is removed from site before onset of monsoons every year so that efforts made are not undone due to rains. Municipal Commissioner informed me that that this is the biggest drain of Ghaziabad Its discharge is about 150 MLD .They have identified ten more points on this drain where they shall repeat this project. I was also informed that they are at present working on the conveyor belt like system to clear the waste collected at the surface barrier. It's a very good idea to maintain the surface barriers clean because it will save much time and shall also keep the drain clean without cleaning it manually which is a tough process because the workers have to work in very unhygienic and unhealthy conditions.

After the inspection I am of the view that work is being done but its speed needs to be increased. **Timeline provided in the Solid Waste Management Rules has already expired. Remediation of all the drains needs to be done immediately because these are ultimately causing pollution of river Yamuna. At present only one drain as pilot project has been taken and the remaining remains unattended. It is a matter of great concern for all the concerned.**

RO Ghaziabad was directed to remain in touch with the concerned authorities and to ensure that the work picks up desired pace shortly.

Municipal Commissioner, Ghaziabad is also directed to ensure that bio/phytoremediation work in all the drains, as an interim measure, starts at the earliest. Apart from it, once the site of Shakti Khand is

cleared, immediately the work of establishing the third Garbage Factory must also be started.

6. Short Compliance status

S.No.	Directions	Action Taken
1	<p>Already the work of legacy waste clearance at Shakti Khand has been delayed. The Municipal Corporation should ensure that it positively completes it by June 2021. Similarly, the work of legacy waste clearance at Pratap Vihar should be completed on priority by year end. No further extensions be given in these works</p>	<ul style="list-style-type: none"> • Work of clearing of the legacy waste at this site is going on along with dumping of some fresh waste at the Shakti Khand site. • 50% of the legacy waste had been cleared and the remaining waste shall be cleared positively within three to four months after the rainy season. • It has been proposed to establish a garbage factory once this site will be clear. • The timeline fixed by the Hon'ble NGT had already expired. • The treatment of legacy waste had started in January 2021. • The bio-remediation process is carried out as per the CPCB guidelines. • The compost/bio earth has been tested at government

		<p><i>approved lab and is found to comply with FCO 1985 norms.</i></p> <ul style="list-style-type: none"> • <i>The firm has tied up with fertilizer companies like Kribhco, NFL etc. to market the compost on a larger scale across UP.</i> • <i>As of now the compost is being taken by local farmers and also used by Ghaziabad Nagar Nigam for plantation etc.</i> • <i>The inert material has been used for local land filling. More than 95% material has been reused and almost no material is left for disposal.</i> • <i>Due to corona and intermittent rains, the project got delayed by 2-3 months. The rainy season is expected to cause further delay. Post the rainy season, it is expected to take around 3-4 months to clear the balance land.</i> • <i>The legacy waste processing work has commenced at the Pratap</i>
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		<p>Vihar site, however at a very slow pace.</p> <ul style="list-style-type: none"> • To complete the remediation work by March 2022 the installation of additional machinery to increase the daily processing capacity to 1500-2000 TPD is proposed to be installed. • Pratap Vihar was a low lying area as per the persons who are acquainted with the site for long period thus there are possibilities that garbage may be present under surface level. In that situation it may take more than expected time, depending on the quantity of waste material present below ground level
2	<p>Already Ghaziabad Municipal Corporation is working on completing a number of decentralized waste processing plants. They should be fully made operational in the next three months to obviate the necessity to fill the solid waste in land fill sites.</p>	<ul style="list-style-type: none"> • Four garbage factories have been proposed one at Indirapuram legacy waste site (after the land is cleared) with capacity of 500-700 TPD and another at Govindpuram with 300 TPD capacity where the work has not yet started.

		<ul style="list-style-type: none"> • At present work in one garbage factory is complete and it is fully functional. While the work at the other is 75% complete and it shall start functioning at full capacity very soon. • Out of four garbage factory projects, two were inspected however the work on the other two has not started yet. • As per the directions of the Hon'ble NGT the GNN had already missed the Deadlines for the setting up of the land fill sites.
3	<p>The issue of bioremediation/phytoremediation has been pending for quite some time. Municipal Corporation should ensure that the work is complete in all the 11 drains in the next 3 months</p>	<ul style="list-style-type: none"> • The phyto-remediation system has been customized and designed for Brij Vihar drain. • During the inspection it was observed that the some part of the drain was totally covered with floating solid waste. The quantity was so much that the drain water was not even visible. No work of cleaning it was going on.

		<ul style="list-style-type: none"> • This committee is of the view that some work is being done but the speed is not as per the requirement. • Timeline provided in the Solid Waste Management Rules has already expired.
4	The performance of one city one operator scheme be regularly monitored and it should be ensured that payments are linked with performance	A contract had been signed between M/S Geron Engineering Pvt Ltd and Ghaziabad Nagar Nigam on 20.10.2020.
5	GNN may take further action expeditiously for remediation of legacy waste, operationalizing decentralized waste processing plant and remediation of 11 drains as recommended by the Oversight Committee. The GNN may give its progress report within next three months to the Oversight Committee	The Oversight committee had received the progress report and inspected the site. Work of cleaning the legacy sites had been done however the pace of work is slow particularly at Pratap Vihar.
6	Oversight Committee is requested to review progress made by State government in resolving interdepartmental issues of UP Aawas Nigam and operation of STPs under one city one operator system. Performance of STPs at Indirapuram has been dealt in O.A. No. 648/2019, M/s Hindon River Resorts Pvt. Ltd. & Anr. v. Ghaziabad Development Authority & Ors.	The disputes had been resolved between the U.P. Aawas Vikas Parishad and Nagar Nigam Ghaziabad. Aawas Vikas has released Rs. 2 Crore to Nagar Nigam Ghaziabad to clean the Pratap Vihar legacy waste site. After clearance the Prataap Vihar site shall be handed over to the Awas Vikas Parishad.
7	Learned counsel for the State PCB states that the GNN has taken up only one drain as a pilot project for	The team had installed a prototype on Preet Vihar drain

	<p><i>phyto-remediation which will result in neglecting other drains. Learned counsel for the GNN states that work will be taken up simultaneously for all the drains.</i></p>	<p><i>in the month of February of 172 KLD capacity. The prototype was tested for a month which has yield good results, an increase in dissolved oxygen was recorded. Post this trial, the work of installation of 2 plants (2 MLD capacity) in Brij Vihar drains has been completed, this technique has been found to be very successful and tenders have been given to replicate it on all the drains. The work on the drain is expected to be completed by 30 September 2021.</i></p>
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7. Recommendations:

In view of the above we recommend as follows:

- I. *The timelines set by the Hon'ble NGT for completion of various works have already expired but they are yet to be completed. Having regards to the ground conditions, the Ghaziabad Nagar Nigam has intimated a new timeline to complete these works. They should be directed to ensure that the works are completed within the promised timelines, else they will be liable to pay EC.*
- II. *The UPPCB may be directed to ensure that the agencies responsible for preserving the environment of **the Nagar Nigam area must discharge their statutory responsibilities in true spirit of the law by imposing adequate EC in time.** It should also coordinate with the District Administration for timely recovery of the EC from these agencies.*
- III. *In the micro shed level planning, **it should be a mandate to do the real time monitoring of drains major polluting source points. It will not only be beneficial in accessing the actual quality and quantity of the sewage flowing into the river from a particular drain but also help in***

the infrastructure planning and development on the drains in future.

IV. The Ghaziabad Nagar Nigam has done some innovations in Phyto-remediation and solid waste management works. The pilot projects have been found feasible both cost and performance wise. They are working on replicating these pilot projects at other sites. Once the scalability is tested, it may be shared with other ULBs for adapting or adopting the technology as per their local requirements.”

6. From the above, it is seen that the remedial action is highly inadequate and statutory timelines as well as timelines fixed by the Tribunal have been crossed. Earlier committed timelines have also been breached. New timelines are given which may or may not be observed. For acknowledged failure and damage to the environment, no accountability is fixed. There is also non-payment of compensation for delay in violation of orders of this Tribunal already quoted above. Thus, any recommendation for extension of timeline without fixing accountability for past failure is uncalled for. Crossing of timeline is a criminal offence under the Solid Waste Management Rules, 2016 read with the Environment (Protection) Act, 1986. Section 268 to 270 of the Indian Penal Code, 1860 also makes any act or omission causing injury to public or any act likely to spread infection criminal offence. Thus, the Tribunal cannot be party to permitting continuation of such criminal offence. The criminal and civil liability for the failure is of the concerned authorities as laid down. Stringent conditions have to be laid down to ensure further remedial action. As noted above, the status shown by the report is of substantial non-compliance. Pratap Vihar Legacy Site where waste is being dumped for more than ten years remains un-remediated. The drain has been found to be covered with the floating solid waste with such heavy quantity that the water was not even visible and no work of

clearing was going on. The compliance status shows that only 50 % of the waste is claimed to have been cleared. Though it is stated that the remaining will be cleared in 3-4 months, after more than two months of filing of the report, further progress has been claimed. It is reported that processing of legacy waste at Pratap Vihar is at very slow pace. It has potential for hazard of contamination of ground water by the leachate. There is no report about management of the current waste. Information in public domain, by way of media reports, shows the situation to be alarming.² Failure to manage drains adds to pollution of river Ganga as the said drain first meet Hindan which meets Yamuna, which is tributary of Ganga.

7. It may be noted that the issue of scientific management of solid waste remains serious challenge to the protection of environment and public health. The matter was dealt with and monitored by the Hon'ble Supreme Court for 18 years in WP No. 888/1996, *Almitra H. Patel v. Union of India & Ors.* Vide order dated 02.09.2014, the same was transferred to this Tribunal³.

² <https://www.jagran.com/uttar-pradesh/ghaziabad-dirt-in-the-city-due-to-noncollection-of-garbage-increasing-pollution-due-to-burning-22101556.html>

<https://timesofindia.indiatimes.com/city/ghaziabad/why-indirapuram-needs-an-overhaul-of-its-drains/articleshow/85544580.cms>

https://www.hindustantimes.com/cities/noida-news/ghaziabad-stretches-of-national-highway-9-turning-into-dumping-sites-says-nhai-101634754144122-amp.html?utm_source=whatsapp&utm_medium=social&utm_campaign=ht AMP

<https://navbharattimes.indiatimes.com/state/uttar-pradesh/ghaziabad/garbage-dumping-from-khoda-and-noida-into-ghaziabad/articleshow/87130229.cms>

<https://timesofindia.indiatimes.com/city/gurgaon/notice-for-waste-near-hindon-river/articleshow/87145744.cms>

³ Operative part of the order of the Hon'ble Supreme Court reads:

“Enforcement of the Rules and efforts to upgrade the technology relevant to the handling of solid municipal waste is a perennial challenge and would require constant efforts and monitoring with a view to making the municipal authorities concerned accountable, taking note of dereliction, if any, issuing suitable directions consistent with the said Rules and

8. The issue has been discussed at length in order dated 28.02.2020 in OA 606/2018 as follows:-

“.....

3. *The matter was earlier considered by the Hon'ble Supreme Court inter-alia vide judgments reported in (2000) 2 SCC 679 and (2004) 13 SCC 538 directing scientific disposal of waste by setting up of compost plants/processing plants, preventing water percolation through heaps of garbage, creating focused **'solid waste management cells'** in all States and complying with the Municipal Solid Waste Management Rules, 2016 (SWM Rules, 2016) on urgent basis. **It was observed that the local authorities constituted for providing services to the citizens are lethargic and insufficient in their functioning which is impermissible. Non-accountability has led to lack of effort on the part of the employees.** Domestic garbage and sewage along with poor drainage system in an unplanned manner contribute heavily to the problem of solid waste. The number of slums have multiplied significantly occupying large areas of public land. Promise of free land attracts more land grabbers. **Instead of "slum clearance" there is "slum creation" in cities which is further aggravating the problem of domestic waste being strewn in the open.** Accordingly, the Court directed that provisions pertaining to sanitation and public health be complied with, streets and public premises be cleaned daily, **statutory authorities levy and recover charges from any person violating laws and ensure scientific disposal of waste**, landfill sites be identified keeping in mind requirement of the city for next 20 years and environmental considerations, sites be identified for setting up of compost plants, steps be taken to prevent fresh encroachments and compliance report be submitted within eight weeks.*
4. *Further observations in the judgment of the Hon'ble Supreme Court⁴ are:*

"3. The petitioner has handed over a note in the Court showing the progress that has been made in some of the States and also setting out some of the suggestions, including the suggestion for creation of solid waste management cell, so as to put a focus on the issue and also to provide incentives to those who perform well as

direction incidental to the purpose underlying the Rules such as upgradation of technology wherever possible. **All these matters can, in our opinion, be best left to be handled by the National Green Tribunal established under the National Green Tribunal Act, 2010.** The Tribunal, it is common ground, is not only equipped with the necessary expertise to examine and deal with the environment related issues but is also competent to issue in appropriate cases directions considered necessary for enforcing the statutory provisions."

⁴ (2004) 13 SCC 538

was tried in some of the States. The said note states as under:

- “1. As a result of the Hon’ble Supreme Court’s orders on 26-7-2004, in Maharashtra the number of authorisations granted for solid waste management (SWM) has increased from 32% to 98%, in Gujarat from 58% to 92% and in M.P. from NIL to 34%. No affidavits at all have been received from the 24 other States/UTs for which CPCB reported NIL or less than 3% authorisations in February 2004. All these States and their SPCBs can study and learn from Karnataka, Maharashtra and Gujarat’s successes.
2. **All States/UTs and their SPCBs/PCCs have totally ignored the improvement of existing open dumps, due by 31-12-2001, let alone identifying and monitoring the existing sites. Simple steps can be taken immediately at almost no cost by every single ULB to prevent monsoon water percolation through the heaps, which produces highly polluting black run-off (leachate). Waste heaps can be made convex to eliminate standing water, upslope diversion drains can prevent water inflow, downslope diversion drains can capture leachate for recirculation onto the heaps, and disused heaps can be given soil cover for vegetative healing.**
3. **Lack of funds is no excuse for inaction. Smaller towns in every State should go and learn from Suryapet in A.P. (population 103,000) and Namakkal in T.N. (population 53,000) which have both seen dustbin-free ‘zero garbage towns’ complying with the MSW Rules since 2003 with no financial input from the State or the Centre, just good management and a sense of commitment.**
4. **States seem to use the Rules as an excuse to milk funds from the Centre, by making that a precondition for action and inflating waste processing costs 2-3 fold. The Supreme Court Committee recommended 1/3 contribution each from the city, State and Centre. Before seeking 70-80% Centre’s contribution, every State should first ensure that each city first spends its own share to immediately make its wastes non-polluting by simple sanitising/stabilising, which is always the first step in composting viz.**

inoculate the waste with cow dung solution or bio culture and placing it in windrows (long heaps) which are turned at least once or twice over a period of 45 to 60 days.

5. Unless each State creates a focussed **‘solid waste management cell’** and rewards its cities for good performance, both of which Maharashtra has done, compliance with the MSW Rules seems to be an illusion.
 6. **The admitted position is that the MSW Rules have not been complied with even after four years.** None of the functionaries have bothered or discharged their duties to ensure compliance. **Even existing dumps have not been improved.** Thus deeper thought and urgent and immediate action is necessary to ensure compliance in future.”
5. In this regard, reference may also be made to orders of Hon’ble Supreme Court in *Municipal Council, Ratlam vs. Vardhichand*⁵ and *B.L. Wadhera v. Union of India* and Ors.⁶ laying down that **clean environment is fundamental right of citizens under Article 21** and it is for the local bodies as well as the State to ensure that public health is preserved by taking all possible steps. **For doing so, financial inability cannot be pleaded.**
 6. The Hon’ble Supreme Court also dealt with the issue of liquid waste management and after issuing requisite directions, required this Tribunal to monitor the compliance. Directions of the Hon’ble Supreme Court include steps for liquid waste management by setting up requisite treatment plants for which funds are to be generated by the local bodies and the States as per constitutional provisions.⁷

⁵ (1980) 4 SCC 162

⁶ (1996) 2 SCC 594

⁷ “10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. **In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds,** for the purpose of generating finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. **Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility.** The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). **The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next**

7. *This Tribunal considered the matter of solid waste management after notifying all the concerned States/Regulatory Bodies and finally disposed of the same on 22.12.2016⁸ requiring all the States/UTs to follow the SWM Rules, 2016 after preparing requisite action plans in a time bound manner with further direction that **any State/UT which failed to comply with the Rules shall be liable to be proceeded against under Section 15 of the Environment (Protection) Act, 1986 (EP Act), apart from being required to pay environmental compensation and senior most officers of the States/Local Bodies being personally liable.** The directions also include requirement for segregation of waste, providing buffer zone around plants and landfill sites and due monitoring. The States/Local Bodies were also to create market for consumption of Refuse-Derived Fuel (RDF). Tipping fee was to include the efficient and regular monitoring of waste processing plant, segregation of inert and Construction and Demolition (C&D) material and its transportation. Landfill sites were required to be bio-stabilized preventing leachate and generation of Methane, enforcement of Extended Producer Responsibility, rights and liabilities under contracts being made consistent with the Rules, creating public awareness about the facilities available at regular intervals. **Copy of the judgment was circulated to all the Chief Secretaries/Advisors of States/UTs.**”*

9. The matter was earlier considered vide order dated 20.08.2018. All the States/UTs were required to finalize their action plan latest by 31.10.2018 and execute latest by 31.12.2019, to be overseen by the Principal Secretaries of the States. Vide order dated 16.01.2019, the Tribunal directed that the statutory timelines under the 2016 Rules to be

financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.

11. Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge industrial pollutants and sewer, directly into rivers and water bodies.

13. We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional National Green Tribunal.

14. To supervise complaints of non-implementation of the instant directions, the Benches concerned of the National Green Tribunal, will maintain running and numbered case files, by dividing the jurisdictional area into units. The abovementioned case files will be listed periodically. The Pollution Control Board concerned is also hereby directed to initiate such civil or criminal action, as may be permissible in law, against all or any of the defaulters.”

⁸ O.A. No. 199/2014 (2016) SCC Online NGT 2981

strictly followed and required the presence of the Chief Secretaries of all the States/UTs before this Tribunal with the progress reports. After interaction with the Chief Secretaries concerned, further directions were issued and finally vide order dated 20.08.2020 passed in the presence of Chief Secretary of some of the States but made applicable to all the States, the Tribunal observed that:

“.....

25. Accordingly, we have considered the matter further after interaction with the Chief Secretaries, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya and Member Secretary, CPCB. Even though all the thematic areas of the environment are significant, interaction has been limited to few selected themes, other themes being left to be considered separately on different scheduled hearings.

26. As per available statistics, there is huge gap in generation and treatment of solid and liquid waste in the country. **As per CPCB report 2016 (06.12.2016), as against 61948 MLD sewage generated in urban areas in India, the treatment capacity is 23277 MLD. The deficit in capacity is 62%. There is no data of sewage generation in rural areas. As per CPCB estimate of solid waste⁹, about 65 million tonnes of waste is generated annually in the country out of which about 62 million tonnes is Municipal Solid Waste (MSW). Only about 75-80% of the municipal waste gets collected and out of this only 22- 28% is processed and treated and remaining is deposited indiscriminately at dump yards. It is projected that by the year 2031, the MSW generation shall increase to 165 million tonnes and to 436 million tonnes by 2050. There are more than 4000 dump sites as per CPCB data¹⁰ which need to be remediated to avoid harmful impact on environment and public health.**

27. All the States/UTs were directed by this Tribunal to commence remediation of legacy waste sites by 01.11.2019¹¹. The Tribunal observed:

“28.We are conscious that the SWM Rules provide for a maximum period of upto five years for the purpose, however there is no reason why the same should not

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[http://164.100.47.193/lsscommittee/Urban%20Development/16 Urban Development 25.pdf](http://164.100.47.193/lsscommittee/Urban%20Development/16%20Urban%20Development%2025.pdf)

¹⁰ Order dated 18.10.2019 in O.A. No. 606/2018 para 6

¹¹ Order dated 17.07.2019 O.A. No. 519/2019 Para 28

happen earlier, in view of serious implications on the environment and public health¹².”

*“30. Needless to say that potential hazard of dumpsites on public health and environment is more or less on the same pattern and earliest such dumpsites are cleared, sooner it is better for public health. **Such dumpsites are undoubted source of air pollution resulting in respiratory and other diseases. Most vulnerable are the infants and the senior citizens.** The right to breathe fresh air being part of right to life, delay in remedying the situation is not desirable. The plea of capping is being put forward on the ground of need for urgent remedial action, ignoring that doing so will perpetuate the adverse consequences of retaining non-biodegradable and other polluting components in the garbage eventually causing continuous damage to the soil and the ground water. Biological solutions have to be preferred over engineering solutions on the subject. However action has to be taken fast. Delay which has taken place so far is on account of inaction of the concerned authorities for which there is no justification.*

*31. It will also be appropriate to note that the scheme of the SWM Rules is to prevent collection of waste and instead, to ensure its segregation, treatment and disposal at the earliest and as far as possible at the source itself. **If it is not done, the waste continues to be accumulated which becomes a challenge for the environment and public health. In this regard particular reference may be made to Rule 15 (zi). The authorities need to evolve a holistic strategy for integrated waste management in the municipal planning which may***

¹² (a) What a Waste 2.0, Global Snapshot of Solid Waste Management to 2050, World Bank Group, ISBN (paper): 978-1-4648-1329-0, 2018 International Bank for Reconstruction and Development / The World Bank, <http://datatopics.worldbank.org/what-a-waste/>. The report states- When waste is burned, the resulting toxins and particulate matter in the air can cause respiratory and neurological diseases, among others (Thompson 2014). Piles of waste produce toxic liquid runoff called leachate, which can drain into rivers, groundwater, and soil. Organic waste entering waterways reduces the amount of oxygen available and promotes the growth of harmful organisms (Bhada-Tata and Hoornweg 2016). Marine pollution is also increasing as a result of mismanaged solid waste on land, poor disposal practices by sea vessels, and runoff from sewage and polluted streams.

(b) <https://www.epw.in/engage/article/institutional-framework-implementing-solid-wastemanagement-india-macro-analysis> Several studies have been published that link asthma, heart attack, and emphysema to burning garbage. Human faecal matter is also frequently found in municipal waste—this, along with unmanaged decomposed garbage, attracts other rodents that further lead to a spread of diseases such as dengue and malaria. Leachate from rotten garbage contains heavy metals and toxic liquid; with such emissions ending up either absorbed into the soil or flowing into water bodies today (Awasthi 2013), the entire food chain can be affected when this contaminated water is utilised for agriculture, human consumption and animal consumption.

result in ‘zero waste’ going to the landfill in terms of the said rules¹³.

35. A copy of this order be sent to CPCB, all the Chief Secretaries, the MoEF&CC and MoHUA.”

28. The issue of solid and liquid waste needs to be taken seriously. We have already mentioned the available statistics on the subject. It is a matter of serious concern that legacy waste remediation has not even commenced at most of the sites even though statutory rules contemplate outer limit for completion of such remediation by 07.04.2021. Current processing of the waste generated and collected is also not taking place on regular basis. For any person travelling by train, hot spots of scattered garbage and overflowing sewage are common sights. Satisfactory sewage management also remains far cry. This unsatisfactory state of affairs must be remedied at the earliest and in a time bound manner by initiative at the highest level. Accountability needs to be fixed and consequences for failure clearly provided and enforced.

.....

41. In view of above, consistent with the directions referred to in Para 29 issued on 10.01.2020 in the case of UP, Punjab and Chandigarh which have also been repeated for other States in matters already dealt with, we direct:

a. In view of the fact that most of the statutory timelines have expired and directions of the Hon’ble Supreme Court and this Tribunal to comply with Solid Waste Management Rules, 2016 remain unexecuted, interim compensation scale is hereby laid down for continued failure after 31.03.2020. The compliance of the Rules requires taking of several steps mentioned in Rule 22 from Serial No. 1 to 10 (mentioned in para 12 above). Any such continued failure will result in liability of every Local Body to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body from 01.04.2020 till compliance. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal. Final compensation may be assessed and recovered by the State PCBs/PCCs in the light of Para 33 above within six months from today. CPCB may prepare a template and

¹³ Reference may also be made to- Suggestive /Indicative “The National Action Plan for Municipal Solid Waste Management”, Central Pollution Control Board, https://cpcb.nic.in/uploads/MSW/Action_plan.pdf.

issue an appropriate direction to the State PCBs/PCCs for undertaking such an assessment in the light thereof within one month.

- b. Legacy waste remediation was to 'commence' from 01.11.2019 in terms of order of this Tribunal dated 17.07.2019 in O.A. No. 519/2019 para 28¹⁴ even though statutory timeline for 'completing' the said step is till 07.04.2021 (as per serial no. 11 in Rule 22), which direction remains unexecuted at most of the places and delay in clearing legacy waste is causing huge damage to environment in monetary terms as noted in para 33 above, pending assessment and recovery of such damage by the concerned State PCB within four months from today, continued failure of every Local Body on the subject of commencing the work of legacy waste sites remediation from 01.04.2020 till compliance will result in liability to pay compensation at the rate of Rs. 10 lakh per month per Local Body for population of above 10 lakhs, Rs. 5 lakh per month per Local Body for population between 5 lakhs and 10 lakhs and Rs. 1 lakh per month per other Local Body. If the Local Bodies are unable to bear financial burden, the liability will be of the State Governments with liberty to take remedial action against the erring Local Bodies. Apart from compensation, adverse entries must be made in the ACRs of the CEO of the said Local Bodies and other senior functionaries in Department of Urban Development etc. who are responsible for compliance of order of this Tribunal. Final compensation may be assessed and recovered by the State PCBs/PCCs in the light of Para 33 above within six months from today.*
- c. Further, with regard to thematic areas listed above in para 20, steps be ensured by the Chief Secretaries in terms of directions of this Tribunal especially w.r.t. plastic waste, bio-medical waste, construction and demolition waste which are linked with solid waste treatment and disposal. Action may also be ensured by the Chief Secretaries of the States/UTs with respect to remaining thematic areas viz. hazardous waste, e-waste, polluted industrial clusters, reuse of treated water, performance of CETPs/ETPs, groundwater extraction, groundwater recharge, restoration of water bodies, noise pollution and illegal sand mining.*

¹⁴ The Chief Secretaries may ensure allocation of funds for processing of legacy waste and its disposal and in their respective next reports, give the progress relating to management of all the legacy waste dumpsites. Remediation work on all other dumpsites may commence from 01.11.2019 and completed preferably within six months and in no case beyond one year. Substantial progress be made within six months. We are conscious that the SWM Rules provide for a maximum period of upto five years for the purpose, however there is no reason why the same should not happen earlier, in view of serious implications on the environment and public health.

- d. *The compensation regime already laid down for failure of the Local Bodies and/or Department of Irrigation and Public Health/In-charge Department to take action for treatment of sewage in terms of observations in Para 36 above will result in liability to pay compensation as already noted above which are reproduced for ready reference:*
- e. *Interim measures for phytoremediation/ bioremediation etc. in respect of 100% sewage to reduce the pollution load on recipient water bodies – 31.03.2020. Compensation is payable for failure to do so at the rate of Rs. 5 lakh per month per drain by concerned Local Bodies/States (in terms of orders dated 28.08.2019 in O.A. No. 593/2017 and 06.12.2019 in O.A. No. 673/2018) w.e.f. 01.04.2020.*
- f. *Commencement of setting up of STPs – 31.03.2020. Compensation is payable for failure to do so at the rate of Rs. 5 lakh per month per STP by concerned Local Bodies/States (in terms of orders dated 28.08.2019 in O.A. No. 593/2017 and 06.12.2019 in O.A. No. 673/2018) w.e.f. 01.04.2020.*
- g. *Commissioning of STPs – 31.03.2021. Compensation is payable for failure to do so at the rate of Rs. 10 lakh per month per STP by concerned Local Bodies/States (in terms of orders dated 28.08.2019 in O.A. No. 593/2017 and 06.12.2019 in O.A. No. 673/2018) w.e.f. 01.04.2021.*
- h. *Compensation in above terms may be deposited with the CPCB for being spent on restoration of environment which may be ensured by the Chief Secretaries' of the States/UTs.*
- i. *An 'Environment Monitoring Cell' may be set up in the office of Chief Secretaries of all the States/UTs within one month from today, if not already done for coordination and compliance of above directions which will be the responsibility of the Chief Secretaries of the States/UTs.*
- j. *Compliance reports in respect of significant environmental issues may be furnished in terms of order dated 07.01.2020 quarterly with a copy to CPCB.”*

10. Vide order dated 14.12.2020 in OA No. 606/2018, the Tribunal *inter alia* directed:-

“9. The compensation in terms of earlier order be recovered and credited to a separate amount with the Environment Department of the States/UTs to be used for restoration of environment in the

concerned States/UTs. The deposit, instead of being made with the CPCB, may now be made to the said account.”

11. Thus, the authorities have to be held accountable by way of compensation on polluter pays principle and departmental action for their failure in breach of constitutional obligation under the “Public Trust Doctrine”, apart from liability for prosecution under the Criminal Law. Remedial action by higher authorities may include review of posting of key officers dealing with the waste management, including Commissioner, Nagar Nigam and fixing liability under the Civil and Criminal Law.

12. Accordingly, the Chief Secretary, Uttar Pradesh with the assistance of Additional Chief Secretary, Nagar Vikas, UP and/or any other authorities may review the situation within one month. Compensation payable in terms of orders of this Tribunal may be deposited with CPCB within one month which may be utilized for restoration of damage to the environment by preparing an appropriate action plan. The situation may be constantly reviewed preferably on daily basis for the next one month and at suitable intervals thereafter. The Additional Chief Secretary, Nagar Vikas, UP may file compliance status after coordinating with concerned authorities after three months. Pending assessment quantification of compensation, the Ghaziabad Nagar Nigam may deposit interim compensation of Rs. 1 crore with the CPCB within 15 days, to be utilised for restoration of the environment. The Nigam is free to recover the amount out of the salary of erring officers.

13. We also direct CPCB to give an independent report on the issue of management of solid as well as liquid waste in the area in question

before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The report may mention the area of both the legacy sites reclaimed, quantity of waste bio-mined, routing of recovered material for further usage. Lifting of stabilised organic fraction by the Fertilizer agencies and blending by NPK to enhance fertilizer nutritive value may be ascertained. It may be enquired whether any more legacy waste site exists. Further, whether the RDF contains plastic/chlorinated plastic used as fuel. With regard to four garbage factories, information is required about the process adopted, material balance and Authorization under MSW Rules. In case of ten sewage drains, the technologies adopted and their performance duly supported by the analytical results needs to be indicated. Storm water drains are not be used for disposal of sewage, as earlier held by this Tribunal, being prohibited under the Water Act. The performance of STPs and the gap between sewage generation and treatment may be mentioned.

14. The Additional Chief Secretary, Nagar Vikas, UP may remain present in person by Video Conferencing on the next date.

List for further consideration on 24.02.2022.

A copy of this order be forwarded to the Chief Secretary, UP, CPCB, Additional Chief Secretary, Nagar Vikas, Ghaziabad Nagar Nigam and State PCB by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Brijesh Sethi, JM

Dr. Nagin Nanda, EM

October 22, 2021
Original Application No. 909/2018
SN