

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

(By Video Conferencing)

Original Application No. 593/2017

(arising from W.P. (Civil) No. 375/2012 on the file of the Hon'ble
Supreme Court)

(With Report dated 13.02.2020 and 14.05.2020)

WITH

Original Application No. 148/2016

(With Report dated 15.05.2020)

Paryavaran Suraksha Samiti & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

With

Mahesh Chandra Saxena

Applicant(s)

Versus

South Delhi Municipal Corporation & Ors.

Respondent(s)

Date of hearing: 21.05.2020

**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**

Applicant(s): Mr. Rahul Khurana, Advocate

Respondent(s): Mr. Raj Kumar, Advocate for CPCB
Mr. Balendu Shekhar, Advocate for EDMC
Mr. A.K. Prasad, Advocate for CGWA
Mr. Narendra Pal Singh, Advocate for DPCC

ORDER

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Background: Transfer of proceedings to this Tribunal by the Hon'ble Supreme Court vide order in (2017) 5 SCC 326 to monitor compliance of directions to set up STPs/ETPs/CETPs by 31.3.2018 (as per para 10 of the order of Hon'ble Supreme Court) by concerned Industries and Local Bodies to prevent water pollution.	Para 1
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ORIGINAL APPLICATION NO. 593/2017 (PARYAVARAN SURAKSHA SAMITI & ANR. VS. UNION OF INDIA & ORS.)

Background: Transfer of proceedings to this Tribunal by the Hon'ble Supreme Court vide order in (2017) 5 SCC 326 to monitor compliance of directions to set up STPs/ETPs/CETPs by 31.3.2018 (as per para 10 of the order of Hon'ble Supreme Court) by concerned Industries and Local Bodies to prevent water pollution:

1. Proceedings in this matter are consequential to the order of the Hon'ble Supreme Court dated 22.02.2017 in *Paryavaran Suraksha*

*Samiti Vs. Union of India*¹ transferring the proceedings in *W.P. (Civil)* No. 375/2012 for monitoring compliance of the orders of the Hon'ble Supreme court. The order of the Hon'ble Supreme Court requires establishment and functioning of requisite ETPs/CETPs/STPs and in default to close industrial activities discharging effluents without treatment and to take action against local bodies for failing to install STPs and discharging sewage without treatment. Some of the observations in the judgment of the Hon'ble Supreme Court are:

“7. Having effectuated the directions recorded in the foregoing paragraphs, the next step would be, to set up common effluent treatment plants. We are informed, that for the aforesaid purpose, the financial contribution of the Central Government is to the extent of 50%, that of the State Government concerned (including the Union Territory concerned) is 25%. The balance 25%, is to be arranged by way of loans from banks. The above loans, are to be repaid, by the industrial areas, and/or industrial clusters. We are also informed that the setting up of a common effluent treatment plant, would ordinarily take approximately two years (in cases where the process has yet to be commenced). The reason for the above prolonged period, for setting up “common effluent treatment plants”, according to the learned counsel, is not only financial, but also, the requirement of land acquisition, for the same.

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

¹ (2017) 5 SCC 326

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 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.**
12. We are of the view that in the manner suggested above, **the malady of sewer treatment, should also be dealt with simultaneously.** We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.
13. **We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down.** We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the

*directions contained in this order. 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.”

(emphasis supplied)

Proceedings before this Tribunal: Significant orders dated 3.8.2018, 19.2.2019 and 28.8.2019 in the light of data furnished by the CPCB based on information furnished by State PCBs/PCCs:

2. Accordingly, on 25.05.2017, notice was issued to the Central Pollution Control Board (CPCB), the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) and the Ministry of Environment, Forest and Climate Change (MoEF&CC). They filed their status reports showing gaps in waste generated and treatment capacity. It was further stated that action had been initiated to remedy the situation. After considering the status report, the Tribunal, vide orders dated 04.07.2017, 18.09.2017 and 11.10.2017, sought information about the steps taken by the SPCBs/PCCs.
3. Vide order dated 03.08.2018, the matter was reviewed and after noting that in absence of functional ETPs/CETPs/STPs, untreated effluents were being discharged in water bodies leading to contamination of surface and ground water which causes various diseases and also has adverse consequence on aquatic organism due to decreased level of oxygen. The Tribunal directed the CPCB to

prepare an action plan. Direction was also given for monitoring by a Committee of two officers – one each representing MoEF&CC and CPCB at least once in every month. CPCB was required to place the progress report every three months on the website and take penal action for failure by way of recovery of compensation for damage to the environment, apart from other steps.

4. Vide order dated 19.02.2019, after considering the status report furnished by the CPCB, based on the reports furnished by the States/UTs, this Tribunal after referring to orders passed in O.A NO. 673/2018 for remedial action in respect of 351 polluted river stretches, which had direct nexus with the steps for ETPs/CETPs/STPs and order passed in O.A No. 606/2018 requiring Chief Secretaries to monitor progress *inter alia* on the subject of control of pollution of the river stretches, directed that the Chief Secretaries may look into the subject of setting up and proper functioning of ETPs/CETPs/STPs in their respective States/ UTs. Further direction issued was to prepare a report on assessment of compensation on account of discharge of untreated sewage and dumping of solid waste, loss to ecological services due to illegal mining, deforestation, after taking inputs from expert bodies. The Tribunal also directed the CPCB to compile its monitoring report with regard to 97 CETPs (assuming the total number of CETPs in the country to be 97) installed in different States. CPCB was also directed to furnish its report in O.A. No. 95/2018, *Aryavart Foundation Vs. M/s Vapi Green Enviro Ltd. & Ors.* which concerned the issue of inadequate functioning CETP leading to water pollution.

Further proceedings:

5. In the light of directions of this Tribunal dated 19.02.2019, the CPCB furnished reports dated 30.05.2019 updated on 19.07.2019 and 14.08.2019 giving the status of setting up of ETPs/CETPs/STPs with regard to methodology for assessment of environmental compensation and monitoring of CETPs. The reports were considered exhaustively vide order dated 28.08.2019. Before we advert to the observations of this Tribunal with regard to the reports, we may refer to the observations on the main issue:

“1. The issue for consideration is establishment and functioning of ETPs/CETPs/STPs to prevent untreated sewage/effluents being discharged in water bodies, including rivers and canals meeting such rivers or otherwise. The magnitude of the problem is well acknowledged. In the year 1962 GoI set up a Committee for prevention of water pollution. The recommendations led to enactment of the Water (Prevention and Control of Pollution) Act, 1974 (“Water Act”) in pursuance of Article 252 of the Constitution. The Water Act provides for the constitution of a Central Board and State Boards/Committees. No polluted matter can be discharged into a stream or well or on land, and no industry, operation or process can be established and no out-let for discharge of sewage used without consent of the State Board. The Water Act provides powers to give directions for closing any such activity as well as for prosecution. Power to give directions implicitly includes recovery of compensation on ‘Polluter Pays’ principle.

2. In spite of above statutory regime we are faced with serious problem of water pollution. The Hon’ble Supreme Court noted² that the water pollution caused serious diseases, including Cholera and Typhoid. Water pollution could not be ignored and adequate measures for prevention and control are necessary. Polluting industries were directed to be shifted on ‘Precautionary’ principle. It is not necessary to refer to all the judgments of the Hon’ble Supreme Court dealing with the significance of water and need to prevent pollution of water. We may only refer to the observations that everyone has right to have access to drinking water in quantum and equality equal to the basic needs. This is fundamental to life and part of Article 21.³

² (1988) 1 SCC 471

³ APPCB vs. Prof. M.V Nayudu (2001) 2 SCC 62 at para 3, 4, State of Orissa Vs. Government of India (2009) 5 SCC 492, at para 58 **“Rivers in India are drying up, groundwater is being**

3. **As per CPCB's report 2016⁴, it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India. Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in the rural areas.**

4. **We may note that discharge of untreated effluents and sewage is the principal cause of water pollution in the country as noted in cases relating to pollution of rivers.⁵ Similarly, in the case of 100 polluted industrial clusters being dealt with by this Tribunal⁶, water pollution is one of the factors polluting the said industrial clusters. As already noted, official data of CPCB is to the effect that 351 river stretches in the Country are polluted. The Tribunal held that remedial action for restoration of the said river stretches is necessary.⁷ In the said order, it was observed:**

“As already noted, well known causes of pollution of rivers are *dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters, encroachments of catchment areas and floodplains, over drawl of groundwater, river bank erosion on account of illegal sand mining. In spite of directions to install Effluent Treatment Plants (ETPs), Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been achieved. Tough governance is the need of the hour. If pollution does not stop, the industry has to be stopped. If sewage dumping*

rapidly depleted, and canals are polluted. Yamuna in Delhi looks like a black drain. Several perennial rivers like Ganga and Brahmaputra are rapidly becoming seasonal. Rivers are dying or declining, and aquifers are getting over pumped. Industries, hotels, etc. are pumping out groundwater at an alarming rate, causing sharp decline in the groundwater levels.”

⁴http://www.sulabhervis.nic.in/Database/STST_wastewater_2090.aspx July 16, updated on December 6, 2016

⁵ O.A No. 673 of 2018 this Tribunal is considering remedial action to rejuvenate 351 polluted river stretches. Therein, other cases of river pollution are mentioned thus “This Tribunal also considered the issue of pollution of river Yamuna, in Manoj Mishra Vs. Union of India, river Ganga in M.C. Mehta Vs. Union of India, river Ramganga which is a tributary of river Ganga in Mahendra Pandey Vs. Union of India & Ors., rivers Sutlej and Beas in the case of Sobha Singh & Ors. Vs. State of Punjab & Ors., river Son in Nityanand Mishra Vs. State of M.P. & Ors., river Ghaggar in Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case)”, river Hindon in Doaba Paryavaran Samiti Vs. State of U.P. & Ors., river Kasardi in Arvind Pundalik Mhatre Vs. Ministry of Environment, Forest and Climate Change & Ors., River Ami, Tapti, Rohani and Ramgarh lake in Meera Shukla Vs. Municipal Corporation, Gorakhpur & Ors., rivers Chenab and Tawi in the case of Amresh Singh Vs. Union of India & Ors. and Subarnarekha in Sudarsan Das Vs. State of West Bengal & Ors. and issued directions from time to time”

⁶ O.A No. 1038/2018

⁷ O. A No.673/2018, order dated 08.04.2019

does not stop, local bodies have to be made accountable and their heads are to be prosecuted. Steps have to be taken for awareness and public involvement.”

5. All the States and UTs where polluted river stretches exist are required to constitute River Rejuvenation Committees to prepare actions plans for restoration (which are to be reviewed by the highest authority in the States, i.e Chief Secretary) to be monitored by CPCB and thereafter to be further monitored by this Tribunal. Accordingly, the action plans have been prepared which broadly envisage action to prevent discharge of untreated effluent/sewage. The same are being monitored by the CPCB and by this Tribunal and the matter is now listed for hearing on 29.11.2019. In O.A 606/2018 while dealing with the compliance of Solid Waste Management Rules, 2016, this Tribunal vide order dated 16.01.2019 directed personal appearance of all the Chief Secretaries with their monitoring reports on major environment issues including the rejuvenation of polluted river stretches. **The Chief Secretaries of all States/UTs have accordingly appeared and furnished their reports which envisages steps for setting up of ETPs/CETPs/STPs to prevent water pollution. The Chief Secretaries have to appear before this Tribunal with further progress reports on the subjects.**

6. Further, control of pollution of river Ganga is being monitored by this Tribunal in O. A No. 200/2014 after transfer from the Hon'ble Supreme Court. Therein timelines have been prescribed to the effect that STPs be set up in time bound manner and no a drop of pollution be discharged in the river. The Tribunal observed:

“Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.

With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain

connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019.”

(emphasis supplied)

6. We now refer to the observations of this Tribunal while considering the reports dated 30.05.2019 updated on 19.07.2019 and 14.08.2019:

“I. Report dated 30.05.2019 updated on 19.07.2019

13. According to updated report dated 19.07.2019, out of 62,897 number of industries requiring ETPs, 60,944 industries are operating with functional ETPs and 1949 industries are operating without ETPs. 59,258 industries are complying with environmental standards and 1,524 industries are non-complying. There are total 192 CETPs, out of which 133 CETPs are complying with environmental standards and 59 CETPs are non-complying. There are total 13,709 STPs (Municipal and other than municipal), out of which, 13,113 STPs are complying with environmental standards and 637 STPs are non-complying 73 CETPs in construction/proposal stage, whereas, for STPs, 1164 projects (municipal and non-municipal) are under construction/proposal stage.
14. A report has also been prepared on the scale of environmental compensation to be recovered from individual/authorities for causing pollution or failure for preventing causing pollution, apart from illegal extraction of ground water, failure to implement Solid waste Management Rules, damage to environment by mining and steps taken to explore preparation of an annual environmental plan for the country. Extracts from the report which are considered significant for this order are:

“I. Environment Compensation to be levied on Industrial Units

Recommendations

The Committee made following recommendations:

1.5.1 To begin with, Environmental Compensation may be levied by CPCB only when CPCB has issued the directions under the Environment (Protection) Act, 1986. In case of a, band c, Environmental Compensation may be calculated based on the formula "EC= Pl x N x Rx S x LF", wherein, Pl

may be taken as 80, 50 and 30 for red, orange and green category of industries, respectively, and R may be taken as 250. Sand LF may be taken as prescribed in the preceding paragraphs

1.5.2 In case of d, e and f, the Environmental Compensation may be levied based on the detailed investigations by Expert Institutions/Organizations.

1.5.3 The Hon'ble Supreme Court in its order dated 22.02.2017 in the matter of Paryavaran Suraksha Samiti and another v/s Union of India and others {Writ Petition {Civil} No. 375 of 2012), directed that all running industrial units which require "consent to operate" from concerned State Pollution Control Board, have a primary effluent treatment plant in place. Therefore, no industry requiring ETP, shall be allowed to operate without ETP.

1.5.4 EC is not a substitute for taking actions under EP Act, Water Act or Air Act. In fact, units found polluting should be closed/prosecuted as per the Acts and Rules.

II. Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in NCR.

Table No. 2.1: Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in Delhi-NCR.

Activity	State Of Air Quality	Environmental Compensation (₹)
Industrial Emissions	Severe +/Emergency	Rs 1.0 Crore
	Severe	Rs 50 Lakh
	Very Poor	Rs 25 Lakh
	Moderate to Poor	Rs 10 Lakh
Vapour Recovery System (VRS) at Outlets of Oil Companies		
i. Not installed	Target Date	Rs 1.0 Crore
ii. Non functional	Very poor to Severe +	Rs 50.0 Lakh
	Moderate to Poor	Rs 25.0 Lakh
Construction sites (Offending plot more than 20,000 Sq.m.)	Severe +/Emergency	Rs 1.0 Crore
	Severe	Rs 50 Lakh
	Very Poor	Rs 25 Lakh
	Moderate to Poor	Rs 10 Lakh
Solid waste/ garbage dumping in Industrial Estates	Very poor to Severe +	Rs 25.0 Lakh
	Moderate to Poor	Rs 10.0 Lakh
Failure to water sprinkling on unpaved roads		
a) Hot-spots	Very poor to Severe +	Rs 25.0 Lakh
b) Other than Hot-spots	Very poor to Severe +	Rs 10.0 Lakh

III. Environmental Compensation to be levied in case of failure of preventing the pollutants being discharged in water bodies and failure to implement waste management rules:

Table No. 3.3: Minimum and Maximum EC to be levied for untreated/partially treated sewage discharge

Class of the City/Town	Mega-City	Million-plus City	Class-I City/Town and others
Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 2000 Max. 20000	Min. 1000 Max. 10000	Min. 100 Max. 1000
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	Min. 2 Max. 20	Min. 1 Max. 10	Min. 0.5 Max. 5

Table No. 3.4: Minimum and Maximum EC to be levied for improper municipal solid waste management

Class of the City/Town	Mega-City	Million-plus City	Class-I City/Town and others
Minimum and Maximum values of EC (Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 1000 Max. 10000	Min. 500 Max. 5000	Min. 100 Max. 1000
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	Min. 1.0 Max. 10.0	Min. 0.5 Max. 5.0	Min. 0.1 Max. 1.0

3.3 Environment Compensation for Discharge of Untreated/Partially Treated Sewage by Concerned Individual/ Authority:

BIS 15-1172:1993 suggests that for communities with population above 100,000, minimum of 150 to 200 lpcd of water demand is to be supplied. Further, 85% of return rate (CPHEEO Manual on Sewerage and Sewage Treatment Systems, 2013), may be considered for calculation of total sewage generation in a city. CPCB Report on "Performance evaluation of sewage treatment plants under NRCD, 2013", describes that the capital cost for 1 MLD STP ranges from 0.63 Cr. to 3 Cr. and O&M cost is around Rs. 30,000 per month. After detail deliberations, the Committee suggested to assume capital cost for STPs as Rs. 1.75 Cr./MLD (marginal average cost). Further, expected cost for conveyance system is assumed

as Rs. 5.55 Cr./MLD (marginal average cost) and annual O&M cost as 10% of the combined capital cost. Population of the city may be taken as per the latest Census of India. Based on these assumptions, Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

$$\begin{aligned}
 EC = & \text{Capital Cost Factor} \times [\text{Marginal Average Capital Cost for Treatment Facility} \times (\text{Total Generation-Installed Capacity}) + \text{Marginal Average Capital Cost for Conveyance Facility} \times (\text{Total Generation -Operational Capacity})] + \text{O\&M Cost Factor} \times \text{Marginal Average O\&M Cost} \\
 & \times (\text{Total Generation- Operational Capacity}) \times \text{No. of Days for which facility was not available} \\
 & + \text{Environmental Externality} \times \text{No. of Days for which facility was not available}
 \end{aligned}$$

Alternatively;

$$\begin{aligned}
 EC \text{ (Lacs Rs.)} = & [17.S\{\text{Total Sewage Generation - Installed Treatment Capacity}\} + 55.S\{\text{Total Sewage Generation-Operational Capacity}\}] + \\
 & 0.2(\text{Sewage Generation-Operational Capacity}) \times N + \text{Marginal Cost of Environmental Externality} \times (\text{Total Sewage Generation-Operational Capacity}) \times N
 \end{aligned}$$

Where; N= Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority

Quantity of Sewage is in MLD

Table No. 3.5: Sample calculation for EC to be levied for discharge of untreated/partial treated Sewage

City	Delhi	Agra	Gurugram	Ambala
Population (2011)	1,63,49,831	17,60,285	8,76,969	5,00,774
Class	Mega-City	Million-plus City	Class-I Town	Class-I Town
Sewage Generation (MLD) (as per the latest data available with CPCB)	4195	381	486	37
Installed Treatment Capacity (MLD) (as per the latest data available with CPCB)	2500	220	404	45.5
Operational Capacity (MLD) (as per the latest data available with CPCB)	1900	140	300	24.5

Treatment Capacity Gap (MID)	2295	241	186	12.5
Calculated EC (capital cost component for STPs) in Lacs Rs.	29662.50	2817.50	1435.00	0.00
Calculated EC (capital cost component for Conveyance System) in Lacs. Rs.	127372.50	13375.50	10323.00	693.75
Calculated EC (Total capital cost component) in Lacs Rs.	157035.00	16193.00	11758.00	693.75
Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 2000 Max. 20000	Min. 1000 Max. 10000	Min. 100 Max. 1000	Min. 100 Max. 1000
Final EC (Total Capital Cost Component) in Lacs Rs.	20000.00	10000.00	1000.00	693.75
Calculated EC (O&M Component in Lacs Rs./day)	459.00	48.20	37.20	2.50
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	Min. 2 Max. 20	Min. 1 Max. 10	Min. 0.5 Max. 5	Min. 0.5 Max. 5
Final EC (O&M Component) in Lacs. Rs./Day	20.00	10.00	5.00	2.50
Calculated Environmental Externality (Lacs Rs .Per Day)	2.0655	0.2049	0.1395	0.0094
Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. Per Day)	Min. 0.60 Max. 0.80	Min. 0.25 Max. 0.35	Min. 0.05 Max. 0.10	Min. 0.05 Max. 0.10
Final Environmental Externality (Lacs Rs. Per day)	0.80	0.25	0.10	0.05

3.4 Environment Compensation to be Levied on Concerned Individual/Authority for Improper Solid Waste Management:

Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

$EC = \text{Capital Cost Factor} \times \text{Marginal Average Cost for Waste Management} \times (\text{Per day waste generation} - \text{Per day waste disposed as per the Rules}) + \text{O\&M Cost Factor} \times \text{Marginal Average O\&M Cost} \times (\text{Per day waste generation} - \text{Per day waste disposed as per the Rules}) \times \text{Number of days violation took place} + \text{Environmental Externality} \times N$

Where;

Waste Quantity in tons per day (TPD)

$N =$ Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority

Simplifying;

$EC \text{ (Lacs Rs.)} = 2.4(\text{Waste Generation} - \text{Waste Disposed as per the Rules}) + 0.02 (\text{Waste Generation} - \text{Waste Disposed as per the Rules}) \times N + \text{Marginal Cost of Environmental Externality} \times (\text{Waste Generation} - \text{Waste Disposed as per the Rules}) \times N$

Table No. 3.6: Sample calculation for EC to be levied for improper management of Municipal Solid Waste

City	Delhi	Agra	Gurugram	Ambala
Population (2011)	1,63,49,831	17,60,285	8,76,969	5,00,774
Class	Mega-City	Million-plus City	Class-I Town	Class-I Town
Waste Generation (kg. per person per day)	0.6	0.5	0.4	0.4
Waste Generation (TPD)	9809.90	880.14	350.79	200.31
Waste Disposal as per Rules (TPD) (assumed as 25% of waste generation for sample calculation)	2452.47	220.04	87.70	50.08
Waste Management Capacity Gap (TPD)	7357.42	660.11	263.09	150.23
Calculated EC (capital cost component) in Lacs. Rs.	17657.82	1584.26	631.42	360.56
Minimum and Maximum values of EC (Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 1000 Max. 10000	Min. 500 Max. 5000	Min. 100 Max. 1000	Min. 100 Max. 1000

Final EC (capital cost component) in Lacs. Rs.	10000.00	1584.26	631.42	360.56
Calculated EC (O&M Component) in Lacs. Rs./Day	147.15	13.20	5.26	3.00
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./Day)	Min. 1.0 Max. 10.0	Min. 0.5 Max. 5.0	Min. 0.1 Max. 1.0	Min. 0.1 Max. 1.0
Final EC (O&M Component) in Lacs. Rs./Day	10.00	5.00	1.00	1.00
Calculated Environmental Externality (Lacs Rs. Per Day)	2.58	0.18	0.03	0.02
Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. per day)	Max. 0.80	Min. 0.25 Max. 0.35	Min. 0.01 Max. 0.05	Min. 0.01 Max. 0.05
Final Environmental Externality (Lacs Rs. per day)	0.80	0.25	0.03	0.02

IV. Environmental Compensation in Case of Illegal Extraction of Ground Water

4.5 Formula for Environmental Compensation for illegal extraction of ground water

The committee decided that the formula should be based on water consumption (Pump Yield & Time duration) and rates for imposing Environmental Compensation for violation of illegal abstraction of ground water. The committee has proposed following formula for calculation of Environmental Compensation (EC_{Gw}):

$$EC_{Gw} = \text{Water Consumption per Day} \times \text{No. of Days} \times \text{Environmental Compensation Rate for illegal extraction of ground water } \{ECR_{Gw}\}$$

Where water Consumption is in m^3/day and ECR_{Gw} in $Rs./m^3$

Yield of the pump varies based on the capacity/power of pump, water head etc. For reference purpose, yield of the pump may be assumed as given in **Annexure-VI**.

Time duration will be the period from which pump is operated illegally.

In case of illegal extraction of ground water, quantity of discharge as per the meter reading or as

calculated with assumptions of yield and time may be used for calculation of EC_{Gw} .

4.6 Environmental Compensation Rate (ECR_{Gw}) for illegal use of Ground Water:

The committee decided that the Environmental Compensation Rate (ECR_{Gw}) for illegal extraction of ground water should increase with increase in water consumption as well as water scarcity in the area. Further, ECR_{Gw} are kept relaxed for drinking and domestic use as compared to other uses, considering the basic need of human being.

As per CGWB, safe, semi-critical, critical and over-exploited areas are categorized from the ground water resources point of view (CGWB, 2017). List of safe, semi-critical, critical and over-exploited areas are available on the website of CGWB and can be accessed from <http://cgwa-noc.gov.in/LandingPage/NotifiedAreas/Categorization0fAssessmentUnits.pdf#ZOOM=150>.

Environmental Compensation Rates (ECR_{Gw}) for illegal use of ground water (ECR_{Gw}) for various purposes such as drinking/domestic use, packaging units, mining and industrial sectors as finalized by the committee are given in tables below:

4.6.1 ECR_{Gw} for Drinking and Domestic use:

Drinking and Domestic use means uses of ground water in households, institutional activity, hospitals, commercial complexes, townships etc.

SI. No.	Area Category	Water Consumption (m ³ /day)			
		<2	2 to <5	5 to <25	25 & above
		Environmental Compensation Rate (ECR_{Gw}) in Rs./m³			
1	Safe	4	6	8	10
2	Semi Critical	12	14	16	20
3	Critical	22	24	26	30
4	Over-Exploited	32	34	36	40
Minimum EC_{Gw}=Rs 10,000/- (for households) and Rs. 50,000 (for institutional activity, commercial complexes, townships etc.)					

4.6.2 ECR_{Gw} for Packaged drinking water units:

SI. No.	Area Category	Water Consumption (m ³ /day)			
		<200	200 to <1000	1000 to <5000	5000 &
		Environmental Compensation Rate (ECR_{Gw}) in Rs./m³			
1	Safe	12	18	24	30
2	Semi critical	24	36	48	60
3	Critical	36	48	66	90
4	Over-exploited	48	72	96	120
Minimum EC_{Gw}=Rs 1,00,000/-					

4.6.3 ECR_{Gw} for Mining, Infrastructure and Dewatering Projects

SI. No	Area Category	Water Consumption (m^3/day)			
		<200	200 to <1000	1000 to <5000	5000 &
		Environmental Compensation Rate (ECR_{Gw}) in Rs./ m^3			
1	Safe	15	21	30	40
2	Semi critical	30	45	60	75
3	Critical	45	60	85	115
4	Over-exploited	60	90	120	150
Minimum EC_{Gw}=Rs 1,00,000/-					

4.6.4 ECR_{Gw} for Industrial Units:

SI. No.	Area Category	Water Consumption (m^3/day)			
		<200	200 to <1000	1000 to <5000	5000 &
		Environmental Compensation Rate (ECR_{Gw}) in			
1	Safe	20	30	40	50
2	Semi critical	40	60	80	100
3	Critical	60	80	110	150
4	Over-exploited	80	120	160	200
Minimum EC_{Gw} = Rs 1,00,000/-					

4.8 Recommendations

The committee has given following recommendations:

- The minimum Environmental Compensation for illegal extraction of ground water for domestic purpose will be Rs. 10,000, for institutional/commercial use will be 50,000 and for other uses will be 1,00,000.
- In case of fixation of liability, it always lies with current owner of the premises where illegal extraction is taking place.
- Time duration may be assumed to be one year in case where no evidence for period of installation of bore well could be established.
- For Drinking and Domestic use, where metering is not present but storage tank facility is available, minimum water consumption per day may be assumed as similar to the storage capacity of the tank.
- For industrial ground water use, where metering is not available, water consumption may be assumed as per the consent conditions. Further, where in case industry is operating without consent, water consumption may be calculated based on the plant capacity (on the recommendation of SPCB/PCC, if required). SPCB/PCC may bring the issue of illegal extraction of ground water in industries in to the notice of CGWA for appropriate action by CGWA.

- Authorities assigned for levy EC and taking penal action are listed below:

S. No.	Actions	Authority
1.	To seal the illegal bore-well/tube-well to stop extraction of water and further closure of project	District Collector
2.	To levy EC _{GW} as per prescribed method	District Collector,
3.	To levy EC on water pollution, as per the method prescribed in report of CPCB- "EC on industrial pollution"	CPCB/SPCB/PCC
4.	Prosecution of violator	CGWA under EP Act SPCB/PCC under Air and Water Act

- CGWA may maintain a separate account for collection and utilization of fund, collected through the prescribed methodology in this report.”

“Discussion on the report dated 30.05.2019 updated on 19.07.2019

15. It is clear from the order of the Hon’ble Supreme Court⁸ that the responsibility of operating STPs under Article 243W and item 6 of Schedule XII to the Constitution is of local bodies who have to evolve norms to recover funds for the purpose which is to be supervised by the States/UTs. The norms were to be finalized upto 31.03.2017 to be implemented from the next year, i.e 01.04.2018. In absence thereof, the States/UTs have to cater to the financial requirement from its own resources. The States/UTs are to prioritize the cities, towns, villages discharging effluents/sewage directly into the water bodies. Industrial activity without proper treatment plants (ETPs and CETPs) is not to be allowed by the State PCBs and the Secretaries, Environment of the States/UTs are to be answerable. Thus, the source for financial resources for the STPs, stands finalized under the binding judgment of the Hon’ble Supreme Court. Authorities and persons accountable are identified. Rigid implementation has been laid down. This Tribunal has been required to monitor compliance of the directions and timelines.
16. It is in this background that the present report needs to be appraised and further directions given. As regards the Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water is accepted as an interim measure. With regard to setting up of STPs, while we appreciate the extensive work of the CPCB based on information furnished by States/UTs, the challenge remains about verification of the said data on the one hand and analysis of the steps taken and required on

⁸ Para 10-13 in *Paryavaran Suraksha Samiti Vs. Union of India, Supra*

the other. There is already a database available with the CPCB with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites. This needs to be collated and river basinwise macro picture needs to be prepared by the CPCB in terms of need for interventions, existing infrastructure and gaps therein. The States have given timelines which need to be effectively monitored both by the CPCB and the Chief Secretaries in terms of its execution.

17. As already noted, prevention of pollution of water is directly linked to access to potable water as well as food safety. Restoration of pristine glory of rivers is also of cultural and ecological significance. This necessitates effective steps to ensure that no pollution is discharged in water bodies. Doing so is a criminal offence under the Water Act and is harmful to the environment and public health. 'Precautionary' principle of environmental law is to be enforced. Thus, the mandate of law is that there must be 100% treatment of sewage as well as trade effluents. This Tribunal has already directed in the case of river Ganga that timelines laid down therein be adhered to for setting up of STPs and till then, interim measures be taken for treatment of sewage. There is no reason why this direction be not followed, so as to control pollution of all the river stretches in the country. The issue of ETPs/CETPs is being dealt with by an appropriate action against polluting industries. Setting up of STPs and MSW facilities is the responsibility of Local Bodies and in case of their default, of the States. Their failure on the subject has to be adequately monitored. Recovery of compensation on 'Polluter Pays' principle is a part of enforcement strategy but not a substitute for compliance. It is thus necessary to issue directions to all the States/UTs to enforce the compensation regime, latest with effect from 01.04.2020. We may not be taken to be condoning any past violations. The States/UTs have to enforce recovery of compensation from 01.04.2020 from the defaulting local bodies. On failure of the States/UTs, the States/UTs themselves have to pay the requisite amount of compensation to be deposited with the CPCB for restoration of environment. The Chief Secretaries of all the States may furnish their respective compliance reports as per directions already issued in O.A. No. 606/2018."

"II. Report dated 14.08.2019 with regard to monitoring of CETPs

18. The Committee inspected 127 CETPs in 14 States. Figure of CETP assumed to be 97 was not correct. 66 CETPs were found to be non-compliant. CPCB directed SPCBs to take following steps:
1. SPCBs shall direct non-complying CETPs to take immediate corrective actions to comply with the environmental standards.

2. CETP should be directed to take action as per the recommendations provided at Annexure A-N within a time frame.
3. In case of non-complying CETPs, action as deemed fit including levying of environmental compensation may be taken.
4. In case, OCEMS are not connected with CPCB & SPCB servers, ensure a robust system of physical inspections to verify compliance by drawing samples.”

“Discussion on the report dated 14.08.2019

19. We accept the recommendation of the CPCB and direct the Chief Secretaries, State Governments, Union Territories and the SPCBs/PCCs to take further action accordingly and furnish an action taken report accordingly. The CPCB to meanwhile compile and collate information with regard to ETPs, CETPs, STPs, MSW Facilities, Legacy Waste dump sites and complete the pending task on the subject before the next date and furnish a report.

20. The environmental compensation regime for CETP not meeting the prescribed norms need to be evolved by the CPCB.”

(emphasis supplied)

7. After the above discussion, this Tribunal proceeded to issue following directions:

“Directions

21. We may now sum up our directions:

(i) The Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water in the report dated 30.05.2019 is accepted and the same may be acted upon as an interim measure.

(ii) SPCBs/PCCs may ensure remedial action against non-compliant CETPs or individual industries in terms of not having ETPs/fully compliant ETPs or operating without consent or in violation of consent conditions. This may be overseen by the CPCB. CPCB may continue to compile information on this subject and furnish quarterly reports to this Tribunal which may also be uploaded on its website.

(iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment.

(iv) The CPCB needs to collate the available data base with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites and prepare a river basin-wise macro picture in terms of gaps and needed interventions.

(v) The Chief Secretaries of all the States/UTs may furnish their respective compliance reports on this subject also in O.A. No. 606/2018.

List for further consideration on 21.05.2020, unless required earlier. A copy of this order be placed on the file of O.A. No. 606/2018 relating to all States/UTs and be sent to Chief Secretaries of all States/UTs, Secretary MoEF&CC, Secretary Jal Shakti and Secretary, MoHUA.

(emphasis supplied)

8. Before proceeding further, we may also note further order of this Tribunal dated 06.12.2019 in O.A. No. 673/2018 directing as follows:

“XII. Directions:

47. We now sum up our directions as follows:

- i. **100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated 22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.**
- ii. **Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. Rs. 10 lakhs per month per STP.**
- iii. We further direct that an institutional mechanism be evolved for ensuring compliance of above directions. For

this purpose, monitoring may be done by the Chief Secretaries of all the States/UTs at State level and at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB.

iv. For above purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance who may take assistance of CPCB and may give its quarterly report to this Tribunal commencing 01.04.2020.

v. The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the Secretary level and ensuring appropriate adverse entries in the ACRs of erring officers. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose.

vi. Monthly progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti with a copy to CPCB. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers.

vii. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.

viii. Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.

ix. CPCB may finalize its recommendations for action plans relating to P-III and P-IV as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the action plans prepared by the States which may start forthwith, if not already started.

x. The action plan prepared by the Delhi Government which is to be approved by the CPCB has to follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.

xi. Since the report of the CPCB has focused only on BOD and FC without other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification, a survey may now be conducted with reference to all the said parameters by involving the SPCB/PCCs within three months. Monitoring gaps be identified and upgraded so to cover upstream and downstream locations of major

discharges to the river. CPCB may file a report on the subject before the next date by e-mail at judicial-ngt@gov.in.

- xii. Rivers which have been identified as clean may be maintained.”

(emphasis supplied)

Latest CPCB report dated 14.5.2020 furnishing status of compliance:

9. The CPCB has filed two reports:
- (i). Report dated 13.02.2020 titled “Steps taken Report”.
 - (ii). Report dated 14.05.2020 titled “Compliance Report”.
10. Since report dated 14.05.2020 covers the entire subject, it is not necessary to refer to the report dated 13.02.2020 in detail. Report dated 14.05.2020 mentions the compliance status of ETPs/CETPs & STPs, as reported by State PCBs/PCCs as on 05.05.2020, which has been given in a tabular form and the summary is given as follows:

*i. As per the data received from SPCBs/PCCs, out of total 65,135 number of industries requiring ETPs, 63,108 industries are operating with functional ETPs and **2,027 industries are operating without ETPs. Show-cause notices and closure directions have been issued to 968 and 881 industries, respectively for operating without ETPs. Legal cases have been filed against 7 industries and action is under process against 269 industries.** Out of 63,108 operational industries, 61,346 industries are complying with environmental standards and **1,616 industries are non-complying. Show-cause notices and closure directions have been issued to 921 and 260 industries, respectively for non-compliance. Legal cases have been filed against 22 industries and action is under process against 798 industries.***

*ii. As per the data received from SPCBs/PCCs, there are total 191 CETPs, out of which 128 CETPs are complying with environmental standards and **63 CETPs are non-complying. Show-cause notices and closure directions have been issued to 18 and 4 CETPs, respectively, for non-compliance. Legal cases have***

been filed against 9 CETPs and action is under process against remaining 32 CETPs.

iii. As per the data received from SPCBs/PCCs, there are total 15,403 STPs (Municipal and other than municipal), out of which, 14,795 STPs are complying with environmental standards and **608 STPs are non-complying. Show-cause notices and closure directions have been issued to 340 and 38 STPs, respectively for non-compliance. Legal cases have been filed against 15 STPs and action is under process against 215 STPs.**

iv. As per the data received from SPCBs/PCCs, there are **82 CETPs in construction/proposal stage, whereas, for STPs, 1084 projects (municipal and non-municipal) are under construction/proposal stage.**

v. As per the data received from 36 SPCBs/PCCs, 14 SPCBs/PCCs (namely- Andhra Pradesh, Assam, Bihar, Goa, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Odisha, Puducherry, Tamil Nadu, Telangana, West Bengal) are displaying OCEMS data in public domain. The link provided by Maharashtra and Gujarat is password protected and data is not available in public domain. **The 4 SPCBs (namely, Chhattisgarh, Jammu & Kashmir, Punjab and Sikkim) have not provided appropriate web links.** Further, Chandigarh PCC has clarified that Data will be displayed after upgradation of STPs. Mizoram SPCB has informed that there is no industry requiring OCEMS connectivity. Lakshadweep PCC informed that there is no industry in the Union Territory of Lakshadweep.

13 SPCBs/PCCs (Andaman & Nicobar, Arunachal Pradesh, Daman & Diu, Dadra Nagar Haveli, Delhi, Karnataka, Manipur, Meghalaya, Nagaland, Rajasthan, Tripura, Uttar Pradesh and Uttarakhand) are not displaying OCEMS data in public domain.”

(emphasis supplied)

11. Action taken has been mentioned as ‘river basin-wise data collection and analysis by CPCB for compliance of Hon’ble NGT directions dated 28.08.2019’; Status of Non-complying CTEPs; Meeting of the Monitoring Committee and Quarterly Steps Taken Reports. Extracts from the report are:

“3.0 Action taken by CPCB for compliance of Hon’ble NGT directions dated 28.08.2019:

i. River basin wise macro picture of ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites:

The issue was deliberated in the meetings of the Monitoring Committee, wherein, it was observed that specific river basin wise data regarding location (latitude & longitude), waste generation and treatment etc. for each and every industry, CETP, STP, MSW facility and Legacy Waste Site is not available with CPCB. Further, to find out river-basin wise gaps in treatment system and needed interventions for particular sector, unit-wise data regarding actual generation, treatment and discharge of effluent/ waste etc. is required. Therefore, to compile such a compressive database, it was decided that information will be collected through online portal, by developing specific formats for each sector. This database will also be helpful for policy makers and regulators to critically analyse the needed interventions/measures for abatement and control of pollution.

CPCB has finalized the formats for collection of information from concerned SPCBs/PCCs, for preparation of river basin wise macro picture related to ETPs and CETPs (**Annexure-II & III**). An online portal has also been developed by CPCB, which is available on the following weblink: <http://125.19.52.219/gpi/riverbasin/>. CPCB vide email dated 12.05.2020 (**Annexure-IV**) requested all SPCBs/PCCs to provide the information on the portal by 31st May, 2020. The formats for STPs, MSW facilities and Legacy Waste Sites have been finalized and the same are given at **Annexure-V, Annexure-VI and Annexure-VII**, respectively. However, portal development for STPs, MSW facilities, Legacy Waste sites is in the process.

It is to be noted that following river basin, as classified by Central Water Commission, Ministry of Jal Shakti, Government of India, are being considered for the data collection and analysis:

1. Indus
- 2(a). Ganga (Upto Border)
- 2(b). Brahmaputra (Upto Border)
- 2(c). Barak etc. (Upto Border)
3. Godavari
4. Krishna
5. Cauvery
6. Pennar
0. East flowing rivers between Krishna and Pennar and between Mahanadi and Godavari
7. East flowing rivers between Krishna and Kanyakumari
8. Mahanadi
1. Brahmani and Baitarani

2. Subernarekha
3. Sabarmati
4. Mahi
5. West flowing rivers of Kutch and Kathiawar including Luni
6. Narmada
7. Tapi
8. West flowing rivers from Tapi to Tadri
9. West flowing rivers from Tadri to Kanyakumari
10. Area of Inland drainage in Rajasthan
11. Minor river basins drainage to Bangladesh & Burma

(Source: <http://www.cwc.gov.in/river-basin-planning>)

ii. Status of Non-complying CETPs:

a) In compliance of Hon'ble NGT directions, during March-May, 2019, CPCB inspected a total number of 144 CETPs in 14 states, out of which 17 were found closed. As per the monitoring, 66 CETPs were found non-complying in terms of outlet standards. The compiled inspection-cum-monitoring reports and action taken by CPCB were submitted to Hon'ble NGT on 14.08.2019. CPCB has directed all concerned SPCBs, through directions u/s 18(1)(b) of Air and Water Act, issued on 13.08.2019, to take following actions against defaulting CETPs:

1. SPCBs shall direct non-complying CETPs to take immediate corrective actions to comply with the environmental standards.
2. SPCBs shall direct all non-complying CETPs to take action as per the recommendations of CPCB, within a time frame.
3. In case of non-complying CETPs, action as deemed fit including levying of environmental compensation may be taken.
4. In case, OCEMS are not connected with CPCB & SPCB servers, ensure a robust system of physical inspections to verify compliance by drawing samples.

CPCB has been following-up the matter with the concerned SPCBs/PCCs. Action Taken Reports, w.r.t. 66 non-complying CETPs has been received from all the 14 SPCBs. The dates of ATRs submitted by SPCBs/PCCs, are given at **Annexure-VIII**.

As per the information received from concerned SPCBs, out of 66 noncomplying CETPs, 26 CETPs have complied the directions, however, 40 CETPs are still non-complying. Environmental compensation has been levied on 13

CETPs. Actions for levying EC / legal action are under process against 10 CETPs. The state-wise summary status of 66 non-complying CETPs and action taken by concerned SPCBs is given at **Annexure-IX**. Further, CETP-wise compliance status of CPCB's directions and recommendations is attached at **Annexure-X**.

b) Regarding evolving environmental compensation regime for CETPs, it is to submit that in compliance of Hon'ble NGT order dated 03.08.2017, in the matter of OA No. 593/2017 (Paryavaran Suraksha Samiti v/s UoI), CPCB has earlier finalized the following formula, which is primarily based on the Pollution Index (PI) of the concerned sector, for levying environmental compensation on a defaulting industry:

$$EC = PI \times N \times R \times S \times LF$$

Where,

EC is Environmental Compensation in ₹

PI = Pollution Index of industrial sector

N = Number of days of violation took place

R = A factor in Rupees (₹) for EC

S = Factor for scale of operation

LF = Location factor

Presently, considering the PI value as 80, the same formula is being used for levying EC on non-complying CETPs. Further, as per the Hon'ble NGT directions CPCB is in the process of revising EC regime for non-complying CETPs. The issue was discussed in the Committee, dealing with the EC matter, on 17.02.2020 and 04.03.2020. CPCB will finalize the revised EC regime for non-complying CETPs, shortly.

iii. Meeting of the Monitoring Committee:

CPCB has been conducting meetings of the Monitoring Committee on regular basis to review the compliance status of ETPs/CETPs/STPs submitted by SPCBs/PCCs and to deliberate on issues for ensuring the compliance of Hon'ble NGT's directions. So far, fifteen meetings of the Monitoring Committee have been conducted. Since the date last hearing i.e. 28.08.2019, meetings of the Monitoring Committee were held on 27th September 2019, 9th December 2019, 13th February, 2019 at CPCB Head Office, Delhi.

iv. Quarterly Steps Taken Reports:

CPCB has been uploading Steps Taken Reports on its website, as directed by the Hon'ble Tribunal. The reports can be accessed through the URL-<https://cpcb.nic.in/ngt-court-cases/>. So far, six reports with the status as on 26.10.2018, 23.01.2019, 15.04.2019, 19.07.2019, 22.10.2019 and 04.02.2020 have been uploaded. The copies of the Steps Taken Report i.e. 22.10.2019 and

04.02.2020 were also submitted to the Hon'ble NGT through e-filing.”

12. The report further mentions preparation of formats for collection of information from concerned States PCBs/PCCs, development of online portal. Compliance status is found to be as follow:

*“As per the information received from concerned SPCBs, **out of 66 noncomplying CETPs, 26 CETPs have complied the directions, however, 40 CETPs are still non-complying. Environmental compensation has been levied on 13 CETPs. Actions for levying EC / legal action are under process against 10 CETPs.** The state-wise summary status of 66 non-complying CETPs and action taken by concerned SPCBs is given at Annexure-IX. Further, CETP-wise compliance status of CPCB’s directions and recommendations is attached at Annexure-X.”*

Analysis of the report dated 14.5.2020:

13. The above report shows that some steps have been initiated against non-compliant ETPs/CETPs/STPs while further steps need to be taken. With regard to industries not having ETP or not connected to CETP, pending construction of CETPs as mentioned in the above report, the State PCBs/PCCs may ensure that there is no discharge of any untreated pollutants by the industries and such polluting activities must be stopped and compensation recovered for the non-compliance, if any, apart from any other legal action in accordance with law. As regards non-compliant STPs, further action may be completed by the State PCBs/PCCs and it may be ensured that there is 100% treatment of sewage and till STPs are set up, atleast in-situ remediation takes place. However, on account of Corona pandemic which has affected several on-going activities, the timeline of levy of compensation in terms of order dated 28.08.2019 in O.A. No. 593/2017 read with order dated 06.12.2019 in O.A. No. 673/2018, of 01.04.2020 may be read as 01.07.2020 and 01.04.2021 may be

read as 01.07.2021. Further reports may be taken by the CPCB from all the State PCBs/PCCs as per the system evolved by the CPCB from time to time.

14. At this stage, it will also be appropriate to mention the proceedings in another matter pending before this Tribunal which have bearing on the present case namely *O.A. No. 1038, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels"* which was last dealt with on 14.11.2019. Brief reference to same has been made in earlier order also. The issue therein was remedial action against pollution of industrial clusters, classified as such, based on Comprehensive Environmental Pollution Index (CEPI) prepared by CPCB on the basis of data furnished by the State PCBs/PCCs. The said data shows that 100 industrial clusters are polluted in terms of air, water and soil. Some of the salient observations in the said order are as follows:

"9. In view of the above, since the data compiled so far shows increasing trend of air, water and soil pollution, meaningful action must result in reversing such trend and the violators of law cannot be allowed to have a free run at the core of environment and public health. Inaction by the statutory authorities is also at the cost of Rule of Law which is the mandate of the Constitution and is necessary for meaningful enforcement of legitimate constitutional rights of citizens and basic duty of a welfare State under the Constitution.

10. We may note the observation of the Hon'ble Supreme Court in the subject of accountability of authorities for failing to discharge their duties. In ***M.C. Mehta v. UOI & Ors.***, W.P Civil No. 13029/1985 vide order dated 04.11.2019, the Hon'ble Supreme Court observed:

"....Obviously, it is writ large that the State Governments, Government of NCT of Delhi and civic bodies have miserably failed to discharge their liability as per the directive principles of State

Policy which have found statutory expression, they are being made statutory mockery and also the directions of this Court and High Courts in this regard are being violated with impunity.

.... Time has come when we have to fix the accountability for this kind of situation which has arisen and is destroying right to life itself in gross violation of Article 21 of the Constitution of India.

.... **Everybody has to be answerable including the top state machinery percolating down to the level of gram panchayat. The very purpose of giving administration power up to the panchayat level is that there has to be proper administration and there is no room for such activities. The action is clearly tortuous one and is clearly punishable under statutory provisions, besides the violation of the Court's order."**

In **Techi Tagi Tara vs. Rajendra Singh Bhandari and Ors., (2018) 11 SSC 734**, it was observed:

"2..... There can be no doubt that the protection and preservation of the environment is extremely vital for all of us and unless this responsibility is taken very seriously, particularly by the State Governments and the SPCBs, we are inviting trouble that will have adverse consequences for future generations. Issues of sustainable development, public trust and intergenerational equity are not mere catch words, but are concepts of great importance in environmental jurisprudence.

4. One of the principal attributes of good governance is the establishment of viable institutions comprising professionally competent persons and the strengthening of such institutions so that the duties and responsibilities conferred on them are performed with dedication and sincerity in public interest. This is applicable not only to administrative bodies but more so to statutory authorities- more so, because statutory authorities are the creation of a law made by a competent legislature, representing the will of the people."

- 11. The Tribunal has thus no option except to reiterate that meaningful action has to be taken by the State PCBs/PCCs as already directed and action taken report furnished showing the number of identified polluters in polluted industrial areas mentioned above, the extent of closure of polluting activities, the extent of environmental compensation recovered, the cost of restoration of the damage to the environment of the said areas, otherwise there will be no meaningful environmental governance. This may be failure of rule of law and breach of trust reposed in statutory authorities rendering their existence useless and burden on the society.**

On default, the Tribunal will have no option except to proceed against the Chairmen and the Member Secretaries of the State PCBs/PCCs by way of coercive action under Section 25 of the National Green Tribunal Act, 2010 read with Section 51 CPC. Such action may include replacement of persons heading such PCBs/PCCs or direction for stopping their salaries till meaningful action for compliance of order of this Tribunal. The Tribunal may also consider deterrent compensation to be recovered from the State PCBs/PCCs. Such action taken reports strictly in terms of law and order of this Tribunal referred to above may be furnished by the State PCBs/PCCS on or before 31.01.2020 to the CPCB. The CPCB may prepare a tabulated analysis of the same and file a consolidated report before this Tribunal before February 15, 2020 by email at judicial-ngt@gov.in. The CPCB may also revise its mechanism for expansion and new activities by red and orange category of industries in critically/ severely polluted areas consistent with the spirit of the earlier orders of this Tribunal and principles of environmental law to bring down the pollution load and ensure that activities do not further add to such load.”

15. We may also refer to the proceedings in another connected matter being O.A. No. 606/2018 dealing with the solid waste management and other issues. The same has also been briefly referred to earlier. The said matter was taken up in pursuance of the order of the Hon'ble Supreme Court dated 02.09.2014 in *Writ Petition No. 888/1996, Almitra H. Patel Vs. Union of India & Ors.*⁹ In the said matter, this Tribunal flagged important environmental issues including solid waste and liquid waste management in the light of orders of the Hon'ble Supreme Court. On account of continuous non-compliance for a long period, the Chief Secretaries of all States/UTs were required to appear before this Tribunal vide order

⁹ 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 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.”

dated 16.01.2019. The Tribunal issued directions in the presence of the Chief Secretaries of all the States/UTs by separate orders. Since Chief Secretaries sought time for compliance, they were required to appear again with progress report on crucial issues, including water pollution leading to pollution of rivers and industrial clusters and other issues. Further order dated 12.09.2019 was passed with regard to the schedule of appearance of the Chief Secretaries in second round. Some of the Chief Secretaries have already appeared. It may be sufficient to refer to order dated 28.02.2020 (other orders be almost on same lines) inter-alia directing 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 Court¹⁰are:

"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 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**

¹⁰ (2004) 13 SCC 538

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."**
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 waste¹¹, 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 data¹² which need to be remediated to avoid harmful impact on environment and public health.**
37. *The Chief Secretaries mentioned that the central assistance was inadequate which cannot be a justification for failure of the State in managing its waste. Waste management is responsibility of the State and Local Bodies, as already held by the Hon'ble Supreme Court in the judgments referred to above. If the funds available are inadequate, the State has to raise the same from the generators of waste.*

¹¹

http://164.100.47.193/lssccommittee/Urban%20Development/16_Urban_Development_25.pdf

¹² Order dated 18.10.2019 in O.A. No. 606/2018 para 6

38. *The Chief Secretaries must ensure adverse entries in the service records of erring officers in respect of liquid waste management atleast from 01.04.2020.*

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 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 28¹³ 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*

¹³ 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.

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.
- 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:
- i. **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.**
 - ii. **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.

iii. 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.

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 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."

(emphasis supplied)

Directions:

- 16. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform. CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may**

consolidate all action plans and file a report accordingly. Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained. As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution.

17. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.

18. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal.¹⁴ If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.

ORIGINAL APPLICATION NO. 148/2016 (MAHESH CHANDRA SAXENA VS. SOUTH DELHI MUNICIPAL CORPORATION & ORS.)

Consideration of consequential issue of utilization of treated water: Earlier proceedings leading to order dated 11.9.2020:

¹⁴ <https://www.indiatoday.in/india/story/coronavirus-lockdown-india-fresh-air-clean-rivers-1669726-2020-04-22>

19. This matter is connected with and incidental to the setting up of STPs. In the course of operation of STPs, treated water is generated and proper use of such water for secondary purposes can lead to availability of more clean water for drinking purposes. Right to access fresh drinking water is part of right to life. There is huge shortage of drinking water in the country. This Tribunal noted that in absence of proper planning, fresh water was being used for purposes for which treated water could easily be used. Some the statistics noted by the Tribunal and other pertinent observations in the order dated 11.09.2019 are as follows:

- “1. **Delhi is an urbanized city state having a population of about 20 millions which is expected to increase to 23 million by the year 2021. Present total water requirement for domestic purposes for population of 20 million @ 60 GPCD works out to 1200 MGD. Present average potable water production by Delhi Jal Board is about 936 MGD and includes about 80-85 MGD of ground water. Thus, there is a gap of 204 MGD. Only 81.3 households have piped water supply. Reuse of water both in domestic and industrial sectors is essential. Around 150 billion liters of sewage water is produced in India annually. 70% of Singapore drinks treated sewage water.¹⁵ There appears to be no satisfactory plan with any of the States/Union Territories (UTs) in the country. This Tribunal monitored the matter with reference to the NCT of Delhi for more than two years and passed several orders.**
2. Finally, on 27.11.2018, the Tribunal considered the report of the Delhi Jal Board (DJB) dated 16.11.2018 to the effect that **460 MGD waste water was being treated but reuse of such water was not being ensured.**

(emphasis supplied)

20. The Tribunal further noted:

- “3. **As per CPCB’s report 2016¹⁶, it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India.**

¹⁵ Second interim report dated 31.07.2019 of Monitoring Committee constituted under O.A. No. 496/2016.

¹⁶http://www.sulabhervis.nic.in/Database/STST_wastewater_2090.aspx July 16, updated on December 6, 2016

Thereby the deficit in capacity of waste treatment is of 62%. There is no data available with regard to generation of sewage in the rural areas. To remedy this situation orders have been passed by the Hon'ble Supreme Court¹⁷ as well as this Tribunal¹⁸ directing 100% treatment of the sewage and industrial effluents by installing requisite ETPs/CETPs/STPs. Proper utilization of treated water has implications not only to save potable water but also to prevent illegal extraction of groundwater and conservation of water bodies. Timelines have been laid down for ensuring treatment of sewage and effluents for preventing pollution of river Ganga¹⁹ as well as other polluted river stretches which will result in more treated water being available.

4. **Having regard to the necessity to ensure utilization of treated waste water to reduce pressure on the ground water resources throughout the country, the Tribunal directed all the States/UTs in India to prepare and furnish their action plans within three months to the Central Pollution Control Board (CPCB) so that CPCB could review the same and issue further directions.**

5. Report dated 01.05.2019 furnished by the CPCB was considered by this Tribunal on 10.05.2019 and it was noted that some of the States did not furnish their action plans and the action plans furnished by some of the States needed improvements. The Tribunal directed that the States/UTs which had not yet furnished their action plans may do it by 30.06.2019 and such action plans may have monitoring mechanism for coordination with the local bodies which will be the responsibility of the Chief Secretaries of the States/UTs.

6. The Tribunal observed:

“7. It is well known that absence of plan for reuse of treated water affects recharge of ground water and also results in fresh water being used for purposes for which treated water can alternatively be used. Proper plans for reuse of waste water can add to availability of potable water which is many times denied this basic need or has to travel long distances to fetch clean water. This being a substantial question of environment, direction is issued to the States/UTs which have not yet submitted their action plans to do so latest by 30.06.2019, failing which the Tribunal may have to consider coercive measures, including compensation for loss to the environment. The plans may include a monitoring mechanism in the States for coordination with the local bodies. This will be the

¹⁷ Paryavaran Suraksha Samiti Vs. Union of India, (2017) 5 SCC 326

¹⁸ Paryavaran Suraksha Samiti Vs. Union of India, O.A No. 593/2017 order dated 28.08.2019

¹⁹ O.A No. 200/2014

responsibility of the Chief Secretaries of all the States/UTs.

8 The issue is also connected with the rejuvenation of 351 river stretches. The States/UTs may include this subject in the deliberations with the Central Monitoring Committee constituted in terms of orders dated 08.04.2019 in O.A. No. 673/2018, News item published in The Hindu authored by Shri Jacob Koshy titled More river stretches are now critically polluted CPCB and order dated 24.04.2019 in O.A.606/2018, Compliance of Municipal Solid Waste Management Rules, 2016. **The Chief Secretaries may also include this subject in their reports to this Tribunal in pursuance of orders passed in O.A. No. 606/2018 on 16.01.2019 and further orders in their presence.**

9. The CPCB may place on its website guidelines for preparing an appropriate plan within two weeks from today and also furnish its final report after analysis of gaps in the plans by 31.07.2019 by e-mail at ngt.filing@gmail.com.”

7. In respect of Delhi, this Tribunal noted the stand of the DJB that Municipal Corporations and the **DDA may lift the treated water by tankers till the pipelines are laid for which time bound plans have been prepared and included in the action plan submitted to the CPCB. On this aspect, it was directed:**

“10.
We understand that about 103 MGD of treated water is not being effectively used by DJB out of the total 459 MGD. This is a colossal waste of our precious natural resources and cannot be permitted. This in our view needs to be expeditiously sorted out by Chief Secretary Delhi, Municipal Corporations and DDA by way of intersectoral coordination. We also direct that laying of pipelines be expedited in a time bound manner and revised plan to this regard be submitted which is duly vetted and ratified by CPCB.”

8. As per the Monitoring Committee on Yamuna, a flat recovery rate towards collection and treatment of sewage can be an option towards viable sewage management.

“A strong direction is needed to be given in order to make everyone pay a flat rate for sewage collection and treatment whether using below or upto 20 KL, as those using more than 20 KL in any case are paying for sewage treatment. The DJB charges Rs. 11.93 per KL for the sewage it treats on behalf of NDMC

and the Cantonment Board. A specialized institution like the National Institute of Financial Policy & Planning or the C&AG may be directed to examine the costs involved and revenue generated as it is leading to mindless pollution of the environment and depletion of ground water”.

(emphasis supplied)

21. The Tribunal considered the report of the CPCB furnished in pursuance of earlier order as follows:

“9. Accordingly, further report has been furnished by the CPCB on 31.07.2019 to the effect that guidelines have been prepared for utilization of treated sewage from the STPs and uploaded on the website of CPCB on 24.04.2019. 23 States/UTs have furnished their action plans but 13 States/UTs have yet to submit. The action plans of 23 States/UTs needed further improvements. ‘Major observations and shortcomings’ are mentioned as follows:

1. Action plan received from State of Andhra Pradesh, Madhya Pradesh and NCT of Delhi has mentioned schemes for utilization of treated sewage in different sectors like horticulture, Metro washing, Power Plants, Construction activity, rejuvenation of water bodies (Pond/lakes), industrial sectors. Action plan also include firmed timelines for implementation of various schemes.
2. Action plan of Delhi covers all aspects as per suggested action plan. However, wastewater demand from bulk users like DDA, PWD, CPWD, DMCs, DMRC are comparative on lower side and same need to be enhanced. Chief Secretary may take up said matter with bulk users to increase the utilization of treated sewage. Option of restricted uses of bore wells by said stakeholders may explore to compel more demand of treated sewage.
3. Public Health Engineering Department, Manipur mentioned that they do not have any specific policy of utilization of treated wastewater from STPs.
4. Union Territory of Lakshadweep has mentioned that no STPs was installed in their territory and no action plan was provided.
5. Department of Urban Development and Municipal Affairs vide letter dated 29.04.2019 requested for extension of 02 months (June, 2019) for submission of action plan. However, no action plan has been received till date.
6. State of Gujrat has only submitted action plan related to Surat city which indicate use of treated sewage for industrial purpose.

7. Only three states have adequate capacity for sewage treatment - Himachal Pradesh and Chandigarh.
8. Utilization of treatment in industrial sector has been indicated by few states (Andhra Pradesh-Steel, Thermal Power Plant and Oil Refinery), Chhattisgarh & Odisha (Thermal Power Plant). Surat and Daman have indicated reuse of treated waste water in industrial clusters.
9. In most of the remaining states/UTs, Utilization of treated sewage has been indicated in activities like Horticulture and Irrigation. Other potential users of treated sewage like Industrial Clusters, Metro Rail, Indian Railways, Infrastructure Projects, Agriculture and Bus Depots have not been explored
10. Projection of future Sewage Generation and Treatment Capacity has not been done and same has not been taken into consideration in the utilization plan.
11. Timelines for implementation of proposed schemes have not been indicated.”

Some of the salient features of the guidelines which highlight suggestive actions for formulation of action plan for usage of treated waste water from sewage treatment plants are as follows:

- “1. Estimate Present and Projected Sewage Generation and Treatment Capacity.
2. Identify bulk users of Water: Industrial Clusters, Metro Rail, Indian Railways, Infrastructure Projects, Agriculture, Bus Depots and PWD.
3. Quantify their potential Water Demand.
4. Development of Dead Water Aquatic Sources (Lake, Pond etc).
5. Time line for establishing such infrastructure (Treatment, Conveyance and Utilization of Treated Sewage).
6. To promote use of treated waste water for various usage.
7. To promote supply of treated sewage to industrial clusters
8. Industrial clusters can set up treatment facility to meet their raw water requirement instead of drawing groundwater.
9. Maximizing re-use of treated waste- water will minimize groundwater abstraction.”

The States/UTs must submit their Action Plans to CPCB in terms of timelines and measurable indicators with regard to utilization of treated sewage water and institutional set up in the States/UTs validating the use of treated water in terms of its safety to human health and environment.

10. This Tribunal has held that standards of Faecal coliform need to be adhered to by the STPs so that treated sewage water can be safely utilized²⁰.

11. In view above, we direct that the States/UTs which have not yet furnished their action plans may do so on or before 30.11.2019, failing which defaulting States/UTs will be liable to pay compensation @ of Rs. 1 Lakh per month till action plans are filed. The States/UTs which have furnished the action plans may remove the deficiencies noticed above by 30.11.2019, failing which they will be liable to pay compensation @ of Rs. 1 Lakh per month. The compensation may be deposited with the CPCB which may be used for restoration of the environment.

12. The CPCB may furnish a consolidated report on or before 31.01.2020 by e-mail at judicial-ngt@gov.in. Information about the quantum of sewage generated and treated may also be furnished. The Chief Secretaries of the concerned States/UTs may monitor compliance of the order.”

(emphasis supplied)

Report of the CPCB dated 15.5.2020:

22. Accordingly, status report dated 15.05.2020 has been filed by the CPCB giving the gap analysis as follows:

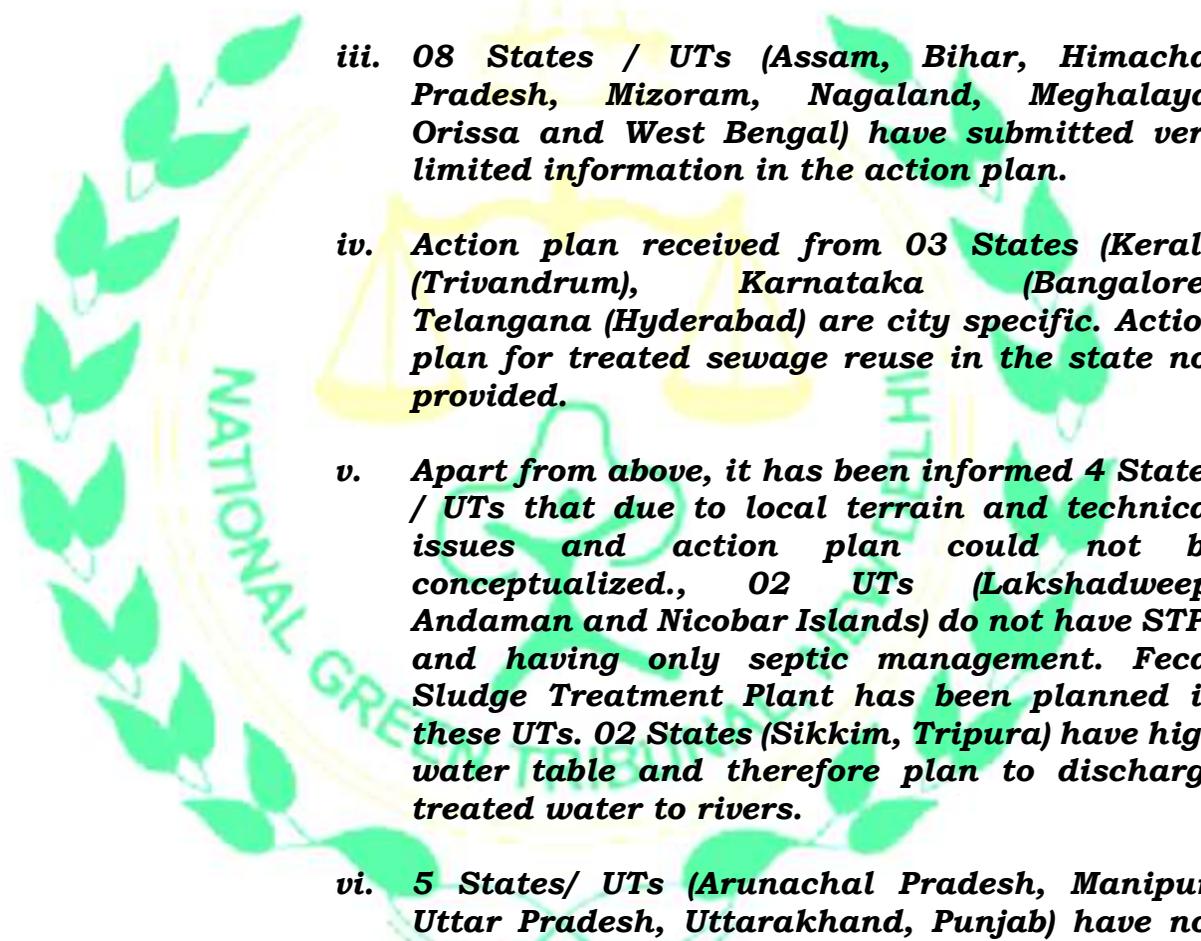
“3.0 GAP ANALYSIS

As per Hon'ble NGT Directions dated 10.5.2019, suggestive measures for action plan for use of treated sewage was uploaded on CPCB's website. The same was also sent to all States/UTs vide letter dated 16.07.2019. CPCB had directed all States / UTs to cover the following action points in the Action Plan to be prepared for use of treated sewage:

- i. Estimation of quantity of present and projected sewage generation,
- ii. Estimation of Present and planned treatment capacity
- iii. Identification of Bulk users (Irrigation, horticulture, Industries, PWD and Railways etc) and to quantify the usage
- iv. Estimation of quantity of treated sewage to be used by the bulk users
- v. Specification time lines to meet the target.

Accordingly, action plan submitted by 31 States / UTs were assessed based on its adequacy in addressing the above-mentioned points. The overview of the assessment is given in Table-1. Following are the major observations based on the assessment:

²⁰ Order dated 21.12.2018 and 30.04.2019 in O.A. No. 1069/2018, Nitin Shankar Deshpande vs. UOI & Ors.

- 
- i. 06 States/ UTs (Andhra Pradesh, Delhi, Puducherry, Haryana, Tamil Nadu, Madhya Pradesh) have addressed all the five action points as listed above in their action plan.**
- ii. 10 States/UTs have partially addressed the above- listed action points in their action plan. 09 States / UTs (Gujrat, Chhattisgarh, Jharkhand, Goa, Daman & Diu, Dadar Nagar Havelli, Jammu and Kashmir, Maharashtra and Rajasthan) have identified bulk users However, quantity of treated sewage to be used by these bulk-users as well as timelines for meeting these targets have not been specified. Chandigarh has not estimated the presented / projected qty of Sewage generation and not specified timelines for meeting the target.**
- iii. 08 States / UTs (Assam, Bihar, Himachal Pradesh, Mizoram, Nagaland, Meghalaya, Orissa and West Bengal) have submitted very limited information in the action plan.**
- iv. Action plan received from 03 States (Kerala (Trivandrum), Karnataka (Bangalore), Telangana (Hyderabad) are city specific. Action plan for treated sewage reuse in the state not provided.**
- v. Apart from above, it has been informed 4 States / UTs that due to local terrain and technical issues and action plan could not be conceptualized., 02 UTs (Lakshadweep, Andaman and Nicobar Islands) do not have STPs and having only septic management. Fecal Sludge Treatment Plant has been planned in these UTs. 02 States (Sikkim, Tripura) have high water table and therefore plan to discharge treated water to rivers.**
- vi. 5 States/ UTs (Arunachal Pradesh, Manipur, Uttar Pradesh, Uttarakhand, Punjab) have not submitted any information.**

CPCB's observations on the action plan submitted by the individual states/UTs have been enumerated in Table 1. Additional observations on the action plan submitted by the States /UTs are as follows:

- i. Only 14 States/UTs (Andhra Pradesh, Daman & Diu, Delhi, Gujarat, Haryana, Himachal Pradesh, J&K, Madhya Pradesh, Maharashtra, Nagaland, Rajasthan, Tripura, Puducherry, A&N) have estimated present quantity of Sewage generated in their States/UTs.**

- ii. Only 3 States/UTs (Haryana, Himachal Pradesh, Jammu & Kashmir) have adequate capacity of Sewage treatment w.r.t to present quantity of sewage generated.*
- iii. Major bulk users identified include- Irrigation, horticulture,, Rejuvenation of water bodies, Construction, Recreation, Railways, Vehicles and Coach washing, firefighting, recreation and industry.*
- iv. 13 States/UTs (Andhra Pradesh, Maharashtra, Chhattisgarh, Goa, Delhi, Rajasthan, Tamil Nadu, Puducherry, Odisha, Madhya Pradesh, Gujarat, Haryana, Jharkhand) plan to use treated sewage in industries which include Steel Plant, Thermal Power Plant, Refineries and Railways.*
- v. Percentage of reuse of treated sewage planned maximum in Haryana (80 %) followed by Puducherry (55 %), Delhi (50 %), Chandigarh (35 %), Tamil Nadu (25%), Madhya Pradesh (20 %), Andhra Pradesh (5 %).*
- vi. NCT of Delhi has set target to increase their re usage from 12.5 % to 60 %. In future, utilization of 341 MGD treated sewage are proposed for drinking purpose (197 MGD), Irrigation (112 MGD) and 10 MGD in rejuvenation of water bodies.*
- vii. Time-line specified by States/UTs for implementation of Action Plan varies between 2020 -2030.”*

(emphasis supplied)

Analysis of report dated 15.5.2020:

23. The above shows serious deficiencies on the part of several States/UTs in performing their constitutional obligation of properly and rationally managing the treated water so as to make more potable water available for drinking purposes. Some States have shown apathy and indifference in giving appropriate response.

Further Directions:

24. **Accordingly, we direct that States which have not addressed all the action points may do so promptly latest before 30.06.2020,**

reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. All the States may take steps accordingly. The CPCB may compile further information on the subject. The compliance for action plans will be the responsibility of the Secretaries of Urban Development/other concerned, including Irrigation & Public Health, Local Bodies, Rural Development Departments of all the States/UTs and to be overseen by the Chief Secretaries. The Ministry of Jal Shakti and Ministry of Housing and Urban Affairs, Government of India may also monitor and coordinate the situation appropriately in the interest of water qualities of rivers, lakes, water bodies and protection of groundwater.

25. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court.

26. Summary of directions:

- i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.

CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB

may consolidate all action plans and file a report accordingly.

Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

- ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.
- iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.
- iv. Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the

timelines for setting up of STPs since both the issues are interconnected. The CPCB may compile further information on the subject accordingly.

- v. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court.**

27. The CPCB may furnish its report by 15.09.2020 giving the status of furnishing of action plans and their execution as on 31.08.2020 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.

A copy of this order be sent to the Chief Secretaries of all States/UTs, Secretaries of MoHUA and Ministry of Jal Shakti, Govt. of India, CPCB and all the State PCBs/PCCs by e-mail.

A copy of this be also sent to the Secretary General, Supreme Court of India with reference to the order of the Hon'ble Supreme Court Supreme Court in (2017) 5 SCC 326, for information and record.

List for further consideration 21.09.2020.

Adarsh Kumar Goel, CP

Sheo Kumar Singh, JM

Dr. Nagin Nanda, EM

May 21, 2020
Original Application No. 593/2017
Original Application No. 148/2016
DV