

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

Original Application No. 148/2016  
(M.A. No. 686/2017)

Mahesh Chandra Saxena

Applicant(s)

Versus

South Delhi Municipal Corporation & Ors.

Respondent(s)

Date of hearing: 27.08.2019

Date of uploading of order: 11.09.2019

**CORAM:**

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

**ORDER**

1. Utilization of treated waste water from Sewage Treatment Plants (STPs) is the issue for consideration. In absence of a proper and elaborate plan, fresh water is being used for purposes for which treated water could alternatively be used. 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.<sup>1</sup> 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.

3. As per CPCB's report 2016<sup>2</sup>, 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. To remedy this situation orders have been passed by the Hon'ble Supreme Court<sup>3</sup> as well as this Tribunal<sup>4</sup> 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 Ganga<sup>5</sup> as well as other

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<sup>1</sup> Second interim report dated 31.07.2019 of Monitoring Committee constituted under O.A. No. 496/2016.

<sup>2</sup>[http://www.sulabhervis.nic.in/Database/STST\\_wastewater\\_2090.aspx](http://www.sulabhervis.nic.in/Database/STST_wastewater_2090.aspx) July 16, updated on December 6, 2016

<sup>3</sup> Paryavaran Suraksha Samiti Vs. Union of India, (2017) 5 SCC 326

<sup>4</sup> Paryavaran Suraksha Samiti Vs. Union of India, O.A No. 593/2017 order dated 28.08.2019

<sup>5</sup> O.A No. 200/2014

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 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](mailto: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”.*

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 utilized<sup>6</sup>.

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](mailto: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.

Copy of this order need to be sent to Chief Secretaries of States and Advisors in UTs by e-mail for compliance. It would also be appropriate if it is sent to Ministry of Jal Shakti.

List for further consideration on 21.05.2020.

Adarsh Kumar Goel, CP

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<sup>6</sup> Order dated 21.12.2018 and 30.04.2019 in O.A. No. 1069/2018, Nitin Shankar Deshpande vs. UOI & Ors.

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

September 11, 2019  
Original Application No. 148/2016  
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