

**BEFORE THE NATIONAL GREEN TRIBUNAL  
WESTERN ZONE BENCH, PUNE**

THROUGH PHYSICAL HEARING (WITH HYBRID OPTION)

Original Application No.150/2025(WZ)

Dr. Snehal Donde

Applicant

Versus

State of Maharashtra & Ors.

Respondent(s)

With

Original Application No.88/2025(WZ)  
[Earlier Original Application No.318 of 2025(PB)]

Dr. Rakesh Bakshi

Applicant

Versus

State of Maharashtra, through its Chief Secretary & Ors.

Respondents

Date of hearing: 12.02.2026

**CORAM: HON'BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER  
HON'BLE DR. SUJIT KUMAR BAJPAYEE, EXPERT MEMBER**

**Original Application No.150/2025(WZ):**

Applicant: Mr. Maitreya Ghorpade and Ms. Manasi Thakare, Advocates for the applicant

Respondents: Mr. Aniruddha Kulkarni, Advocate for R-1 and 5/State and MPCB  
Mr. Sagar Patil, Advocate for R-2, 3 and 4/BMC

**Original Application No.88/2025 (WZ):**

Applicant: Mr. Maitreya Ghorpade and Ms. Manasi Thakare, Advocates for the intervener

Respondents: Mr. Aniruddha Kulkarni, Advocate for R-1, 3 & 4  
Mr. Sagar Patil, Advocate for BMC

**ORDER**

1. The issue involved in the present Original Application pertains to the remediation of the pollution found in Powai Lake. Learned counsel for the applicant has shown a study conducted by one Jaydip Damor on Powai

Lake sponsored by Shri Krishna Education and Cultural Trust, guided by Dr. Snehal Donde (applicant) wherein at pages no. 220-221 of the paper book, it is recorded,

- (i) Colour shift was found to greenish which reflects eutrophication caused by nutrient rich runoff and sewage inflow, triggering algal blooms.
- (ii) Reduced transparency and increased turbidity point to high pollution levels, particularly affecting the surface layers.
- (iii) Temperature stratification shows the typical pattern of surface warming, which further supports algal growth and oxygen depletion at lower depths.

2. Conclusion is drawn that these changes indicate a clear shift from a healthy freshwater ecosystem to a pollution-stressed lake and, therefore, restoration actions must be prioritized.

3. This Tribunal had already constituted a Joint Committee to submit its report on the issue involved which submitted its report on 02.12.2025 wherein the Joint Committee has suggested remedial measures as below:

**“6.0 Remedial measures by the joint committee**

*Though various measures have been proposed for abatement of sewage pollution into Powai Lake by implementation of short-term & long-term measures, however, completion of the same may take substantial period of time. Meanwhile, following remedial measures may be implemented for abatement of sewage pollution into Powai Lake:*

- i. *In-situ remediation is simpler to implement than conventional methods, requiring less space and energy. In-situ drain remediation techniques involve the treatment of sewage in the flowing drains by physio-chemical and biological treatment processes. Treatment occurs directly in flowing drains through physical (screening, sedimentation, aeration), chemical (flocculation), and biological (microbial oxidation via phytoremediation) processes. These systems effectively lower BOD and faecal coliform levels while boosting dissolved oxygen including substantial reduction of total nitrogen & phosphorous. Phytoremediation, for example, can reduce faecal coliform by over 50% and raise DO from 0 to 5 mg/l. Additionally, there are alternative biological treatments available for removing nutrient pollutants such as phosphorous and nitrogen. There are many in-situ drain treatment technologies such as Green Bridge Technology (GBT), Microbial Dosing (MD), Soil Scape Filter*

*Technology (SSFT), Floating Islands Technology (FIT), and Restoration of Nallah with Ecological Units (RENEU) are available in India for treating various drains.*

*In view of the above, as an interim treatment method, the BMC to expeditiously implement in-situ drain treatment technology in the culverts and drains, which are carrying untreated sewage into the Powai Lake.*

- ii. After completion of diversion of the untreated sewage into newly proposed sewer lines and subsequent connectivity & treatment at new STP and at existing STPs, the BMC should carry-out rejuvenation of Powai Lake by implementing in-lake restoration techniques - engineering techniques and/or biological techniques. The said activity may be carried-out under the supervision of academic/research institutes having expertise in Rejuvenation of Rivers and Lakes, with funding from the BMC.*
- iii. The BMC must ensure that no untreated sewage is discharged into the Powai Lake and till setting up of STPs, interim remediation (in-situ remediation) must be done forthwith. In case of any default in this regard, the Hon'ble NGT may direct the BMC to pay compensation of Rs. 5 lakh per month per inlet into the lakes from 01/02/2020, as deemed fit, as per the Hon'ble NGT (PB) matter in the OA. No. 125 of 2017, Court on its own Motion Vs The State of Karnataka.*
- iv. It has been reported by the BMC in its Detailed Project Report of March, 2025 that about 4,500 Lakh m<sup>3</sup> of silt has been deposited in the Powai Lake. Decreased transmission of light through the water column is among the most important of the physical effects of increased sediment loads on aquatic ecosystems. Increased sediment loads or resuspension of deposited sediments can cause considerable reductions in both oxygen availability and rates of water column reaeration, thereby significantly impacts the biodiversity, ecological processes, and ecosystem functions of the Lake.*

*In view of the above, the BMC to expeditiously carry-out dredging of edges of Powai Lake to remove the accumulated sediment and debris including de-weeding from the shoreline and shallow areas including de-silting of Powai Lake to restore depth, improve water quality, and enhance the ecosystem functions. Further, analysis of sludge and silt may be carried out before its disposal based on the result of such analysis, the mode of disposal and protocol be determined in accordance with laid down principles under the relevant Rules. The BMC may refer and adopt the appropriate remediation and de-silting techniques which are implemented by the Govt. of Karnataka, as per their action plan & compliance report submitted to the Hon'ble NGT (PB) in the matter in OA. No. 125 of 2017, Court on its own Motion Vs The State of Karnataka.*

- v. The BMC to install additional jet fountains/ aerators of adequate capacity along the shoreline of Powai Lake i.e. near the mixing zone/confluence of untreated sewage with Lake water so as to aid in better aeration and to prevent septic/ anoxic conditions.*

- vi. *After the rainy season, the BMC to initiate cleaning and de-silting of culverts and drains which are carrying untreated sewage into Powai Lake. As far as practically feasible, all the culverts and drains to be covered with pre-cast RCC slabs in order to prevent unauthorized disposal of solid waste and plastic waste etc.*
- vii. *The BMC to install trash net capture technologies consisting of:*
- *Storm Drain Inlet Trash Capture Technologies - Curb Inlet Covers, Catch Basin Outlet Screens, Catch Basin Hoods, Catch Basin Fabric Inserts;*
  - *In-Line and End of Pipe Trash Capture Technologies - Linear Radial Devices, Hydrodynamic Separators, Netting Systems; and*
  - *Open Water Trash Capture Technologies - Litter Booms, Trash Skimmer Vessels, Bandalong Litter Trap.*

*In view of the above, the BMC to explore and implement suitable trash net capture technologies, based on the feasibility assessment to prevent the influx of floating debris including solid waste and plastic waste etc. from entering Powai Lake.*

- viii. *It is observed that the BMC is disposing the removed water hyacinth from Powai Lake to low lying areas in Villages near Bhiwandi, and in Mumbra, Dist. Thane, for disposal through its authorized contractor. Instead of disposal in low lying areas, the BMC may explore the following prospects in terms of its reuse/recycle potential:*
- *Water hyacinth for feeds - because of its nutritional value and potential use as feed for livestock, poultries, and fish, which make it suitable for use as a substitute or an additive for animal feeds.*
  - *Water Hyacinth for Biofertilisers- Water hyacinth can be either mulched, composted, vermicomposted or anaerobically digested for biofertilisation purposes.*
  - *Water Hyacinth in Crafts - Water hyacinth has great potential for use in craft production. Raw material from the dried plant and its fibre can be utilised to make bags, handbags, wallets, flower pots, fashion accessories, mats and many other items.*
  - *Water Hyacinth Conversion to Bioenergy - Biogas production through the anaerobic digestion and briquette production from water hyacinth biomass.*

*In view of the above, the BMC to explore and implement suitable methods, based on the feasibility assessment to reuse/recycle the harvested water hyacinth rather than disposing of it in low lying areas.*

- ix. *The BMC to expeditiously complete the works as proposed in Proposal-1 i.e. laying of sewer line of total length of 3,056 m & interceptors of 13 nos. and connectivity to the existing STPs at Bhandup and Mithi River. Also, to expeditiously complete the works as proposed in Proposal-2 i.e. laying of sewer line of total length of 1,909 m & interceptors of 09 nos. & its connectivity and commissioning of new STP at Powai abandoned sewage pumping station, including laying of discharge of treated sewage conveyance system for final disposal.*

- x. *The BMC to expeditiously complete the works & commissioning of new STP at Bhandup.*
- xi. *The BMC to ensure connectivity and dissemination of real time monitoring results of DO levels of Powai Lake at public domain i.e. website of BMC.*
- xii. *The BMC to ensure that no solid waste, religious offerings, food waste, plastic waste etc. is disposed into the Powai Lake including immersion of idols during festive occasion. Also, to regularly conduct public outreach programs through capacity building for communities near the Powai Lake and also at other areas of Mumbai City for abatement of pollution and conservation of Lakes.*
- xiii. *The BMC to undertake beautification of Lake's shoreline for public use by the way of lake front development. Also, to install fencing around the Powai Lake in order to prevent unauthorized & lackadaisical entry of public including disposal of debris, solid waste and plastic waste etc. Further, the BMC to install signage boards in vernacular language at appropriate locations about DO's and DON'Ts for prevention of pollution and conservation of Powai Lake.*
- xiv. *The BMC to submit a time bound action plan along with PERT chart for implementation of the remedial measures, as given above."*

4. Brihanmumbai Municipal Corporation, Maharashtra (BMC) has filed affidavit dated 11.02.2026 in Original Application No.88/2025(WZ), wherein it is stated that they are taking steps for reducing the pollution, removal of invasive species like water hyacinth and other floating vegetation regularly so as to improve the quality of water and oxygen level in the lake.

5. We are not satisfied with this affidavit and would like the BMC to give in tabular form the recommendation made by the Joint Committee to remedy the issue of pollution of the Lake and what steps are being taken/have been taken by the BMC. If any plan is proposed, timeline of the same along with all details have to be mentioned. For this, the learned counsel seeks two weeks' time. The same is allowed with a direction that a copy of the same shall be shared with the learned counsel for the applicant in advance and also with all other learned counsels for the parties.

6. Put up these matters for next consideration on 09.04.2026.

Dinesh Kumar Singh, JM

Dr. Sujit Kumar Bajpayee, EM

February 12, 2026  
Original Application No.150/2025(WZ)  
With Original Application No.88/2025 (WZ)  
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