

BEFORE THE NATIONAL GREEN TRIBUNAL, EASTERN
ZONE BENCH, KOLKATA.

M.A N.22 of 2022

(Arising out of Original Application No.48/2021/EZ)

Nabin Kishan

...

Applicant

-Versus-

State of Odisha & others ...

Respondents

INDEX

Sl.No.	Annexure	Description of documents	Page
1		AFFIDAVIT ON BEHALF OF ODISHA WATER SUPPLY & SEWERAGE BOARD IN COMPLIANCE OF ORDER DATED 22.09.2022	1 to 7

CUTTACK

DATE:10.10.2022


Advocate



BEFORE THE NATIONAL GREEN TRIBUNAL, EASTERN
ZONE BENCH, KOLKATA.

M.A N.22 of 2022

(Arising out of Original Application No.48/2021/EZ)

Nabin Kishan

...

Applicant

-Versus-

State of Odisha & others ...

Respondents

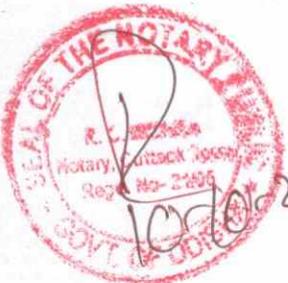
**AFFIDAVIT ON BEHALF OF ODISHA WATER SUPPLY &
SEWERAGE BOARD IN COMPLIANCE OF ORDER DATED
22.09.2022**

I, Prasanta Kumar Mohapatra, aged about 58 years, S/o Late Narasingha Mohapatra, Engineer-in-Chief, Odisha Water Supply & Sewerage Board, do hereby solemnly affirm and state as follows:-

1. That, I am the Engineer-In-Chief of the Odisha Water Supply & Sewerage Board and this affidavit is filed by me on behalf of Odisha Water Supply & Sewerage Board and the Principal Secretary, Housing & Urban Development department, Government of Odisha in compliance of order dated 22.09.2022 passed in this Miscellaneous Application.

2. That, vide Order dated 22.09.2022, this Hon'ble Tribunal has sought for an explanation in so far as Odisha Water Supply & Sewerage Board is Concerned, on the following aspects:-

Prasanta Kumar Mohapatra
Engineer-in Chief,
OWS & SB, BBSR



"11. Prima facie, we are of the view that waste stabilization pond or maturation pond is not a permanent solution for treatment of solid or liquid waste generated by the Belpahar Municipality bearing in mind the future expansion of the municipality limits. Therefore the construction of waste stabilization pond or maturation pond is at the most a temporary arrangement but what is the permanent solution of the problem such as setting up of STP needs to be addressed by the Odisha Water Supply and Sewerage Board.

12. We, therefore, direct the Odisha Water Supply and Sewerage Board to file its affidavit placing on record its plans for future management of solid and liquid waste management in Belpahar Municipality. Let this affidavit be filed by the next date of listing."

3. That the Deponent answers the queries raised by this Hon'ble Tribunal in the following manner:-

- (a) In the year 2017, the Housing & Urban Department, Government of Odisha notified an Odisha Urban Sanitation policy, with the goal of transforming urban Odisha into community-driven, totally sanitised, safe, healthy, and liveable cities and towns, and outcomes in line with the National Urban Sanitation Policy, 2008; the National Water Policy, 2002, the National Environment Policy, 2006, the Odisha State Water Policy 2007. The State government decided to tackle Urbansanitation beyond traditional sewerage solutions and move towards Faecal Sludge Management /Septage management due to large presence of onsite sanitation systems (septic tanks and pit latrines) in Urban households.



Prasanta Kumar Mohapatra
Engineer-in Chief,

- (b) The 4th meeting of the Central Monitoring Committee constituted by Hon'ble NGT in the matter OA No. 673 of 2018 was held on 30.07.2020 under the Chairmanship of Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti. In the said meeting it was informed that a Webinar on 'Faecal Sludge & Septage Management' was held on 22.07.2020, wherein most of the States had participated and it was suggested that States may also explore other feasible and cost-effective alternatives to Sewage Treatment Plants, for which technical assistance may be sought from Urban Development Department, Odisha, Centre for Science and Environment and *National Mission for Clean Ganga*. During the discussion on the progress made in Odisha, the Principal Secretary, Housing & Urban Development Department, Odisha informed that Faecal Sludge Treatment Plants are under different stages of implementation in nearly 40 towns in the State and for monitoring the progress a State Septage Division has been created. Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti appreciated sewage management in the State through low cost Faecal Sludge Treatment Plants, and desired for the said model to be replicated in other parts of the country.
- (c) In the 12th meeting of Central Monitoring Committee conducted under Chairmanship of Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti on 04.02.2022 in connection with OA No. 673/2018, the Principal Secretary,

Prasanta Kumar Mohapatra

Engineer-in-Chief,
OWS & SB, BBSR



Housing & Urban Development, Odisha informed that “instead of Combined Centralized Integrated Underground Sewer system, the State is treating black and greywater separately in decentralized low-cost technology models. With regard to septage, saturation is being reached and works shall be completed by May 2022. Underground sewer systems are only being installed in larger corporations. Therefore, it was requested that instead of sewage generated in the State, septage generation in the State may be considered. With regard to greywater management, it was informed that pilot study is going on and action plan for scaling it up for entire State shall be taken up shortly.”

- (d) In the 13th meeting of Central Monitoring Committee conducted under Chairmanship of Secretary, Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti on 09.06.2022 in connection with OA No. 673/2018, the Additional Secretary, Housing & Urban Development, Odisha informed that 119 Faecal Sludge Treatment Plants are proposed to cover all 114 Urban Local Body in the State. Out of these, 104 Faecal Sludge Treatment Plants are operational in major Urban Local Body/towns with the installed capacity of 1807 Kilo Litres per Day. In the remaining Urban Local Body, Faecal Sludge Treatment Plants of total capacity 230 Kilo Litres per Day shall be completed by July 2022. With regard to solid waste management, it was informed that State has adopted decentralized systems of aerobic decomposting and engaged community partners. Secretary, Department of Water Resources, River Development & Ganga Rejuvenation,

Prasanta Kumar Mohapatra
Engineer-in-Chief,



Ministry of Jal Shakti appreciated the efforts adopted by the State and directed that a team comprising of Officials from SBM 2.0, National Mission for Clean Ganga/ National River Conservation Directorate may visit the State for reviewing the matter and verify any deficiency”.

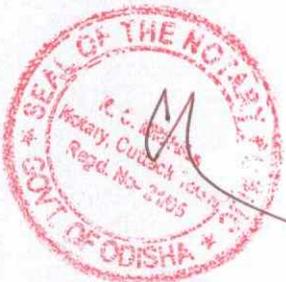
- (e) According to the “*National Inventory of Sewage Treatment Plants, March 2021*” released by Central Pollution Control Board, the country has 67 Sewage Treatment Plants adopting Waste Stabilization ponds to treat Sewage with total capacity of 789 Million Litres per Day.
- (f) The Central Pollution Control Board, February 2020 report titled “*Alternative Treatment Technologies for Wastewater Treatment in Drains*” submitted in compliance to direction of Hon’ble NGT in the matter of OA No.06/2012 Manoj Mishra Vs Union of India & ORS states that “*Waste Stabilization Pond is one of the Ex-situ remediation techniques, which are low-cost for Operation & Maintenance and high in BOD, pathogen removal rate. The treated effluent contains nutrients (e.g. Nitrogen and Phosphorus) and is therefore appropriate for re-use in agriculture, but not for direct discharge in surface waters*” (Page 10).
- (g) Government of India has released a Grey water management manual in July 2021, water management manual in July 2021 under Swachh Bharat Mission(G). This manual gives different technology options for grey water management. It recommends that Magic soak pits and Waste stabilization can be adopted in household level and community level respectively (Page 15).

Prasanta Kumar Mohapatra
Engineer-in-Chief,
CWS & SR, RRSR



- (h) As regards to the setting up of Sewage Treatment Plant the manual on Sewerage and Sewage Treatment Systems, 2013 published by Central Public Health & Environmental Engineering Organisation, Ministry of Urban Development, Govt. of India provides guidelines for design and operation & maintenance of Sewerage and Sewage Treatment Systems. The waste Stabilization pond is one of the Sewage Treatment Plant technology option for sewage treatment in the Manual. It states "*Stabilization ponds are open, flow-through earthen basins designed and constructed to treat sewage and provide comparatively long detention periods extending from a few to several days. In warm climate countries, the pond systems are cheaper to construct and operate compared to conventional methods. They also do not require skilled operational staff and their performance does not fluctuate from day to day. The only disadvantage of pond systems is the relatively large land that they require, but this is sometimes over-emphasized*".
- (i) The Central Public Health & Environmental Engineering Organization under the Ministry of Housing & Urban Affairs (MoHUA), Govt. of India brought out an Advisory in September 2022 titled "Ready Reckoner on Municipal Used Water Treatment Technologies for Medium and Small towns" for speedy selection in approach and technologies for safe management of used water under Swachh Bharat Mission – Urban 2.0.

In this Advisory document, Waste Stabilization Pond has been recommended as a nature based technology for used water treatment requiring no electrical energy and suitable for all location and weather condition with temperature above 20 degree Celsius and for smaller towns due to its robustness and less O&M cost and low skill maintenance.



Prasanta Kumar Mohapatra
Engineer-in-Chief.

(j) Odisha Water Supply & Sewerage Board in its technical report for Belpahar Municipality has made provision for construction of magic soak pits for grey water management at household level and construction of waste stabilization pond for treatment of wastewater at community level.

(k) Waste stabilization pond technology is nature based and low in capital and Operation & Maintenance costs. Odisha Water Supply & Sewerage Board recommended waste stabilization pond considering aspects of low cost and less time required for its construction.

(l) The Municipality has 10 Kilo litre per day capacity faecal sludge treatment plant which is operational.

(m) Regarding management of solid waste, the Municipality has constructed Micro composting centres and Material Recovery facilities for managing solid waste in decentralized manner. These facilities are operational and managed by Women Self-Help Group under the direct supervision of the Municipality.

4. That the contents of the above paragraphs are true and correct to the best of my knowledge and based on official records.

5. That the answering Deponent craves leave of this Hon'ble Tribunal to add, alter, amend the present affidavit if the situation sowarrants.

Identified by

Prasanta Kumar Mohapatra

DEPONENT **Engineer-in Chief, OWS & SB, BBSR**



Solemnly affirm on an oath by the Deponent at Cuttack on 10/10/2019 being identified by **ADVOCATE (SAILAZA NANDAN DAS)**

Advocate/Adv's Clerk/BASC, AG'S office/Notary Personally, that the facts stated above are true to the best of his/her knowledge.

Rama Chandra Mishra
RAMA CHANDRA MISHRA, NOTARY