

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA ²⁰²⁴
ORIGINAL APPLICATION NO. 109 OF 2025 / EZ**

IN THE MATTER OF :

Smt. Haripriya Patel

...Applicant

VERSUS

Odisha State Pollution Control Board
& Others.

...Respondents

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By the Respondent No.1

Through

Kolkata
Date:

Sri Dipanjan Ghosh,
Advocates for the Respondent No.1
(State Pollution Control Board, Odisha)
e-mail: dpnjnghsh0@gmail.com
Phone No.:990308097

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
 EASTERN ZONE BENCH, KOLKATA
 ORIGINAL APPLICATION NO. 109 OF 2025 / EZ

12 SEP 2025

IN THE MATTER OF :

Smt. Haripriya Patel ...Applicant

VERSUS

Odisha State Pollution Control Board
& Others. ...Respondents

AFFIDAVIT ON BEHALF OF THE STATE
 POLLUTION CONTROL BOARD, ODISHA, R.NO.1
 IN COMPLIANCE TO ORDER DTD.06.08.2025 OF
 THIS HON'BLE TRIBUNAL.

I, Smt. Uma Nanduri, IFS, wife of Sri Prem Kumar Jha, IFS
 aged around 58 years, at present working as Member Secretary,
 State Pollution Control Board, having my office at Paribesh
 Bhawan, A/118, Nilakantha Nagar, Unit-VIII, P.O. Nayapalli,



Bhubaneswar, Dist – Khurda, Odisha-751012, do hereby solemnly affirm and state as under:

1. That I am the Member Secretary of the Respondent No.1 Board and, as such, am well-acquainted with the facts and circumstances with the case and competent to swear this affidavit.
2. That I have gone through the averments made in the OA and understood the contents thereof.
3. That this Hon'ble Tribunal vide their order dtd.06.08.2025 at para-4 directed the R-1 Board to file counter affidavit within four weeks with regard to the water quality reports and all parameters in pursuance of the order of this Tribunal dtd.05.03.2025 also indicating the permissible standards.
4. That it is further humbly submitted that Sri Soumya Ranjan Mallick, Asst. Environmental Scientist (AES) of Regional Office, Bhubaneswar of the R-1 Board has carried out inspection on dtd.01.09.2025 with regard to Kanjia and



Kiakani Lake of Nandankanan in presence of staff of Nandankanan Zoological Park and Botanical Garden and collected samples of surface run-off from different locations which has been specified at Point No.B under the heading Sampling Locations of Kanjia and Kiakani Lake of Nandankanan in the inspection report submitted by the inspecting officer.

The samples so collected were submitted to the Central Laboratory of the R-1 Board for analysis of parameters i.e. pH, Total Suspended Solid (TSS), Total Dissolve Solid (TDS), Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Hardness (TH), Chloride (Cl⁻), Nitrate(NO₃), Sulphate (SO₄²⁻) Phosphate (PO₄³⁻), Ammonical Nitrogen (NH₃-N) Coliform Bacteria (Total & Fecal) w.r.t. relating the prescribed standard of surface water quality i.e. IS-2296(1982) of Class-B.


The inspecting officer has made some observation with respect to water quality status of Kanjia & Kiakani



Lake of Nadankanan and also made some conclusion / suggestion. Copy of the Inspection Report along with the Analysis Reports enclosed therein are annexed to this affidavit and marked as ANNEXURE – R1/1 Colly.

5. That this affidavit is required to be filed in compliance to the direction of this Hon'ble Tribunal dtd.06.08.2025 to bring on record the Inspection and Analysis Reports at Annexure-R1/1 Colly..
6. That the Respondent No.1 Board craves leave of this Hon'ble Tribunal to file further affidavit if required for proper adjudication of this case.
7. That the Annexure annexed to the present affidavit is true and correct copy of its original.
8. That the contents of the above paragraphs are true and correct to the best of my knowledge, as derived from the official records, and that nothing material has been concealed therefrom.




DEPONENT
Member Secretary
State Pollution Control Board
Odisha, Bhubaneswar

MANJULA KUMAR PRADHAR
NOTARY PUBLIC
BHUBANESWAR
 REGD. NO ON-71/2009
 PH - 9437627119 (M)

VERIFICATION:

I, the above named deponent, do hereby verify that the contents of the above affidavit are true and correct to the best of my knowledge, as derived from official records, and that nothing material has been concealed therefrom.

Verified at Bhubaneswar on this the 12th day of September, 2025.



SWORN BEFORE ME

DEPONENT

Member Secretary
 State Pollution Control Board
 Odisha, Bhubaneswar

MANJULA KUMAR PRADHAR
NOTARY PUBLIC
BHUBANESWAR
 REGD. NO ON-71/2009
 PH - 9437627119 (M)

ANNEXURE-R1/1 Colly**WATER QUALITY REPORT OF KANJIA AND KIAKANI LAKE OF NANDANKANAN, BHUBANESWAR WITH RESPECT TO O.A. NO. 109/2024/EZB IN THE MATTER OF HARIPRIYA PATEL VRS. STATE OF ODISHA & ORS.**

A. BACKGROUND OF INSPECTION:

- The site in question was inspected by the undersigned as per the direction issued to Respondent No.1, SPC Board, Odisha by Hon'ble National Green Tribunal, Kolkata in the OA.No.109 of 2024/EZ in its Order dtd.06.08.2025. In the Para-4 of the said Order it has been mentioned that "Respondent No.1 Odisha State Pollution Control Board to file counter-affidavit within four weeks with regard to the water quality reports and all parameters".
- Accordingly the site Kanjia and Kiakani lake of Nandankanan was inspected on dt.01.09.2025 in presence of staffs of Nandankan Zoological Park and Botanical Garden. Water samples were collected from different locations which has been mentioned below. The samples were submitted to the Central Laboratory, Patia, State Pollution Control Board, Bhubaneswar for analysis of parameters i.e., pH, Total Suspended Solid (TSS), Total Dissolve Solid (TDS), Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Hardness (TH), Chloride (Cl⁻), Nitrate (NO₃⁻), Sulphate (SO₄²⁻), Phosphate (PO₄³⁻), Ammonical Nitrogen (NH₃-N) Coliform Bacteria (Total & Fecal) w.r.t. relating the prescribed standard of surface water quality i.e. IS-2296(1982) of Class-B.

B. Sampling Locations of Kanjia and Kiakani Lake of Nandankanan:


- a) Kanjia Lake near Rest House
- b) Midpoint of Kanjia Lake
- c) Near Boating Ghat of Kanjia Lake
- d) Kanjia Lake near main gate at Botanical Garden
- e) Kanjia Lake near Holiday cottage of Botanical Garden
- e) Kanjia Lake near Medicinal Garden
- f) Kiakani Lake near opposite site of Bangali sahi near Bougainvilla Garden
- g) Kiakani Lake near Picnic spot site of Botanical Garden, Nandankanan

C. Observations with respect to water quality status of Kanjia and Kiakani Lake of Nandankanan:-

- (a) On the day of inspection it was observed that both the lakes have covered with vast area of heavy eutrophic condition i.e., covered with free floating algae, weed, hydrophytes, thick wild grasses etc.
- (b) Looking to the Analysis report in the present context it is observed that as per the prescribed standard of surface water quality i.e. IS-2296(1982) of Class-B, the concentration of Total Coliform (TC) and Fecal Coliform (FC) exceeded the prescribed standard i.e., 500 MPN/100mL. **(Copy of Analysis report is attached for reference)**. Also the concentrations of Dissolve Oxygen (DO) at all the locations are exhibiting less than the prescribed standard. i.e. 5 mg/L or more.

D. Conclusion / Suggestion:

- (a) The weeds hydrophytes, wild grasses should be cleaned periodically and green plants should be properly decomposed in specific locations to convert in to compost after that can be used as green manure to the existing plants within Zoological park and Botanical garden.
- (b) Basing upon the above cited findings and observations, it is suggested that at regular interval, the concerned Department may please be instructed to clean the eutrophic condition of the lake by boating system and application of bleaching powder should be practice at least 3 times in a calendar year so as to check the growth of fecal origin bacteria up to maximum extent and to maintain the Dissolve Oxygen (DO) level as healthy condition.


10/9/25

Sri Soumya Ranjan Mallick
Asst. Environmental Scientist
Regional office, SPC Board, Bhubaneswar



CENTRAL LABORATORY
STATE POLLUTION CONTROL BOARD, ODISHA
 Plot No. B-59/2 & 59/3, Chandaka Industrial Estate, Patia,
 Bhubaneswar - 751 024
 E-mail: centrallab@ospcbboard.org

**TEST REPORT**

1. ULR No. : TC12740250000959F
 2 (i). Report No. : OS/ 558 /09/2025
 3 (i) Date : 08.09.2025
 2(ii). Amendment No :
 3(ii) Amendment Date :
 4. Sample Submitted By : Sri Soumya Ranjan Mallick, AES,
 (Name and address) Regional Office, SPC Board, Odisha, Bhubaneswar,
 (On behalf of Regional Officer, Bhubaneswar)
 5. Reference Letter No. : Nil
 6. Date of sample receipt : 01.09.2025
 7. Sample Description:
 (i) Discipline : Chemical testing (ii) Group : Water (iii) Sub Group : Surface water
 and Biological testing (Water/ Pollution and Environment) (Surface Water/ Ground Water/ Drinking
 (Biological testing/ Chemical testing) Water/ Wastewater / Effluent)
 8. Analysis Starting Date-Analysis Completion Date : 01.09.2025 – 06.09.2025
 9. If uncertainty is desired by Customer : No
 10. Analysis Results :

(Attach separate sheet if necessary)

Sl. No.	Parameter, Unit	Standards/ Regulatory Limits		Test Method	Samples collected from Kanja & Kiakani Lake of Nandankanan, Bhubaneswar			
		(Applicable for Sl. No. Others/Aug -25/ SW/ 1456 to Others/ Aug -25/ SW/ 1463)			Others/Aug -25/ SW/ 1456	Others/Aug -25/ SW/ 1457	Others/Aug -25/ SW/ 1458	Others/Aug -25/ SW/ 1459
		IS : 2296, (1982) Class -B *	G.S.R.742 (E) **		Kanja lake near rest House	Mid point of Kanja lake	Near boating ghat of Kanja lake	Kanja lake near main gate of Botanical garden
Results								
1.	pH	6.5 - 8.5	6.5 - 8.5	4500-H ⁻ -B, APHA, 23 rd Edn., 2017	7.2	7.1	6.9	7.0
2.	Total Suspended Solids (TSS), mg/L	-	-	2540 D, APHA, 23 rd Edn., 2017	14.0	39.0	21.0	17.0
3.	Total Dissolved Solids (TDS), mg/L	-	-	2540 C, APHA, 23 rd Edn., 2017	140.0	148.0	272.0	160.0
4.	Dissolved Oxygen (DO), mg/L	5, min	5 mg/L or more	4500-O-C, APHA, 23 rd Edn., 2017	3.3	2.9	3.0	2.9
5.	Biochemical Oxygen Demand (BOD, 3days at 27° C), mg/L	3.0, max	3 mg/L or less	IS 3025 : Part 44 (1999)	1.7	2.7	2.2	2.8
6.	Chemical Oxygen Demand (COD), mg/L	-	-	5220 B, APHA, 23 rd Edn., 2017	19.0	34.0	30.0	38.0
7.	Total Hardness (TH), as CaCO ₃ mg/L	-	-	2340 C, APHA, 23 rd Edn., 2017	60.0	88.0	88.0	64.0
8.	Chloride (Cl ⁻), mg/L	-	-	4500 Cl ⁻ B, APHA, 23 rd Edn., 2017	38.0	38.0	80.0	42.0
9.	Nitrate (as NO ₃ ⁻), mg/L	-	-	4500 - NO ₃ ⁻ -E, APHA, 23 rd Edn., 2017	1.723	1.515	1.710	1.657
10.	Sulphate (SO ₄ ²⁻), mg/L	-	-	4500-SO ₄ ²⁻ -E, APHA, 23 rd Edn., 2017	5.52	45.62	41.25	42.29
11.	Phosphate (PO ₄ ³⁻ -P), mg/L	-	-	4500-P-D, APHA 23 rd Edn., 2017	<0.05 #	<0.05 #	<0.05 #	0.085
12.	Ammonical Nitrogen as N (NH ₃ -N), mg/L	-	-	4500-NH ₃ -B followed by 4500-NH ₃ -C, APHA 23 rd Edn., 2017	<0.4 #	0.56	0.56	<0.4 #
13.	Total Coliform (TC), MPN/100 ml	500, max	-	9221 - B, APHA, 23 rd Edn., 2017	3300	17000	4900	160000
14.	Faecal Coliform (FC), MPN/100 ml	-	500 (desirable) 2500 (max. permissible)	9221 - E, APHA, 23 rd Edn., 2017	1300	4900	2300	92000

Pathanik
08/09/2025

Smile Nayak
08/09/25

.....



CENTRAL LABORATORY STATE POLLUTION CONTROL BOARD, ODISHA

Plot No. B-59/2 & 59/3, Chandaka Industrial Estate, Patia,
Bhubaneswar - 751 024

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TC-12740

TEST REPORT

Page 2 of 2

1. ULR No. : TC127402500000959F

2 (i). Report No. : OS/ 558 /09/2025

3 (i) Date : 08.09.2025

2(ii). Amendment No :

3(ii) Amendment Date :

Sl. No.	Parameter, Unit	Test Method	Samples collected from Kanjia & Kiakani Lake of Nandankanan, Bhubaneswar			
			Others/Aug -25/ SW/ 1460	Others/Aug -25/ SW/ 1461	Others/Aug -25/ SW/ 1462	Others/Aug -25/ SW/ 1463
			Kanjia lake near Holiday cottage of Botanical garden	Kanjia lake near Medicinal garden	Kiakani lake opposite of Bengali sahi near Bougainvilla garden	Kiakani lake near Picnic spot site of Botanical garden, Nandankanan
Results						
1.	pH	4500-H-B, APHA, 23 rd Edn., 2017	6.9	6.9	6.8	6.8
2.	Total Suspended Solids (TSS), mg/L	2540 D, APHA, 23 rd Edn., 2017	63.0	14.0	12.0	17.0
3.	Total Dissolved Solids (TDS), mg/L	2540 C, APHA, 23 rd Edn., 2017	128.0	128.0	212.0	216.0
4.	Dissolved Oxygen (DO), mg/L	4500-O-C, APHA, 23 rd Edn., 2017	3.0	3.2	3.4	3.3
5.	Biochemical Oxygen Demand (BOD, 3 days at 27 ^o C), mg/L	IS 3025: Part-44 (1999)	1.9	1.4	1.3	1.4
6.	Chemical Oxygen Demand (COD), mg/L	5220 B, APHA, 23 rd Edn., 2017	21.0	11.0	11.0	15.0
7.	Total Hardness (TH), as CaCO ₃ mg/L	2340 C, APHA, 23 rd Edn., 2017	44.0	60.0	84.0	88.0
8.	Chloride (Cl ⁻), mg/L	4500-Cl-B, APHA, 23 rd Edn., 2017	34.0	36.0	42.0	42.0
9.	Nitrate (as NO ₃), mg/L	4500-NO ₃ -E, APHA, 23 rd Edn., 2017	1.480	1.524	1.608	1.618
10.	Sulphate (SO ₄ ²⁻), mg/L	4500-SO ₄ ²⁻ -F, APHA, 23 rd Edn., 2017	6.15	7.71	9.17	6.04
11.	Phosphate (PO ₄ ³⁻ -P), mg/L	4500-P-D, APHA 23 rd Edn., 2017	0.057	<0.05 #	<0.05 #	<0.05 #
12.	Ammonical Nitrogen as N (NH ₃ -N), mg/L	4500-NH ₃ -B followed by 4500-NH ₃ -C, APHA 23 rd Edn., 2017	0.50	0.56	<0.4 #	0.56
13.	Total Coliform (TC), MPN/100 ml	9221-B, APHA, 23 rd Edn., 2017	4600	160000	13000	92000
14.	Faecal Coliform (FC), MPN/100 ml	9221-E, APHA, 23 rd Edn., 2017	1700	92000	3300	35000

* Tolerance limit for inland surface water subject to pollution (IS : 2296-1982), for Class 'B' (Outdoor bathing)

** Primary water quality criteria for bathing water (water used for organised outdoor bathing)

BDL values as specified by CPCB vide letter No.7065 dt.28.09.2020

11. Deviation from Test Method, if any : No

12. If Sampling Conducted by the Central Laboratory, Yes/ No - No
If Yes,

(a) Date of Sampling :

(b) Method Used :

(c) Name of Sampler with Designation :

End of Test Report

Nishiprava Patnaik
08/09/2025
Authorised Signatory
(Biological Testing)
(Water/ Wastewater)
(Mrs. Nishiprava Patnaik)
(Asst. Env. Scientist)

Smita Nayak
08/09/2025
Authorised Signatory
(Chemical Testing)
(Water/ Wastewater)
(Mrs. Smita Nayak)
(Asst. Env. Scientist)

Sri Niranjan Mallick
08/09/2025
Board Analyst
(Sri Niranjan Mallick)
(OSD-cum- Chief Env. Scientist)

Note :

- (i) The results stated above relate only to the items tested.
(ii) This report shall not be reproduced in full or in part without written approval from the In-charge of the Central Laboratory.