

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE KOLKATA BENCH**

Original Application No. 41 of 2024 / EZ.

Nanda Jhodia

..... Petitioner / Appellant

Vs.

M/s Utkal Alumina International
Ltd. & Ors.

.....Respondent / Defendant

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| 1. | Additional Affidavit. | 1424-1428 |
| 2. | <u>ANNEXURE-R7/1.</u> Photocopy of the letter No. 14975 dtd. 21.09.2024 along with the analysis report (2 nos.) | 1429-1432 |

By the Respondent.No.7

Through

Papiya Banerjee Bihani

Kolkata

Date:

Smt. Papiya Banerjee Bihani
Advocates for the Respondent No.3
(State Pollution Control Board, Odisha)
e-mail: pbanerjeebihani@gmail.com
Phone No.:9831493390

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA
ORIGINAL APPLICATION NO. 41 OF 2024 / EZ

21 SEP 2024

Nanda Jhodia

...Applicant

VERSUS

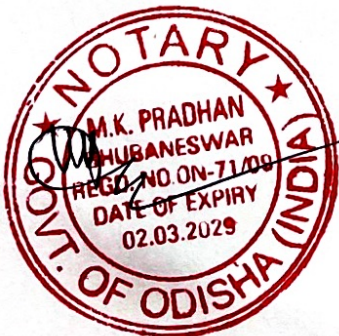
M/s. Utkal Alumina International
Ltd. & Others

...Respondents

ADDITIONAL AFFIDAVIT ON BEHALF OF STATE
POLLUTION CONTROL BOARD, ODISHA, R.NO.7
IN COMPLIANCE TO ORDER DTD.05.08.2024 OF
THIS HON'BLE TRIBUNAL.

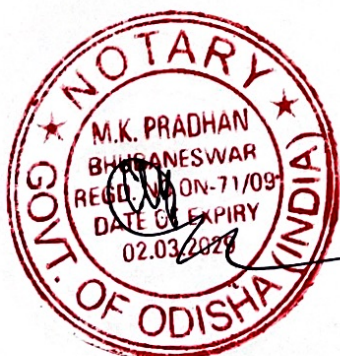
I, Dr. Kailasam Murugesan, IFS, son of late Paramasivam
Kailasam aged around 56 years, at present working as Member
Secretary, State Pollution Control Board, having my office at
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, P.O.
Nayapalli, Bhubaneswar, Dist -- Khurda, Odisha-751012, do
hereby solemnly affirm and state as under:

- 1. That I am the Member Secretary of the Respondent No.7
Board and, as such, am well-acquainted with the facts and



circumstances with the case and competent to swear this affidavit.

2. That it is humbly submitted that in the meantime, the Regional Officer, Rayagada of the R-7 Board has collected fresh samples of the ground water from village Lachhiguda near M/s. Utkal Alumina International Ltd. Refinery Doraguda, Tikiri, Rayagada (R-1) on 16.08.2024 and submitted the samples to the Central Laboratory of the R-7 Board on 17.08.2024 for analysis of parameters like pH, Electrical Conductivity, Total Suspended Solids, Total Dissolved Solids, Turbidity, Total Alkalinity, p. Alkalinity, Total Hardness, Calcium Hardness, Magnesium Hardness, Nitrite as N, Nitrate as N, Ammonical-N, TKN, Sulphate, Phosphate as P, Sodium, Potassium, Total Fixed Solids, Boron, Mercury and Metals like As, Cu, Cd, Cr, Pb, Ni, Zn and Fe and. Soon after receipt of the samples the Central Laboratory has started analysing the sample except metals like Cu, Cd, Zn, Ni and Pb and forwarded the analysis report to the Regional Officer, Rayagada of this Board vide letter No.14975 dtd.21.09.2024. The analysis



report reveals that the ground water sample meets the drinking water specification (IS 10500 (2012) and its amendments) for all the tested parameters. However, this is to mention that due to unavailability of facilities for analysis of arsenic, the same could not be analysed. Copy of the said letter along with the analysis report (2 nos.) are annexed to this affidavit and marked as ANNEXURE – R7/9 Colly.

3. That it is humbly submitted that the metals like Cu, Cd, Zn, Ni and Pb are to be analysed by the Atomic –Absorption Spectrophotometric (AAS) methods, as the rectification of the AAS has not yet completed and step has already been taken for rectification of the same by placing orders to M/s. Spectrolytic Scientific India Private Ltd. and it is reported by the Chief Environmental Scientist of the Central Laboratory that the same is likely to be rectified shortly.
4. That it is humbly submitted that the sample processing for analysis of the aforesaid five metal parameters has already been over and preserved for analysis soon after the rectification of the problem in AAS.



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

5. That the R.No.7 Board craves leave of this Hon'ble Tribunal to file further affidavit, if required, for proper adjudication of this case.
6. That the annexure annexed to the present affidavit is true and correct copy of its original.
7. 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.

[Signature]
DEPONENT
 Member Secretary
 State Pollution Control Board
 Odisha, Bhubaneswar

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 21st day of September, 2024.

SWORN BEFORE ME

[Signature]
DEPONENT
 Member Secretary
 State Pollution Control Board
 Odisha, Bhubaneswar

NOTARY
 M.K. PRADHAN
 BHUBANESWAR
 REGD. NO. ON-71/09
 DATE OF EXPIRY
 02.03.2029
INDIA

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



FAX : 2562822/2560955
TEL : 2564033/2563294
EPABX : 2561909/2562847
E-mail : paribesh1@ospcboard.org
Website : www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII,

Bhubaneswar – 751 012

(CENTRAL LABORATORY)

No. 14975 /

VI-SC (LEM) Misc 38/2024- 25

Dt. 21.09.2024

To

The Regional Officer,
State Pollution Control Board, Odisha,
Rayagada

Sub : Test Reports of ground water sample collected from Tube well within the village Lachhuguda of M/s Utkal Alumina International Limited (Refinery), Doraguda, Tikiri, Dist.- Rayagada – reg.

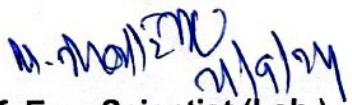
Ref : Your Letter No. 1791 dt.16.08.2024

Sir,

With reference to the above cited letter, please find enclosed herewith the test reports of ground water sample submitted to the Central Laboratory on dt.17.08.2024 by your office, collected from Tube well within the village Lachhuguda of M/s Utkal Alumina International Limited (Refinery), Doraguda, Tikiri, Dist.-Rayagada.

Encl : (i) OS/716/09/2024 (For NABL Scope parameter)
(ii) OS/717/09/2024 (For NABL Non-scope parameter)

Yours faithfully,


Chief Env. Scientist (Lab.)



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

Page 1 of 2

1. ULR No. : TC127402400000752F
- 2 (i). Report No. : OS/716/09/2024
- 2(ii). Amendment No : ---
- 3 (i) Date : 21.09.2024
- 3(ii) Amendment Date : ---
4. Sample Submitted By : Sri S.K. Pradhan, Field Attendant,
(Name and address) Regional Office, SPCB, Odisha, Rayagada
5. Reference Letter No. : 1791 dt.16.08.2024
6. Date of sample receipt : 17.08.2024
7. Sample Description :
 - (i) Discipline : Chemical Testing
(Biological Testing, Chemical testing)
 - (ii) Group : Water
(Water/ Pollution and Environment / Atmospheric Pollution/ Soil and Hazardous Waste)
 - (iii) Sub Group : Ground water
(Surface water/ Ground water/ Drinking water / Wastewater/ Effluent/ Ambient Air/ Stack/ Soil and Hazardous Waste)
8. Analysis Starting Date-Analysis Completion Date : 17.08.2024 – 23.08.2024
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 | Sample collected from Tube well within the village Lachhuguda of M/s Utkal Alumina International Limited (Refinery), Doraguda, Tikiri, Dist.-Rayagada Others/ Aug - 24/ GW/1319 Tube well within the village Lachhuguda Results |
|---------|---------------------------------------------------------------|--------------------------------|------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Requirement (Acceptable limit) | permissible limit in the absence of alternate source | | |
| 1. | pH | 6.5-8.5 | No relaxation | 4500-H ⁺ -B, APHA, 23 rd Edn., 2017 | 8.0 |
| 2. | Electrical Conductivity (EC), $\mu\text{S/cm}$ | - | - | 2510 B, APHA 23 rd Edn., 2017 | 474.0 |
| 3. | Total Suspended Solids (TSS), mg/L | - | - | 2540 D, APHA, 23 rd Edn., 2017 | 15.0 |
| 4. | Total Dissolved Solids (TDS), mg/L | 500 | 2000 | 2540 C, APHA, 23 rd Edn., 2017 | 268.0 |
| 5. | Turbidity (Turb), NTU | 1 | 5 | 2130 B, APHA, 23 rd Edn., 2017 | 1.3 |
| 6. | Total Alkalinity as CaCO ₃ (T. Alka) , mg/L | 200 | 600 | 2320 B, APHA, 23 rd Edn., 2017 | 52.0 |
| 7. | P. Alkalinity as CaCO ₃ (P. Alka) , mg/L | - | - | | <5.0 |
| 8. | Total Hardness as CaCO ₃ (TH), mg/L | 200 | 600 | 2340 C, APHA, 23 rd Edn., 2017 | 76.0 |
| 9. | Calcium Hardness as CaCO ₃ (CaH), mg/L | - | - | 3500-Ca-B, APHA 23 rd Edn., 2017 | 56.0 |
| 10. | Magnesium Hardness as CaCO ₃ (MgH), mg/L | - | - | 3500-Mg-B, APHA 23 rd Edn., 2017 | 20.0 |
| 11. | Nitrite Nitrogen as N (NO ₂ ⁻ -N), mg/L | - | - | 4500-NO ₂ ⁻ -B, APHA 23 rd Edn., 2017 | 0.021 |
| 12. | Nitrate as N (NO ₃ ⁻ -N), mg/L | - | - | 4500-NO ₃ ⁻ -E, APHA, 23 rd Edn., 2017 | 4.895 |
| 13. | Sulphate (SO ₄ ²⁻), mg/L | 200 | 400 | 4500-SO ₄ ²⁻ -E, APHA, 23 rd Edn., 2017 | 8.2 |
| 14. | Phosphate as P (PO ₄ ³⁻ -P), mg/L | - | - | 4500-P-D, APHA 23 rd Edn., 2017 | 0.115 |

(Cont..)

| Sl. No. | Parameter, Unit | Standards/ Regulatory Limits* | | Test Method | Sample collected from Tube well within the village Lachhuguda of M/s Utkal Alumina International Limited (Refinery), Doraguda, Tikiri, Dist.-Rayagada |
|---------|----------------------------------------------------|--------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Requirement (Acceptable limit) | permissible limit in the absence of alternate source | | |
| | | | | | Others/ Aug - 24/ GW/1319 |
| | | | | | Tube well within the village Lachhuguda |
| | | | | | Results |
| 15. | Chloride (Cl ⁻), mg/L | 250 | 1000 | 4500 Cl ⁻ B, APHA, 23 rd Edn., 2017 | 36.0 |
| 16. | Fluoride (F ⁻) mg/L | 1.0 | 1.5 | 4500-F-C, APHA, 23 rd Edn., 2017 | 0.12 |
| 17. | Ammonical Nitrogen as N (NH ₃ -N), mg/L | 0.5 | No relaxation | 4500-NH ₃ -B followed by 4500-NH ₃ -C, APHA, 23 rd Edn., 2017 | <0.4 |
| 18. | Total Kjeldahl Nitrogen (TKN), mg/L | - | - | 4500-Norg C, APHA 23 rd Edn., 2017 | 3.92 |
| 19. | Sodium (Na), mg/L | - | - | 3500-Na B, APHA APHA 23 rd Edn., 2017 | 16.52 |
| 20. | Potassium (K), mg/L | - | - | 3500 K -B, APHA 23 rd Edn., 2017 | 35.4 |
| 21. | Boron (B), mg/L | 0.5 | 2.4 | 4500 B-B, APHA, 23 rd Edn., 2017 | 0.190 |
| 22. | Iron (Fe), mg/L | 1.0 | No relaxation | 3500 Fe - B, APHA, 23 rd Edn., 2017 | 0.765 |
| 23. | Hexavalent Chromium (Cr ⁶⁺), mg/L | - | - | 3500-Cr-B, APHA 23 rd Edn., 2017 | <0.002 |
| 24. | Total Fixed Solids (TFS), mg/L | - | - | 2540 E, APHA 23 rd Edn., 2017 | 228.0 |

* Drinking water specification, IS 10500: 2012 and its amendment no-1, June, 2015 & no-2 September, 2018

11. Deviation from Test Method, if any :

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-----

Usharani Patnaik
21.9.2024
Authorised Signatory
(Water/wastewater)

(Dr. (Mrs) Usharani Patnaik, Addl. Chief Env. Scientist)

Niranjan Mallick
21/9/24
Board Analyst

(Mr. Niranjan Mallick, 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.

(iii) The laboratory is not responsible for the authenticity of photocopied Test Reports.

(iv) The Test Item will not be retained for more than 15 days from the date of issue of Test Report except in case as required by applicable Regulation.

Head Office: State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar - 751 012, FAX : 2562822/2560955
TEL : 2564033/2563294 EPABX : 2561909/2562847, E-mail : paribesh1@ospcboard.org Website : www.ospcboard.org



**CENTRAL LABORATORY
STATE POLLUTION CONTROL BOARD, ODISHA**

Plot No. B-59/2 & 59/3, Chandaka Industrial Estate, Patia,
Bhubaneswar - 751 024
E-mail: centrallab@ospcboard.org

TEST REPORT

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|---------|------------------------------|--------------------------------|------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Requirement (Acceptable limit) | Permissible limit in the absence of alternate source | | |
| | | | | | Others/ Aug - 24/ GW/1319 |
| | | | | | Tube well within the village Lachhuguda |
| | | | | | Results |
| 1. | Total Chromium (as Cr), mg/L | 0.05 | No relaxation | 3030 G followed by 3500 Cr-B, APHA, 23 rd Edn., 2017 | 0.013 |
| 2. | Mercury (as Hg), mg/L | 0.001 | No relaxation | 3112 B, APHA, 23 rd Edn., 2017 | 0.00060 |

* Drinking water specification, IS 10500: 2012

11. Deviation from Test Method , if any :
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-----

Usharani Patnaik
21-9-2024

Authorised Signatory
(Water/wastewater)

(Dr.(Mrs)Usharani Patnaik, Addl. Chief Env. Scientist)

Niranjan Mallick
21/9/24

Board Analyst
(Mr. Niranjan Mallick, Chief Env. Scientist)

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