

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH

APPEAL NO. 9 of 2024

In the matter of:

Chitta Ranjan Mahanta

& Ors.

.... **Petitioner**

Versus

State of Odisha and

Others

.... **Respondents**

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CUTTACK

Date:

**Advocate for the
Respondent No. 9**

Chitta Ranjan Mahanta

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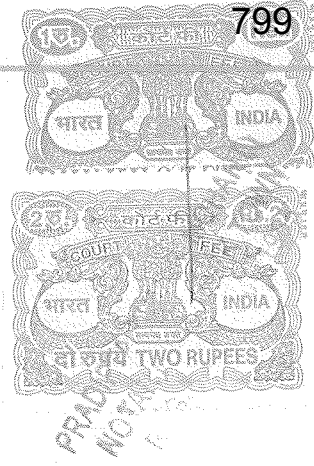
Respondents

COUNTER AFFIDAVIT FILED ON BEHALF OF
RESPONDENT NO. 9

I, P. Kumar Ranjan, aged about 51 years,
Son of Late Vivekananda Parida, residing at Qrs No.
GA - 309, Near OERC Building, Defence Colony,
Sailashree Vihar, Bhubaneswar, Dist. - Khurdha,
Odisha - 757021, do hereby solemnly affirm and state
as follows: -

1. That, I am the Managing Director, Visiontek
Consultancy Services Pvt. Ltd. and duly
authorized to swear this affidavit on behalf of
Respondent No. 9.


PRADIPTA KUMAR MOHANTY
NOTARY, CUTTACK TOWN
REGD.No-ON-04/1995



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2. That, I have gone through the Memorandum of Appeal and understood the contents thereof, and I am otherwise acquainted with the facts of the case.
3. That, at the outset it is humbly clarified that all averments, contentions and/or statement as contained in the application filed by the Petitioner which may not have been specifically denied or traversed by me herein but are in essence, contrary to the substance of this affidavit, should not be deemed to be admitted by reason of mere non-traverse, but should be treated as expressly denied and the Petitioner should be put to strict proof in respect thereof. I also crave leave of this Hon'ble Court to file further affidavit or affidavits if the situation so warrants.
4. That this appeal memorandum has been filed by the Appellants challenging the grant of Environmental Clearance in favour of the Respondent No. 8, i.e., M/s Kai International

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Private Limited for establishment of Iron Ore Beneficiation Plant, Iron Ore Pelletization Plant and Producer Gas Plant at Village - Kapanda in Lahunipara tehsil of Sundergarh District in Odisha.

PRELIMINARY SUBMISSIONS

5. That, at the outset, it is humbly submitted that the allegations leveled against the present Respondent in the appeal memorandum as to falsification of facts and causing serious deviation in the baseline data are wholly arbitrary, baseless and inappropriate.
6. That the Respondent No. 9 is a leading consultancy organization specializing in environmental protection and industrial pollution control, also rendering consultancy services for field investigation, planning and designs, supervision, quality monitoring, preparing detailed project reports, design and field engineering having the highest standards of scientific precision and factual accuracy.

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7. That, a brief chronology of events bearing relevance to the present matter is as follows for better appreciation of this Hon'ble Tribunal:
- a. Trees have been felled after obtaining necessary permission from DFO-cum-Wildlife Warden, Rourkela Forest Division, Sundargarh, Odisha vide letter no. 5838/3F(Lease), dated 20.09.2021.
 - b. An application bearing Original Application No. 94/2021/EZ was filed by the applicant (Mr. Chittaranjan Mahanta & Others) in the year 2021 in this Hon'ble Tribunal alleging illegal tree felling at site.
 - c. Interim orders were issued by this Hon'ble Tribunal on 08.10.2021 directing that no construction and felling of trees shall be made at the site by M/s KAI International Private Ltd. including boundary wall etc. till all necessary clearances are granted by the MoEF&CC and other authorities, till further orders.

Chittaranjan Mahanta

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- d. KIPL applied for Terms of Reference (TOR) to MoEF&CC on 21.10.2021. Thereafter, TOR was granted by MoEF&CC on 29.11.2021.
- e. Baseline data was collected during October 2021 to December 2021.
- f. Draft EIA was submitted to SPCB on 06.04.2022 and Public Hearing was conducted on 24.05.2022. Action plan with budget was prepared against the points of Public Hearing proceedings and were incorporated in EIA report.
- g. Interim order was issued by this Hon'ble Tribunal on 07.02.2023 for stay of EC process and as per this order, Field Visit was carried by Joint Committee comprising of nominees of DG Forest, MoEF&CC (not below the rank of ADG), Integrated Regional Officer of MoEF&CC, Bhubaneshwar, PCCF (HoFF), Odisha, Chief Wildlife Warden, Odisha and the District Magistrate, Sundergarh on 18.03.2023 and 28.04.2023.

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- h. Pursuant to Joint Committee visit report, final order was passed by this Hon'ble Tribunal on 22.08.2023 whereby the case was disposed of with a direction to MoEF&CC for processing the EC.
- i. Thereafter, Final EIA was submitted in e-Parivesh portal on 14.11.2023.
- j. Thereafter, EC presentation was held before EAC (Industry-I) on 29.11.2023 and ADS was generated on 08.12.2023 and it was replied on 18.12.2023. Subsequently, reconsideration of EC presentation was held on 04.01.2024 before EAC (Industry-I).
- k. A complaint was received by MoEF&CC through mail dated 04.01.2024 from villagers of Badbahal and Fatajharan and the same was complied with by KIPL on 04.01.2024 and submitted to MoEF&CC for grant of EC.
- l. An ADS was generated on 15.01.2024 and replied to by KIPL on 15.01.2024.
- m. After considering the recommendation of EAC and the final order of this Hon'ble Tribunal dated

Remarques

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22.08.2023, EC was granted by MoEF&CC on
13.05.2024.

8. That, in light of such circumstances it is respectfully submitted that the Respondent No. 9 has discharged its services diligently and responsibly owing to which the allegations of falsification of baseline data cannot be attributed to the present Respondent. Further, it is evident that the proposal has been thoroughly scrutinized at TOR and EC appraisal stage by EAC (Industry-I) comprising of various expert members, Chairman and of MoEF&CC officials. After proper review and scrutiny, EDS and ADS were raised by MoEF&CC and duly complied by KIPL. MoEF&CC has granted EC taking into consideration of final NGT order on the basis of Field visit carried by Joint Committee comprising of nominee of DG Forest, MoEF&CC (not below the rank of ADG), Integrated Regional Officer of MoEF&CC, Bhubaneswar, PCCF (HoFF), Odisha, Chief

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Wildlife Warden, Odisha and the District Magistrate, Sundergarh on 18.03.2023 & 28.04.2023. Therefore, it is trite to mention that the proposal has been reviewed in detail by eminent experts and authorities of State and Central Government as well as by this Hon'ble Tribunal in its final order dated 22.08.2023 and the Appellants reagitating the same matter in the present original application is mala fide and contrary to the settled principles of law for which the stand of the Appellants cannot be sustained in the eyes of law.

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PARAGRAPH-WISE REPLY

9. That, as far as the submissions made in Paragraphs 1 to 48 of the Memorandum of Appeal filed by the Appellants are concerned, it is humbly submitted that the same are matter of record and merit no reply as there are no specific allegations against the Respondent No. 9, but however if anything is found contrary as such

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then it is denied in its entirety and the same shall be dealt with at the time of hearing.

10. That, as far as the submissions made in Paragraphs 49 and 50 of the Memorandum of Appeal filed by the Appellants is concerned, it is humbly submitted that the same are denied in its entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is respectfully submitted that the allegations of serious deviation in the baseline data, project description, water balance, integrated material balance as per the comparison between the Draft EIA and the Final EIA are baseless, arbitrary and inappropriate in view of the fact that the said scientific surveys were undertaken strictly as per the latest techniques and maintaining the highest professional standards and thus the deviations are unfounded and negligible, if any and thus the stand of the Appellants cannot be sustained as per law.

Pradipta Kumar Mohanta

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11. That as regards the submissions made in Annexure - 16 at Point No. 1 (A), it is humbly submitted that the same are denied in its entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is respectfully submitted that the direction of KAI International project with respect to surrounding industries being mentioned as NW is a typographical error and corrected in final EIA and is mentioned as SE. However, the latitude-longitude of industries and their distance are same in both the EIA reports. Further, the location is very clear in the vicinity map provided in Chapter-2, which is same in both the Draft and Final EIA reports. In Draft and Final EIA, Sri Hari Sponge Iron Limited is coming on the 10 km circumference line and thus was not included as it was not situated inside the 10 km buffer zone. It. As per Terms of Reference, the study area is considered only within 10 km radius [TOR point. 4 (ii) and 4 (viii)] and hence industries at 10 km and beyond are not mentioned.

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Therefore, it is submitted that the present Respondent has not misrepresented the number of industries within the 10 km buffer zone and it is humbly reiterated that so such intentional omission has been committed. The present Respondent has represented the actual number of industries in accordance with the study area stipulated in the TOR.

Furthermore, it is humbly submitted that the referred article (Ref:A) is not related to the EIA report submitted by the Respondent No. 9 and rather, the demographic data for the study area has been taken from census records of 2011 and presented in Section 3.11.3 of the final EIA report and thus the stand of the Appellants cannot be sustained as per law.

12. That as regards the submissions made in Annexure - 16 at Point No. 1 (B), it is humbly submitted that the same are denied in its entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is respectfully

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submitted that in both the draft EIA as well as Final EIA reports, NH 23 (New NH 143) is at an aerial distance of 3.1 km in the East direction. NH 143 is mentioned as NH 149 in the final EIA report (Chapter-1, page-3) as a typographical error. However, in the Final EIA at Page 24 and 29 of Chapter-3, NH-143 is mentioned.

It is humbly submitted that in both the EIA reports the distance of nearby features has been mentioned in aerial distance (not in road distance) as per the standard practice in Environmental Impact Assessment process. The information provided in the EIA report are expressed in aerial distance and correct to best of my knowledge and belief.

Further, it is respectfully submitted that Patasahi Railway station is at aerial distance of 12.9 km North-East and the nearest airport is at an aerial distance of 40.5 km North. The information provided in the EIA report are in aerial distance and correct to best of my knowledge and belief.

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Copy of the relevant extracts of the Final EIA regarding NH-143 is enclosed herewith and marked as Annexure – A/9.

13. That as regards the submissions made in Annexure - 16 at Point No. 1 (C), it is humbly submitted that the same are denied in their entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is humbly submitted that nearby habitations like Daldali Sahi, Nuagan, Kapanda, Talabahali and Tikayatpali are mentioned in the EIA report, representing the 10 km zone area. All habitations could not be mentioned in the report due to the fact that base monitoring stations are chosen at some selected locations representing the study area.

It is humbly submitted that Badbahal village was not mentioned at page no. 3 of Chapter-1 of Final EIA. However, Baseline AAQ monitoring has been carried out at Badbahal village, and mentioned in Chapter 3 of

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the Draft and Final EIA report at Table No. 3.4 & 3.9 respectively.

Impact assessment is carried out inside whole 10 Km radius around the project site at every 1000 m grid points.

The receptors were defined with respect to 16 radial wind directions and radial distance from project site. GLC has been estimated by the model at every 1000 m grid points. A total of 449 receptors were taken for modelling including all 8 nos. baseline monitoring locations spread out in the 10 Km area. Hence no question arises leaving any village in 10Km radius whether mentioned or not mentioned. Pattajharan is a small village (0.9Km, NE), which is covered within 10 km radius area.

Copy of the relevant extracts of Table 3.4 the Final EIA regarding Badbahal village is enclosed herewith and marked as **Annexure – B/9.**

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14. That, as regards the submissions made in Annexure 16 at Point No. 1 (D), it is humbly submitted that the same are denied in their entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is humbly submitted that Smardari Juniani PF has not been skipped in the EIA report. It was mentioned in the Draft as well as Final EIA report at page no. 3 of Chapter-3.

Copy of the relevant extracts of Page No. 3 the Draft and Final EIA respectively regarding Samardari Juniani is enclosed herewith and marked as Annexure – C/9.

15. That, as regards the submissions made in Annexure-16 at Point No. 1 (E) and Point No. 2A, it is humbly submitted that the same are denied in their entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is humbly submitted that there are no discrepancies in the provided data as aerial distance has been given in traffic study report as

Samardari Juniani

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standard practice of EIA studies. Traffic data given in Draft EIA was a typographical error, which was corrected in the Final EIA.

Further, it is humbly submitted that the Coordinates given by complainant are different from KIPL traffic monitoring location. Coordinate of KIPL Traffic monitoring location - 2 - $21^{\circ} 55' 16.69''\text{N}$; $84^{\circ} 54' 3.36''\text{E}$ as per page no. 16 of KIPL traffic study report whereas the coordinates of location given by complainant is $21^{\circ} 55' 38''\text{N}$; $84^{\circ} 53' 38''\text{E}$ as has been mentioned in the appeal memo of the complainant. KIPL Traffic monitoring location - 2 has been misinterpreted by the complainant by showing a different location i.e. Darjing which is 1 Km NNW away from KIPL Traffic monitoring location - 2 in the proximity of intersection of Santikayatpali road to NH-23. It is pertinent to mention that the actual monitoring location is a highway and village road junction, whereas the location given by the complainant is a village area. Complainant has shown a different location

Kemayapali

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(Road connected from Jora Tola to Santikayatpali road) where KIPL traffic monitoring is not carried out.

As regards the allegations against the traffic data sheet reproduced in Table 4.2 of Annexure 16 of the appeal memo, it during traffic monitoring, there was hardly any traffic at Monitoring Location-1, i.e., near the project main gate. Hence, monitoring was carried out on the same route near Tikayatpali Primary School, i.e., road connecting Project main gate to NH-143, which is a motorable pitch and concrete road bearing coordinates $21^{\circ} 54' 49.74''$ N, $84^{\circ} 53' 13.668''$ E. Further, 6840 PCUs/day includes mostly 2-W, 3-W, LMV and HMV are very rare. The data represents traffic count on that day, which varies in different days and therefore, the claim is not fake or false. It is humbly submitted that traffic study was carried out near Tikayatpali Primary School, considering worst case scenario for assessing future traffic impact due to the proposed project. This location was chosen to

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ensure that the project's maximum potential effects on road safety, congestion, air quality and noise. Evaluating the highest possible traffic load ensures adequate mitigation strategies as far as EIA study is concerned.

As regards the comments on key non-compliance, it is humbly submitted that detailed traffic study report was included in the final EIA as a supporting document. Regarding Road development from Tikayatpali to Kapanda, it was mentioned in Public Hearing Proceedings, as company will take up the matter by pursuing the matter through Government of Odisha for improvement of road condition and its maintenance. In response to the above point, reply was given by Project Proponent.

For improving road condition suitable mitigation measures will be adopted. Project Proponent will take up the activities for road improvement after obtaining due permission from the concerned authorities. It will be taken up in consultation with District Administration

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and forest department. Two lane road (project entrance gate to NH 215) is proposed for smooth traffic movement during operation of the project to reduce traffic density and the capacity of the road will be increased. Construction of the proposed two-lane road will be put up before district administration. After approval of the district administration and forest department the proposal may be materialized as per discretion of the Govt. of Odisha. All formalities like tree enumeration, cutting of trees, compensatory afforestation, forest diversion, etc. will be covered as per prevailing guidelines.

Copy of the Google Earth image showing disparity in complainant-given location is enclosed herewith and marked as **Annexure – D/9.**

Copy of the photograph showing traffic monitoring location near Tikayatpali Primary School is enclosed herewith and marked as **Annexure – E/9.**

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Copy of the relevant extracts of the Final EIA regarding road development is enclosed herewith and marked as **Annexure – F/9.**

16. That, as regards the submissions made in Annexure - 16 under Point No. 3, it is humbly submitted that the same are denied in their entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. As regarding the allegations of false reporting, it is humbly submitted that the sampling dates are mentioned correctly in the base line analysis report enclosed in EIA report. However, reporting date was mentioned in the AAQ & Noise as 07.01.2021 instead of 07.01.2022 which is a typographical error. Reporting date mentioned in Ground water, surface water & soil are correctly reported as 07.01.2022.

As regards the alleged discrepancies in Surface Water Quality Report and Ground Water Analysis Report, all the samples were collected on 11.12.2021, and analysis was carried out

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between 13.12.2021 and 22.12. 2021. Parameters like Temperature, pH, EC, DO, colour were analysed at the site itself by the field chemist to ensure higher accuracy of the results. All the samples were preserved and transported in a close ice box maintaining condition strictly adhering to the standard guidelines & on 11.12.2021 as per IS 1622:1981 according to sampling inhouse SOP. Total Coliform testing was carried out as per APHA 9221 B method. As the site is located at the distance of about 273 Km from the Laboratory. The delayed incubation method has been followed as per IS 1622:1981 which specifies as per clause no. 3.3.5 in the case of delayed incubation period. The Coliform bacteria can be kept for up to 72 hours with little effect on final counts. The method is already validated in house to protect the accuracy of the result. The total Coliform was analyzed in VCSPL Lab within 48 hours of sampling strictly adhering to the above said protocol and analyzed within 72 hours as stated above with a validated

Raman Kumar

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procedure. Thus, the total coliform values for Ground water and Surface water are in permissible range in all the samples analyzed.

As regards the allegations of adopting inappropriate testing and reporting, it is humbly submitted that in Ground water standard IS 10500: 2012 Amended 2015 & 2018, standard of Phenolic compounds the acceptable limits and permissible limit for Phenolic Compounds are specified as 0.001 mg/l and 0.002 mg/l, respectively whereas in the actual analysis the phenolic compound reported as 0.02 mg/l against BDL is a typographical error instead of < 0.001 mg/L.

As regards the allegations of reporting wrong and inappropriate result, Soil samples were collected during the period October 2021 to December 2021. There was hardly any rainfall in that period for which moisture content of soil was found in the range of 0.11 to 0.83%. In EIA chapter 3 section 3.3.2, rainfall was nil during November, December & soil sampling was done

Ramanathan

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in December 2021. Soil samplings were carried out as per national guidelines wherein the moisture was reported in the range of 0.11-0.83%. The results were duly verified and true values were reported.

As regards the allegations regarding high levels of Dissolved Oxygen (DO) in surface water, it is humbly submitted that DO was found 7.8 mg/L at SW-9: Katangamunda Nala near Chandiposh village. DO was found 7.6 mg/L at SW-7: Confluence point of Brahmani River & Rukura Nala, near Jibika Village. The reason for high DO due to intermixing of water from different sources at a confluence point resulting high DO in water. The confluence point has stone barriers which causes high turbulence during collision of surface water and stone which enriches of oxygen in the water causing high DO. It is well known that Dissolved Oxygen levels are normally more in winter season as compared to summer season.

Pradipta Kumar Mohanty

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As regards the allegations regarding Biochemical Oxygen Demand, it is humbly submitted that BOD test report was found in the range of 2.0-2.9 mg/L. As per IS 2296: BOD test has been carried out at 27 ° centigrade with 3 days of incubation. Following IS standard (IS 3025 (Part 44): 1993), which clearly mentions that in Indian atmospheric condition 5 days BOD with 20 ° centigrade is not suitable.

As regards the allegations of detection of elements such as Uranium, Gold, and traces of Thorium in the area, it is humbly submitted that analysis of sample has been carried out as per the terms of reference granted vide MoEF & CC file No J-11011/59/2021-IA.II(I); Dated: 29.11.2021 for general and specific parameters of the surface water (IS 2296) and Ground water standard (IS 10500:2012, Amendment 2015, 2018). There was no specific mention in the Terms of Reference about testing of such specific elements like Uranium, Gold and Thorium.

Kumar Mohanti

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Copy of the relevant extracts of the Final EIA regarding meteorological data for October-December, 2021 is enclosed herewith and marked as **Annexure – G/9.**

Copy of the Google Earth image showing location of confluence point of Brahmani River and Rukura Nala is enclosed herewith and marked as **Annexure – H/9.**

Copy of the relevant extracts of the IS Standard regarding BOD and relevant extracts of the Terms of Reference is enclosed herewith and marked as **Annexure – I/9.**

17. That, as regards the submissions made in Annexure 16 under Point No. 4, it is humbly submitted that the same are denied in their entirety, and it is humbly prayed that the Appellants be put to strict proof of the same. It is respectfully submitted that very minor modifications were carried out in final report keeping overall project dimension same, which does not affect the overall environmental aspects

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and mitigations. Although there may be typographical error, there are no major discrepancies in draft and final EIA. ZLD (Zero Liquid Discharge) concept was proposed in the project. As there shall be no effluent discharge from the plant, therefore it will not create any additional pollution load to the soil, flora-fauna, ground water and surface water regime of the area. Air quality modeling was carried out in the whole 10 Km. radius area around the project site covering all locations of core and buffer zone and accordingly mitigation measures were suggested, which was included in Chapter-4 of the EIA report.

18. That. as regards the Prayer made in Annexure - 16 of the appeal memo, it is humbly submitted that all testing were carried out as per Ministry of Environment, Forest and Climate Change (MoEF&CC) recognition. Laboratory followed the standard testing methods, procedures and SOPs which were duly submitted to MoEF&CC

Pradipta Mohanti

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and examined by MoEF&CC during the approval process of MoEF&CC recognition. After due scrutiny, inspection and verification, MoEF&CC has accorded recognition vide letter no. F. No. 15018/57/2017-CPW dated 23.05.2019. Hence, it is humbly submitted that the Complainant's allegations are inappropriate and baseless for which the Appeal is liable to be dismissed at the outset.

19. That your Deponent craves leave to add, alter and modify its Counter Affidavit as and when required.

20. That the facts stated in the petition which are not specifically admitted are deemed to have been denied.

21. That the facts stated in this Counter Affidavit are true to the best of my knowledge and belief.

Pradipta Kumar Mohanti



Identified by
U. Patel
Advocate

Pradipta Kumar Mohanti

DEPONENT

Solemnly sworn before
me by *P.K. Mohanti*
being identified by *U. Patel, Advocate*
at Cuttack Town, Odisha, on *05/01/2026*
Pradipta Kumar Mohanti
NOTARY, CUTTACK TOWN
REGD.No-ON-04/1995
P.K. MOHANTI, Notary, Cuttack Town
Regd. No-ON-04/1995

ANNEXURE-A/9

Page No. of Appeal	
278	<p data-bbox="193 465 475 495">NH-143 IN FINAL EIA:</p> <ul style="list-style-type: none"> <li data-bbox="284 539 1485 745">✓ Connectivity- The area near the project site is marked by extensive transportation connectivity with the existence of NH-143 close to the project site (3.1 km) towards the East direction. These have attracted an immense crowd and thus the vehicular movement. Being domestic and Industrial, the roadway is very congested at maximum hours. Such close vicinity of public connectivity has engaged continuous flow of vehicles for public convenience creating a remarkable rise of the air pollutants at project site. <hr/> <p data-bbox="284 815 443 844">CHAPTER- 3</p> <p data-bbox="767 815 1169 844">VISIONTEK CONSULTANCY SERVICES</p> <p data-bbox="1369 815 1485 844">Page 24</p> <ul style="list-style-type: none"> <li data-bbox="300 889 1485 1025">✓ Santikayatpali Village (NQ-8) shows the Lowest values (day time) 40.8 Leq dB (A). At Bagiabahal Village (NQ-6) night time 42.8 Leq dB (A) is the highest value observed because in this location village road is connected to NH- 143 & lowest in night time is observed at intersection of approach road & entrance road to the project site (NQ- 2) which is 40.6 dB(A). <li data-bbox="300 1025 1485 1093">✓ The summary of the Ambient Noise Monitoring Result shows the Noise levels are mostly within the permissible limits for all the locations with respective to the various categories of the standard. <hr/> <p data-bbox="300 1120 459 1149">CHAPTER- 3</p> <p data-bbox="778 1120 1169 1149">VISIONTEK CONSULTANCY SERVICES</p> <p data-bbox="1369 1120 1485 1149">Page 29</p>

ANNEXURE-B/9

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279	<p>HABITATION:</p> <p style="text-align: center;">Table No.3.4: Ambient Air Quality Location</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Location Code</th> <th>Location Name</th> <th>Distance</th> <th>Direction</th> <th>Justification</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>AQ1</td> <td>At Project Site</td> <td>-</td> <td>-</td> <td>Source Of Pollution</td> <td>21°53'19.26"N</td> <td>84°52'28.53"E</td> </tr> <tr> <td>AQ2</td> <td>Near Approach Road Close to the Project Site</td> <td>0.10 Km</td> <td>NW</td> <td>Predominant Wind (Upwind Direction)/Near Approach Road to the Project Site / Near Dense Forest Area (Kukia RF)</td> <td>21°53'30.83"N</td> <td>84°52'13.58"E</td> </tr> <tr> <td>AQ3</td> <td>Badbahal Village</td> <td>0.41 Km</td> <td>SE</td> <td>Predominant Wind (Downwind Direction)/Near Village Road / Near Dense Forest Area (Samaradari PF)</td> <td>21°53'0.84"N</td> <td>84°52'44.12"E</td> </tr> <tr> <td>AQ4</td> <td>Nuagan Village</td> <td>1.51 Km</td> <td>S</td> <td>Crosswind Direction Village Habitation Nearby Project Site / Near Forest Area</td> <td>21°52'22.37"N</td> <td>84°52'35.61"E</td> </tr> <tr> <td>AQ5</td> <td>Kapanda Village</td> <td>1.59 Km</td> <td>SW</td> <td>Crosswind Direction Nearest Village Habitation</td> <td>21°52'35.42"N</td> <td>84°51'49.51"E</td> </tr> <tr> <td>AQ6</td> <td>Bagiabahal Village</td> <td>1.69 Km</td> <td>W</td> <td>Crosswind Direction Nearby Village Habitation Close To Kukia RF & Brahmani River</td> <td>21°53'32.36"N</td> <td>84°51'17.14"E</td> </tr> <tr> <td>AQ7</td> <td></td> <td></td> <td></td> <td>Downwind Direction/</td> <td></td> <td></td> </tr> </tbody> </table>	Location Code	Location Name	Distance	Direction	Justification	Latitude	Longitude	AQ1	At Project Site	-	-	Source Of Pollution	21°53'19.26"N	84°52'28.53"E	AQ2	Near Approach Road Close to the Project Site	0.10 Km	NW	Predominant Wind (Upwind Direction)/Near Approach Road to the Project Site / Near Dense Forest Area (Kukia RF)	21°53'30.83"N	84°52'13.58"E	AQ3	Badbahal Village	0.41 Km	SE	Predominant Wind (Downwind Direction)/Near Village Road / Near Dense Forest Area (Samaradari PF)	21°53'0.84"N	84°52'44.12"E	AQ4	Nuagan Village	1.51 Km	S	Crosswind Direction Village Habitation Nearby Project Site / Near Forest Area	21°52'22.37"N	84°52'35.61"E	AQ5	Kapanda Village	1.59 Km	SW	Crosswind Direction Nearest Village Habitation	21°52'35.42"N	84°51'49.51"E	AQ6	Bagiabahal Village	1.69 Km	W	Crosswind Direction Nearby Village Habitation Close To Kukia RF & Brahmani River	21°53'32.36"N	84°51'17.14"E	AQ7				Downwind Direction/		
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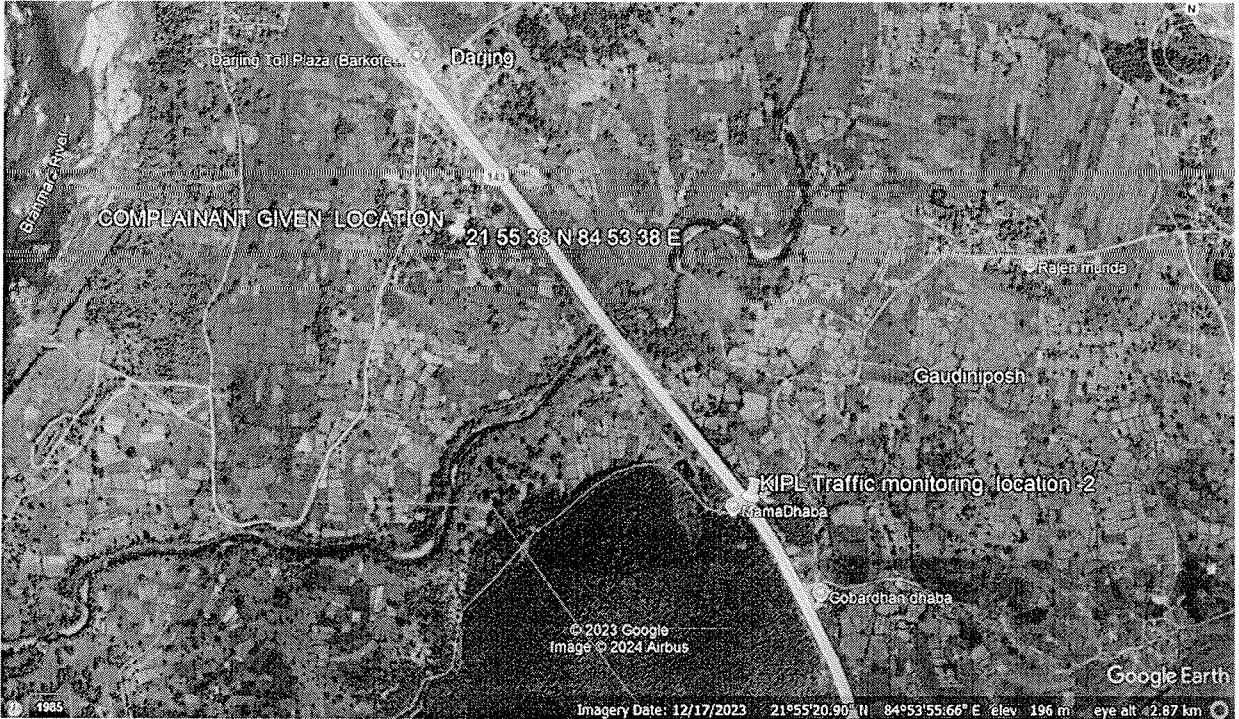
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Page No. of Appeal	Facts/Submission																								
280	<p>FOREST:</p> <p>Draft Report page no 3 of Chapter-3:</p> <table border="1" data-bbox="193 663 1437 1178"> <tr> <td data-bbox="193 663 288 1178">5.</td> <td data-bbox="288 663 727 1178">Reserve and Protected Forests</td> <td data-bbox="727 663 1437 1178"> <p>Protected Forest: Samaradari Juniani PF (E) 0.41 km</p> <p>Reserve Forest:</p> <p>Kukia RF (NW) 0.15 km Dhenkiam RF (W) 2.6 km Nalghati Rajabasa RF (SW) 3.3 km Dhenkiam Block RF (NW) 3.74 km Bhagoth RF (SSW) 6.68 km Dhanaghar Extension RF (NNE) 6.9 km Gurundia RF (SW) 7.92 km</p> </td> </tr> </table> <p>Final Report page no 3 of Chapter-3:</p> <table border="1" data-bbox="279 1294 1449 1749"> <tr> <td data-bbox="279 1294 699 1749" rowspan="9">National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve forest, and Protected forest within 10 km radius</td> <td colspan="2" data-bbox="699 1294 1449 1373">No national parks, Wildlife Sanctuaries, Biosphere Reserves are present within 10 km radius.</td> </tr> <tr> <th data-bbox="699 1373 1118 1451">Name of the RF, PRF, PF, etc.</th> <th data-bbox="1118 1373 1449 1451">Distance (km) & Direction</th> </tr> <tr> <td data-bbox="699 1451 1118 1485">Samaradari Juniani PF</td> <td data-bbox="1118 1451 1449 1485">0.41 km (E)</td> </tr> <tr> <td data-bbox="699 1485 1118 1518">Kukia RF</td> <td data-bbox="1118 1485 1449 1518">0.12 km (NW)</td> </tr> <tr> <td data-bbox="699 1518 1118 1552">Dhenkiam RF</td> <td data-bbox="1118 1518 1449 1552">2.6 km (W)</td> </tr> <tr> <td data-bbox="699 1552 1118 1585">Nalghati Rajabasa RF</td> <td data-bbox="1118 1552 1449 1585">3.3 km (SW)</td> </tr> <tr> <td data-bbox="699 1585 1118 1619">Dhenkiam Block RF</td> <td data-bbox="1118 1585 1449 1619">3.7 km (NW)</td> </tr> <tr> <td data-bbox="699 1619 1118 1653">Bhagoth RF</td> <td data-bbox="1118 1619 1449 1653">6.6 km (SSW)</td> </tr> <tr> <td data-bbox="699 1653 1118 1686">Dhanaghar Extension RF</td> <td data-bbox="1118 1653 1449 1686">6.9 km (NNE)</td> </tr> <tr> <td data-bbox="699 1686 1118 1720">Gurundia RF</td> <td data-bbox="1118 1686 1449 1720">7.9 km (SW)</td> </tr> </table>	5.	Reserve and Protected Forests	<p>Protected Forest: Samaradari Juniani PF (E) 0.41 km</p> <p>Reserve Forest:</p> <p>Kukia RF (NW) 0.15 km Dhenkiam RF (W) 2.6 km Nalghati Rajabasa RF (SW) 3.3 km Dhenkiam Block RF (NW) 3.74 km Bhagoth RF (SSW) 6.68 km Dhanaghar Extension RF (NNE) 6.9 km Gurundia RF (SW) 7.92 km</p>	National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve forest, and Protected forest within 10 km radius	No national parks, Wildlife Sanctuaries, Biosphere Reserves are present within 10 km radius.		Name of the RF, PRF, PF, etc.	Distance (km) & Direction	Samaradari Juniani PF	0.41 km (E)	Kukia RF	0.12 km (NW)	Dhenkiam RF	2.6 km (W)	Nalghati Rajabasa RF	3.3 km (SW)	Dhenkiam Block RF	3.7 km (NW)	Bhagoth RF	6.6 km (SSW)	Dhanaghar Extension RF	6.9 km (NNE)	Gurundia RF	7.9 km (SW)
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283	<p>LOCATIONS TRAFFIC MONITORING LOCATION AND COMPLAINANT LOCATION:</p>  <p>The satellite map displays a road network with several key locations marked. At the top, 'Darjind Toll Plaza (Barkote)' and 'Darjind' are labeled. A prominent road runs diagonally from the top-left to the bottom-right. A specific location is marked with a red dot and labeled 'COMPLAINANT GIVEN LOCATION' with coordinates '21 55 38 N 84 53 38 E'. To the right of this location, 'Rajen munda' and 'Gaudiniposh' are labeled. Further down the road, 'KIPL Traffic monitoring location -2' is marked with a red dot, with 'GamaDhaba' and 'Gobardhan dhaba' nearby. The map includes a north arrow in the top right, copyright information '© 2023 Google Image © 2024 Airbus' at the bottom center, and 'Google Earth' in the bottom right. The imagery date is '12/17/2023' and the elevation is '196 m'.</p>

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284 to 285	<p data-bbox="247 817 1173 851">TRAFFIC MONITORING LOCATION NEAR TIKAYATPALI PRIMARY SCHOOL</p>  A black and white photograph showing a road with trees and a building in the background. The road is in the foreground, and there are several trees along the side. In the background, a building is visible through the trees. The image is somewhat blurry and has a grainy texture.

3X3

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<p>Page No. of Appeal</p>	<ul style="list-style-type: none"> Facts/Submission 												
<p>286 & 287</p>	<p>ROAD DEVELOPMENT: Final EIA chapter 7 page - 4</p> <table border="1"> <tr> <td data-bbox="252 689 327 734">3.</td> <td data-bbox="327 689 845 734">Peripheral Development</td> <td data-bbox="845 689 1433 734"></td> </tr> <tr> <td data-bbox="252 734 327 947"></td> <td data-bbox="327 734 845 947"> <p>a) Education: Emphasize on tribal people education and development of school infrastructure.</p> </td> <td data-bbox="845 734 1433 947"> <p>Company will support for financial assistance to the school for infrastructure development and assistance for qualified teacher deployment in the school to be made as per recommendation of school & village committee.</p> </td> </tr> <tr> <td data-bbox="252 947 327 1088"></td> <td data-bbox="327 947 845 1088"> <p>b) Road Development: Connecting road improvement from Tikayatpali to Kapanda village main plant gate.</p> </td> <td data-bbox="845 947 1433 1088"> <p>Company will take up the matter by pursuing the matter through Govt. of Odisha for the improvement on road condition and its maintenance.</p> </td> </tr> <tr> <td data-bbox="252 1088 327 1149"></td> <td data-bbox="327 1088 845 1149"> <p>c) Supply of drinking water facility Drinking water facility at nearby local</p> </td> <td data-bbox="845 1088 1433 1149"> <p>Company will provide bore well with Syntax tank for drinking water facility as</p> </td> </tr> </table> <ul style="list-style-type: none"> Final EIA chapter-4, page no-51: <div data-bbox="252 1422 1476 1742" style="border: 1px solid black; padding: 5px;"> <p>Recommendations</p> <p>The following recommendations are proposed based on the results of the various field inventories and traffic studies and results obtained from these studies.</p> <ul style="list-style-type: none"> Upgradation of internal connectivity roads from existing carriageway to two-lane roads with paved shoulder. It is recommended that quick development of road condition, proper street lights and parking area near to the main road are of utmost importance for the safety of life as well as development of nearby villages/towns. </div>	3.	Peripheral Development			<p>a) Education: Emphasize on tribal people education and development of school infrastructure.</p>	<p>Company will support for financial assistance to the school for infrastructure development and assistance for qualified teacher deployment in the school to be made as per recommendation of school & village committee.</p>		<p>b) Road Development: Connecting road improvement from Tikayatpali to Kapanda village main plant gate.</p>	<p>Company will take up the matter by pursuing the matter through Govt. of Odisha for the improvement on road condition and its maintenance.</p>		<p>c) Supply of drinking water facility Drinking water facility at nearby local</p>	<p>Company will provide bore well with Syntax tank for drinking water facility as</p>
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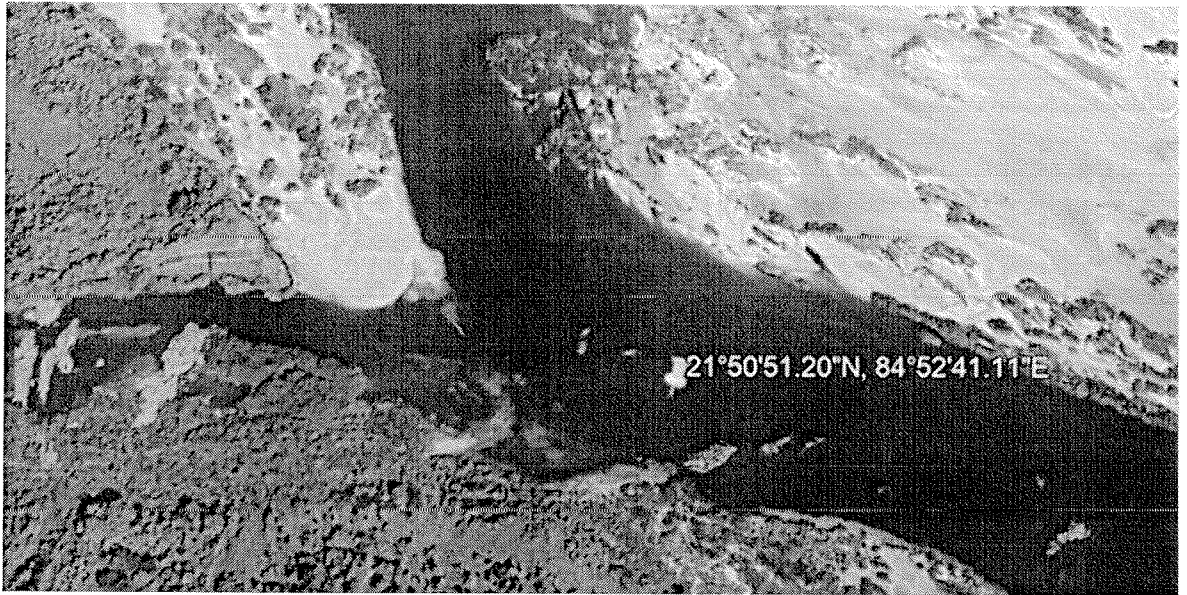
ANNEXURE-6/19

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288	<p>SOIL:</p> <p style="text-align: center;">Table 3.7- Summary of Site Specific Meteorological Data (Oct-Dec 2021)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Parameters</th> <th style="width: 15%;"></th> <th style="width: 15%;">Oct-21</th> <th style="width: 15%;">Nov-21</th> <th style="width: 15%;">Dec-21</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Temperature (°C)</td> <td>Minimum</td> <td>19.5</td> <td>15.2</td> <td>9.4</td> </tr> <tr> <td>Maximum</td> <td>36.4</td> <td>33.6</td> <td>33.9</td> </tr> <tr> <td>Average</td> <td>26.8</td> <td>24.2</td> <td>21.6</td> </tr> <tr> <td rowspan="3">Relative Humidity (%)</td> <td>Minimum</td> <td>46.0</td> <td>44.0</td> <td>40.0</td> </tr> <tr> <td>Maximum</td> <td>99.0</td> <td>97.0</td> <td>91.0</td> </tr> <tr> <td>Average</td> <td>70.7</td> <td>68.7</td> <td>67.5</td> </tr> <tr> <td>Wind Speed (m/Sec)</td> <td>Average</td> <td>1.03</td> <td>0.9</td> <td>0.92</td> </tr> <tr> <td rowspan="11">Wind Direction (%)</td> <td>E</td> <td>0.7</td> <td>0.8</td> <td>0.8</td> </tr> <tr> <td>ENE</td> <td>0.5</td> <td>0</td> <td>0.3</td> </tr> <tr> <td>ESE</td> <td>0.4</td> <td>1.3</td> <td>2.4</td> </tr> <tr> <td>N</td> <td>1.2</td> <td>4.2</td> <td>5.5</td> </tr> <tr> <td>NE</td> <td>15.2</td> <td>16.6</td> <td>15.4</td> </tr> <tr> <td>NNE</td> <td>0.8</td> <td>2.4</td> <td>0.7</td> </tr> <tr> <td>NNW</td> <td>6.5</td> <td>6</td> <td>6</td> </tr> <tr> <td>NW</td> <td>20</td> <td>21.1</td> <td>16.6</td> </tr> <tr> <td>S</td> <td>2.7</td> <td>0</td> <td>0.4</td> </tr> <tr> <td>SE</td> <td>7.8</td> <td>7.6</td> <td>7.2</td> </tr> <tr> <td>SSE</td> <td>1.6</td> <td>0.4</td> <td>1</td> </tr> <tr> <td rowspan="6"></td> <td>SSW</td> <td>1.6</td> <td>0.4</td> <td>0.5</td> </tr> <tr> <td>SW</td> <td>5.9</td> <td>1.8</td> <td>1.2</td> </tr> <tr> <td>W</td> <td>2</td> <td>2.2</td> <td>2.8</td> </tr> <tr> <td>WNW</td> <td>3.2</td> <td>3.4</td> <td>3.9</td> </tr> <tr> <td>WSW</td> <td>0.9</td> <td>1</td> <td>0.8</td> </tr> <tr> <td>CALM</td> <td>45.6</td> <td>51.4</td> <td>49.3</td> </tr> <tr> <td rowspan="2">Cloud Cover (%)</td> <td>Minimum</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Maximum</td> <td>6</td> <td>7</td> <td>8</td> </tr> <tr> <td>Rainfall (mm)</td> <td>Monthly Total</td> <td>27.0</td> <td>0.0</td> <td>0.0</td> </tr> </tbody> </table>	Parameters		Oct-21	Nov-21	Dec-21	Temperature (°C)	Minimum	19.5	15.2	9.4	Maximum	36.4	33.6	33.9	Average	26.8	24.2	21.6	Relative Humidity (%)	Minimum	46.0	44.0	40.0	Maximum	99.0	97.0	91.0	Average	70.7	68.7	67.5	Wind Speed (m/Sec)	Average	1.03	0.9	0.92	Wind Direction (%)	E	0.7	0.8	0.8	ENE	0.5	0	0.3	ESE	0.4	1.3	2.4	N	1.2	4.2	5.5	NE	15.2	16.6	15.4	NNE	0.8	2.4	0.7	NNW	6.5	6	6	NW	20	21.1	16.6	S	2.7	0	0.4	SE	7.8	7.6	7.2	SSE	1.6	0.4	1		SSW	1.6	0.4	0.5	SW	5.9	1.8	1.2	W	2	2.2	2.8	WNW	3.2	3.4	3.9	WSW	0.9	1	0.8	CALM	45.6	51.4	49.3	Cloud Cover (%)	Minimum	0	0	0	Maximum	6	7	8	Rainfall (mm)	Monthly Total	27.0	0.0	0.0
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DO:

BOD:

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RELEVANT INDIAN STANDARDS

Table 9.1. Surface Water Quality Standards (as per IS: 2296).

Class A – Drinking water without conventional treatment but after disinfection. Class B – Water for outdoor bathing. Class C – Drinking water with conventional treatment followed by disinfection. Class D – Water for fish culture and wild life propagation. Class E – Water for irrigation, industrial cooling and controlled waste disposal. (Unobj = Unobjectionable).

Sl	Parameter and Unit	A	B	C	D	E
1	Taste	None	--	--	--	--
2	Odour	Unobj	--	--	--	--
3	Colour (True) (Hazen unit)	10	300	300	--	--
4	pH (max) (min : 6.5)	8.5	8.5	8.5	8.5	8.5
5	Conductivity (25oC) uS/cm	--	--	--	1000	2250
6	DO (mg/L) (minimum)	6	5	4	4	--
7	BOD (3d, 27oC) (mg/L)	2	3	3	--	--

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IS standard (IS 3025 (Part 44) : 1993),

Biochemical Oxygen Demand (BOD) is the most important parameter to determine the degree of pollution in lakes and streams at any time and their self purification capacities, assess the biodegradable organic load of the wastewaters for design of wastewater management system and thereafter to evaluate the efficiency of the same. As per definition BOD of a sample is defined as the amount of oxygen required by the micro-organisms to oxidise the organic matter by aerobic microbial decomposition to stable inorganic forms at some standard time and temperature. As per recommendations of the Royal Commission of Great Britain standard conditions are laid down as 20°C and 5 days. The standard temperature of 20°C is based on the average aquatic temperature of Great Britain and 5 days incubation period with an assumption that most of the carbonaceous organic demand is satisfied during this period. The BOD test is being carried out with these standard conditions for nearly 3 decades throughout the world and our country is no exception.

However, it is felt that 20°C is not a universal average temperature and particularly for a tropical country like India where the temperatures of surface water in rivers, lakes, etc, vary from 20 to 35°C in different seasons and in different parts of the country. The average aquatic temperature in our country is around 27°C. Hence, to be more realistic to the Indian aquatic environment the technical committee responsible for formulation of this standard felt necessary to establish a higher temperature and thereby lower incubation period which would yield BOD values comparable to the standard conditions of 20°C and 5 days.

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<p>Surface Water Quality</p>	<p>Frequency: Once during the study period (Three Month) Parameters: Colour, pH, Dissolved Oxygen (min), Conductivity, Total Hardness, Turbidity, Chlorine (Cl⁻), Total Dissolved Solids, Oil & Grease (max), BOD (3) days at 27°C (max), Chemical Oxygen Demand (COD), Arsenic (As), Lead (Pb), Cadmium (Cd) (max), Hexa Chromium as Cr⁺⁶, Copper (Cu) (max), Zinc (Zn) (max), Selenium (Se) (max), Cyanide (CN) (max), Fluoride (F), Sulphates (SO₄⁻), Calcium (Ca), Magnesium (Mg), Manganese (Mn), Boron (B), Mercury (Hg), Phenolic Compounds as C₆H₅OH (max), Iron (Fe) (max), Nitrate (NO₃), Anionic Detergents (max), Total Coliform. Locations: 11 locations within the study area covering major surface water bodies.</p>
<p>Ground Water Quality</p>	<p>Frequency: Once during the study period (Three Month) Parameters: Color, Odour, Taste, Turbidity, pH, Total Hardness (as CaCO₃), Iron (Fe), Chloride (Cl⁻), Residual Free Chlorine, Total Dissolved Solids as TDS, Calcium (Ca), Magnesium (Mg), Copper (Cu), Manganese (Mn), Sulphate (SO₄⁻), Nitrate (NO₃), Fluoride (F), Phenolic Compounds as C₆H₅OH, Mercury (Hg), Cadmium (Cd), Selenium (Se), Arsenic (As), Cyanide (CN), Lead (Pb), Zinc (Zn), Total Chromium as Cr, Mineral Oil, Alkalinity, Aluminium (Al), Boron (B), Total Coliform as TC, Amonia Total, Barium (Ba), Molybdenum (Mo), Nickel (Ni), PAH & Pesticide.</p>

Part A