

TFL/Talcher/ADGF/01/2025/1544

15.01.2025

**The Additional Director General of Forests (C),
Ministry of Environment, Forests and Climate Change,
Regional Office (EZ), A/3 Chandrasekharapur,
Bhubaneswar- 751023
Odisha.**

Sub: Submission of six-monthly compliance report pertaining to M/S Talcher Fertilizers Ltd. for setting up Ammonia & Urea Fertilizer Plant at Village-Vikrampur, Tahsil- Talcher, District- Angul, Odisha.

Ref: File No. J-11011/231/2013-IA-II(I), MoEF&CC (IA-II Section)
Environmental Clearance dated 09.02.2018

Dear Sir,

Reference to the above subject, we have obtained Environmental Clearance on 09.02.2018 vide reference cited. To comply certain conditions of the said EC, we herewith submitting half yearly compliance report of the conditions imposed in the said EC issued for the said project for the period of May,2024 to October,2024.

We request you to acknowledge the receipt of the same.

Thanking you,

Yours faithfully,



(D.P.Biswajit)

Manager,

Talcher Fertilizers Limited

D.P. Biswajit
Manager (Instrumentation)
Talcher Fertilizers Limited
Talcher, Odisha

Copy to:

1. Member Secretary, Odisha Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VII, Bhubaneswar - 751012 (Odisha).
2. Zonal Office, CPCB, Kolkata.
3. Regional Office, OSPCB, Angul S-3/3, Industrial Estate, Angul-759143, Odisha.

SIX-MONTHS COMPLIANCE STATUS REPORT May 2024–October 2024

TALCHER FERTILIZERS LIMITED VILLAGE - VIKRAMPUR THESIL-TALCHER DISTRICT-ANGUL, ODISHA

Nitya Laboratories Building and Road, Material, Soil, Environmental and Calibration Lab

An ISO : 9001:2015, ISO : 14001:2015 & OHAS : 18001:2007 Certified Company

(Accredited By NABL, MoEF & CC Recognised)

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INTRODUCTION ABOUT THE INDUSTRY

In 1971 The Fertilizer Corporation of India Ltd.(FCIL), set up Talcher Unit over an area of 902 acres in the district of Angul, Odisha which is located about 126 km away from Bhubaneswar to produce urea using coal as feed stock. Licensor for the Coal gasification was M/s Krupp Koppers, Germany and for Ammonia and Urea units Ammonia synthesis, M/s Technimont, Italy.

Commercial Production of Ammonia and Urea commenced on 01.11.1980 with Ammonia and Urea production capacity of 900 and 1500 Tons per day respectively. However due to frequent power restriction, obsolete and mismatch of technology and precarious steam balance the plant could not be sustained. The Board for Industrial and Financial Reconstruction (BIFR) declared the FCIL sick in 1992 and in 2002 Government of India initiated actions to close the company.

Due to shortage of domestic Urea and availability of large land banks, infrastructure and tied-up rail, water & electricity in the units of FCIL, GoI in the year 2007 decided to revive all units of FCIL. Government of India approved Policy for new Investments in the Urea Sector in September 2008 and constituted Empowered Committee of Secretaries (ECOS) in October 2008 with the mandate to evaluate all options of revival of closed units of FCIL/HFCL and to make suitable recommendations for consideration of the Government. In August, 2011, the Cabinet Committee on Economic Affairs (CCEA) had approved the Draft Rehabilitation Scheme (DRS) for revival of all the Units of FCIL and HFCL. DRS envisaged revival of Talcher Unit by the consortium of M/s. Rashtriya Chemical & Fertilizers Limited (RCF), M/s Coal India Limited (CIL) and M/s GAIL (India) Ltd. (GAIL).

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Project-Talcher Fertilizers Limited, Talcher, Odisha.**EC Letter No.-F.No.J-11011/231/2013-IA-II(I) dated 9th February, 2018****A. STATUTORY COMPLIANCE:**

S.No.	Conditions	Compliance
1	In view of the baseline air quality data for PM10 already exceeding the prescribed standards, one more season data to be collected to confirm the consistency of readings/values, and for suggesting Mitigating measures accordingly.	<ul style="list-style-type: none"> Monitoring of PM10 has been completed for the period May 2024 to October 2024. Copy of the same is enclosed in this report.
2	The project proponent shall, take stringent mitigating measures to minimize the incremental concentration of air pollutants (Mainly PM10& PM2.5) to the extent possible due to the proposed industrial operations.	As the monitored results are well within the specified limits no additional measures are proposed to be installed.
3	The project proponent shall develop local air quality management plan in consultation with SPCB and implemented to achieve desired standards.	Compliance Assured
4	The incremental ground level concentrations (GLCs) for PM10, PM2.5, SO2 & NO2 due to the increased vehicular and Other allied/developmental activities, shall be analyzed and reported for actual impact of the project, besides remedial measures.	<p>Compliance Assured</p> <ul style="list-style-type: none"> To check the incremental increase in air pollutant during construction phase, two monitoring stations were selected in the project site. The data is included in this report. As indicated in EIA the major transport of raw material will be by conveyor and hence no impact on GLC due to transport is expected
5	Consent to Establish /Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Consent to Establish (CTE) is obtained from the Office of the State Pollution Control Board, Odisha, vide No.12951/IND-II-NOC-6253 dated:30.11.2019.The same enclosed as Annexure-II
6	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.	Feasibility study for ZLD will be undertaken and appropriate treatment / recycling method will be selected to achieve ZLD.
7	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules,2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Compliance Assured .It will be obtained in consent to operate.
8	National Emission Standards for Organic Chemicals Manufacturing industry issued by the Ministry vide G,S,R, 608(E) dated 21st July, 2010 and amended from time to time shall be followed.	Compliance Assured.
9	To control source suitable pollution and the control Fugitive emissions, devices shall be installed to meet the prescribed norms and/or the NMQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Plants will be designed with state of Art technologies with inbuilt pollution control systems so that the prescribed norms and fugitive emissions will be under control.

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10	Total fresh water requirement shall not exceed 49200cum/day to be met from surface water from Brahmini River. Prior permission in this regard shall be obtained from the concerned regulatory authority.	<ul style="list-style-type: none"> • Fresh Water source will be received from the stipulated source. • And all necessary permissions will be ensured prior to installation of the project.
11	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Compliance Assured.
12	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc., Flame arresters shall be provided on tank farm and solvent transfer through pumps.	Compliance Assured.
13	ETP sludge, process inorganic & evaporation salt, if any, shall be disposed of to the TSDF.	Compliance Assured.
14	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and imports of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Compliance Assured.
15	The company shall undertake waste mini mization measures as below: <ul style="list-style-type: none"> a) Metering and control of quantities of active ingredients to minimize waste. b) Re use of by-products from the process as raw materials or as raw material substitutes in other processes. c) Use of automated filling to minimize spillage d) Use of Close Feed system into batch reactors. e) Venting equipment through vapour recovery system. f) Use of high-pressure hoses for equipment. 	<p>Compliance Assured.</p> <p>Compliance Assured.</p> <p>Compliance Assured.</p> <p>Compliance Assured.</p> <p>Compliance Assured.</p> <p>Compliance Assured.</p>
16	The green belt of 5-10m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	The project activities will be implemented in existing site of TFL with lot of greenery and the guideline of 33% area under green belt out of total project area will be achieved.
17	All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 30h August, 2017 shall be satisfactorily implemented.	CSR dept. will keep aside a sum for CSR activities for project to meet public hearing requirement to the practical extent possible for an industrial unit.
18	At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Compliance Assured.



19	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulation sand the CPCB guidelines, Acoustic enclosure shall be provided to DG set for controlling the noise pollution,	Compliance Assured.
20	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Compliance Assured.
21	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	HR and OHC Dept. will conduct regular health checkups and records for the same will be maintained as per the Factories Act.
22	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	Compliance Assured.

COMPLIANCE OF OTHER GENERIC CONDITIONS

1	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	Compliance Assured.
2	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Compliance Assured.
3	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and its hall be ensured that at least one station each is Installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Compliance Assured.
4	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed,	Compliance Assured.

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5	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Compliance Assured.
6	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Compliance Assured.
7	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Compliance Assured.
8	The company shall also comply with all the environmental protection measures and safe guards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	Compliance Assured.
9	The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.	CSR activities shall be undertaken by involving local and other stake holders.
10	The company shall undertake eco developmental measures including community well fare measures in the project area for the overall improvement of the environment.	Greenery development in the area will be undertaken. Activities shall be undertaken for Developmental measures for welfare of overall environment.
11	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management pollution control measures shall not be diverted for any other purpose.	Compliance Assured.
12	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad /Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Complied.



13	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	Compliance Assured.
14	The environmental statement for each financial year ending 31 st March in Form-Vas is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail	This will be complied after commencement of commercial production.
15	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at WebsiteoftheMinistryat http://moef.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local, news papers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Compliance done. Communicated on In local Odiya news paper and English news paper. Oriya on date 16.02.2018 in Samaj (Añgul Edition) ii) English on date 15.02.2018 in New Indian Express (Bhubaneswar Edition) Copy of the same has been submitted already.
16	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	This will be complied with. Presently, the site preparation work is under progress.



Baseline Monitoring Reports Result

(May 2024 to October 2024)



1.0 Air Quality Monitoring Report (May 2024–October 2024)

The prime objective of ambient air quality monitoring is to evaluate the existing air quality of the proposed project area. This will also be useful for assessing the conformity to standards of the ambient air quality during the operations of proposed project. This section describes the selection of sampling locations, methodology adopted for sampling, analytical techniques and frequency of sampling Meteorological conditions prevailing within study area.

Sampling and Analytical Techniques

The sampling and analytical techniques used for the monitoring of Ambient Air quality is given in Table –1.

TABLE-1: TECHNIQUES USED FOR AMBIENT AIR QUALITY MONITORING

S.No.	Parameter	Technique	Technical Protocol	Detectable Limit
1	Particulate Matter size less than 10µm (PM10), µg/m ³	Gravimetric method	IS 5182 Part-23 : 2006(Reaff.2017)	5µg/m ³
2	Particulate Matter size less than 2.5µm (PM2.5), µg/m ³	Gravimetric method	EPA-40Appendix L To Part 50	5µg/m ³
3	Sulphur Dioxide(SO ₂), µg/m ³	Improved Westand Gaeke	IS5182:Part 2:2001 (Reaff.2017)	5µg/m ³
4	Nitrogen Dioxide(NO ₂), µg/m ³	Modified Jacob & Hochheiser	IS5182:Part 6:2006 (Reaff.2017)	5µg/m ³
5	Ammonia(NH ₃), µg/m ³	GC FID	ABCTL/SOP/A05 Is. No.102-01-2015	0.1µg/m ³
6	VOCs	GC FID	U.S.EPA Method TO17: 1999	0.1µg/m ³
7	Methane Hydrocarbons (MHC)	HC Analyzer for Spot Concentration	ABCTL/SOP/A15 Is.No.102-01-2015	0.1µg/m ³
8	Non-Methane Hydrocarbons(NMHC)	HC Analyzer for Spot Concentration	ABCTL/SOP/A15 Is.No.102-01-2015	0.1µg/m ³



Frequency and Parameters

On each sampling day, 1 set of 24 hours / 8hour average samples was collected. The following air pollution parameters were measured by sampling during the sampling period.

1. Particulate matter (PM₁₀)
2. Particulate matter (PM_{2.5})
3. Sulphur dioxide (SO₂)
4. Oxides of nitrogen (NO_x)
5. Ammonia
6. VOC

Sampling and Analytical Procedure

A brief description of the sampling and analytical procedures followed during the ambient air quality survey is as follows:

Particulate Matter (PM₁₀)

The sampling of ambient air for evaluating PM₁₀ levels were performed with AAQM Sampler fitted with a cyclone separator. Air exiting the separator is drawn at a measured rate through pre-weighed glass fiberfilter sheets of 20 cm x 25 cm sizes. The concentration of PM₁₀ were computed from the average air flow rate, sampling period and the mass of particulate matter collected over the filter surface.

Particulate Matter (PM_{2.5})

PM_{2.5} is determined as per USEPA (United State Environment Protection Agency) guidelines with the help of Fine Dust Sampler (AAQM). Ambient air @ 16.67 lpm is allowed to pass through Louvered inlet and WINS Impactor assembly having a 37mm dia. filter paper. Particulate matter of size <2.5 microns is deposited on 46.2mm dia. PTFE filter. The difference of final weight and initial weight of filter paper gives the weight of particulate matter of size <2.5 microns. The concentration of PM_{2.5} is computed as the weight of dust deposited on the filter divided by volume of air sampled.

Sulphur Dioxide (SO₂)

The sampling of ambient air for evaluating the gaseous pollutants were performed with a Multigas Sampler, using the vacuum created by the AAQM Sampler for drawing the air samples through the impingers. For SO₂, air was drawn at a measured and controlled rate of 400 to 500 ml/min & passed through a solution of potassium tetrachloromercurate (TCM). After sampling, the absorbing reagent was treated with dilute solutions of sulfamic acid, formaldehyde and para-rosaniline hydrochloride. The absorbance of the intensely coloured para-rosaniline methyl sulphonic acid was measured at the wavelength of 560 nm using spectrophotometer and the amount of SO₂ in the sample was computed. The ambient SO₂ concentrations were computed from the amount of SO₂ collected and the volume of air sampled.

Oxides of Nitrogen (NO_x)

Air was drawn at a measured and controlled rate of about 200 ml/minute through an orifice-tipped impinger containing solutions of sodium hydroxide and sodium arsenite. After completion of the sampling, an aliquot of the used absorbing solution was treated with solutions of H₂O₂, sulphanilamide and NEDA. The nitrite ion present in the impinger was calculated from the absorbance of the resulting solution measured at 540 nm using spectrophotometer. The ambient NO_x concentrations were computed from the total nitrite ion present in the impingers, overall efficiency of the impinger and the procedure, and the volume of air sampled.

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Ammonia (NH₃)

The ambient air is collected through AAQM fitted with two Midget impingers containing 10 ml absorbing solution i.e. dilute Sulphuric acid in each (one for blank) at the rate of 1.0 l/min for a period of 10-15 minutes. Ammonium sulphate solution thus formed is treated with Nessler reagent to produce yellow-brown colour complex. The Ammonia concentration is determined by spectrophotometer at 440 nm and comparing it with a standard curve.

Results

The observations made on air quality parameters at 06 locations have been presented through Table-4 to 9. Minimum and maximum values, arithmetic mean values and 98th percentile values of the 24 hour / 8 hour average concentrations have also been computed and presented.



Selection of Sampling Locations:

The baseline status of the ambient air quality has been assessed through a scientifically designed ambient air quality monitoring network. The design of monitoring network in the air quality surveillance program has been based on the following considerations:

- Topography/Terrain of the study area
- History of wind pattern
- Human Settlements
- Health status
- Accessibility of monitoring site
- Resource Availability
- Representativeness of the region for establishing baseline status
- Representativeness with respect to likely impact areas

Accordingly, an ambient air quality monitoring was conducted at 06 locations during the period of 1st May 2024 to 31st October 2024.

(May 2024 –October 2024).The location of ambient air sampling stations has been presented below in Table2 & Table 3.

Table2: Details of sampling locations

S.No.	Location Name	With respect to project site	
		Direction	Distance
1	TFL Admin Building	-	-
2	H.B. Colony	ENE	1.2 km
3	TFL Guest House	-	-
4	Balanda Village	NW	2.5km
5	Karanapur Village	W	4.5km
6	Kukudanga Village	SW	2.5km

Table3: Details of Air Quality Monitoring Locations (May 2024 to October 2024)

S.No.	Sample Code	Sampling Locations	Geographical Locations
1	TFL/A1	TFL Admin Building	20°54'42.8"N , 85°09'38.4"E
2	TFL/A2	H.B Colony	20°54'19.3"N, 85°10'20.4"E
3	TFL/A3	TFL Guest House	20°54'14.8"N, 85°09'56.9"E
4	TFL/A4	Balanda Village	20°55'31.0"N, 85°09'26.8"E
5	TFL/A5	Karanapur Village	20°54'26.4"N, 85°07'06.1"E
6	TFL/A6	Kukudanga Village	20°53'23.3"N, 85°08'50.8"E

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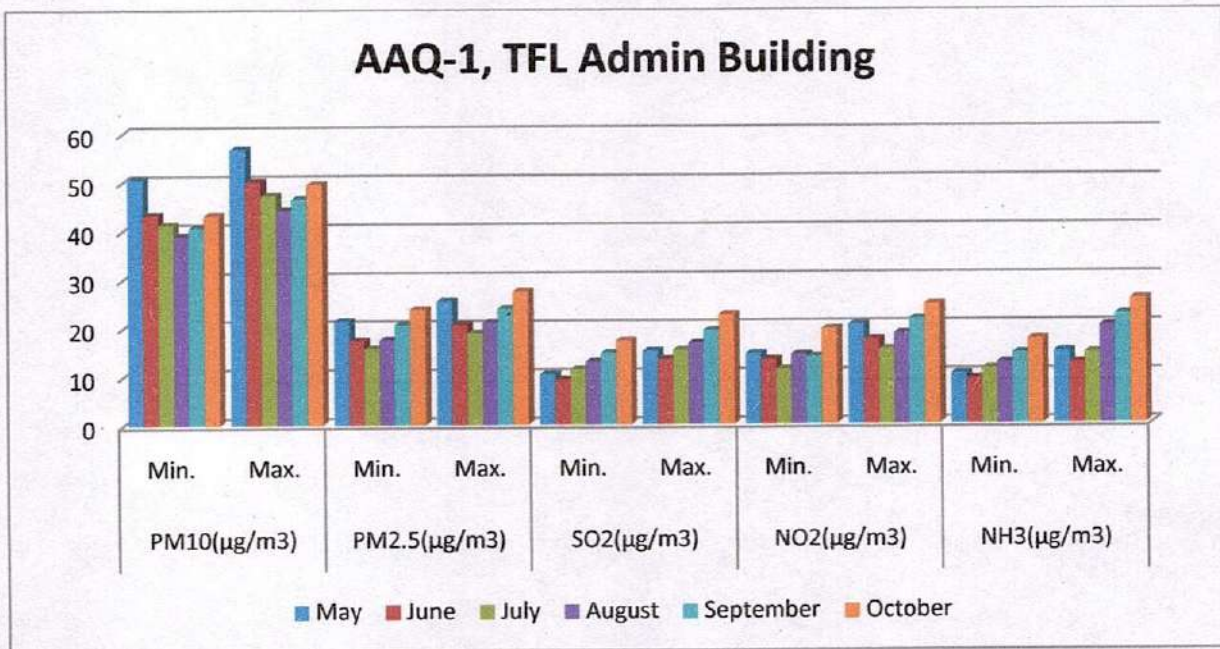


Ambient Air Quality Monitoring Results

AAQ1-TFLAdmin Building

Months	PM10($\mu\text{g}/\text{m}^3$)		PM2.5($\mu\text{g}/\text{m}^3$)		SO2($\mu\text{g}/\text{m}^3$)		NO2($\mu\text{g}/\text{m}^3$)		NH3($\mu\text{g}/\text{m}^3$)		VOC ($\mu\text{g}/\text{m}^3$)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
May	50.53	56.78	21.30	25.36	10.27	15.00	14.40	20.40	10.20	14.80	0
June	43.21	50.12	17.20	20.49	9.12	13.24	13.15	17.25	9.10	12.35	0
July	41.20	47.20	15.60	18.80	11.20	15.20	11.20	15.20	11.20	14.50	0
August	38.90	44.20	17.40	20.90	12.80	16.60	14.20	18.50	12.50	20.10	0
September	40.50	46.50	20.50	23.80	14.60	19.20	13.70	21.50	14.40	22.40	0
October	43.20	49.50	23.70	27.40	17.20	22.50	19.50	24.60	17.40	25.50	0
NAAQ Standards	100		60		80		80		400		

Graphical Representation

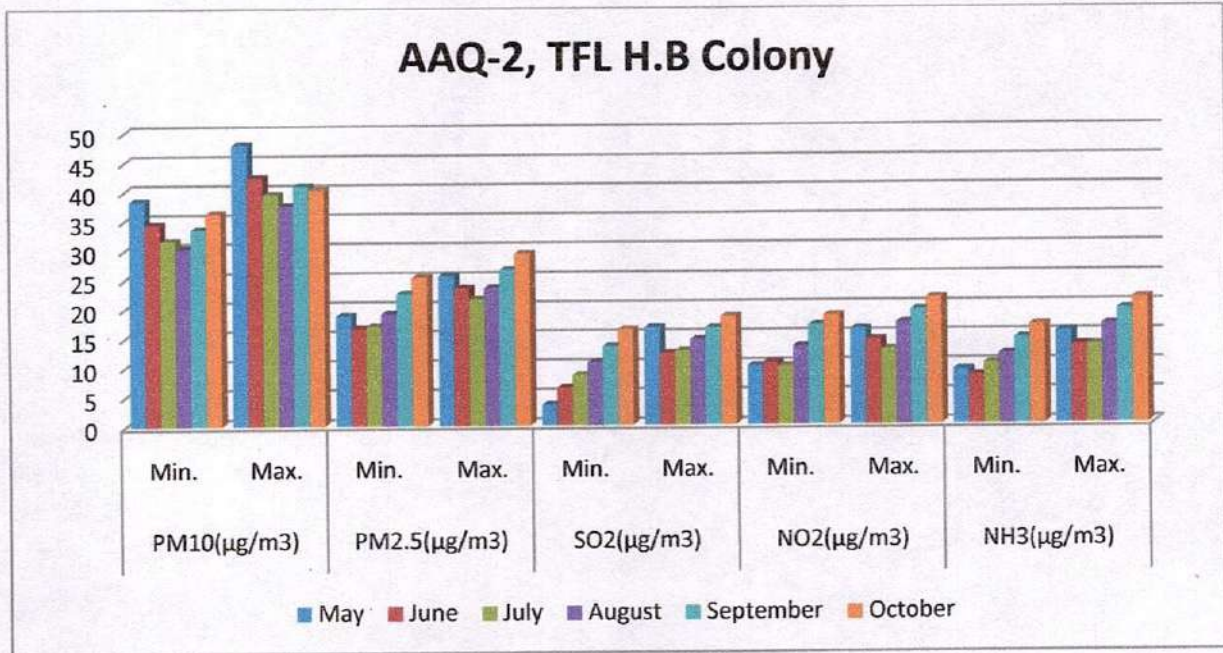


Ambient Air Quality Monitoring Results

AAQ2-TFL H.B Colony

Months	PM10($\mu\text{g}/\text{m}^3$)		PM2.5($\mu\text{g}/\text{m}^3$)		SO2($\mu\text{g}/\text{m}^3$)		NO2($\mu\text{g}/\text{m}^3$)		NH3($\mu\text{g}/\text{m}^3$)		VOC ($\mu\text{g}/\text{m}^3$)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
May	38.30	47.90	18.65	25.47	3.40	16.50	9.90	16.10	9.10	15.60	0
June	34.30	42.32	16.48	23.28	6.29	12.12	10.42	14.23	8.12	13.28	0
July	31.50	39.40	16.80	21.50	8.40	12.50	9.80	12.60	10.20	13.50	0
August	30.20	37.50	19.00	23.40	10.60	14.40	13.20	17.20	11.80	16.80	0
September	33.40	40.80	22.40	26.40	13.30	16.40	16.80	19.40	14.50	19.40	0
October	36.20	40.20	25.20	29.20	16.20	18.40	18.50	21.50	16.80	21.30	0
NAAQ Standards	100		60		80		80		400		

Graphical Representation

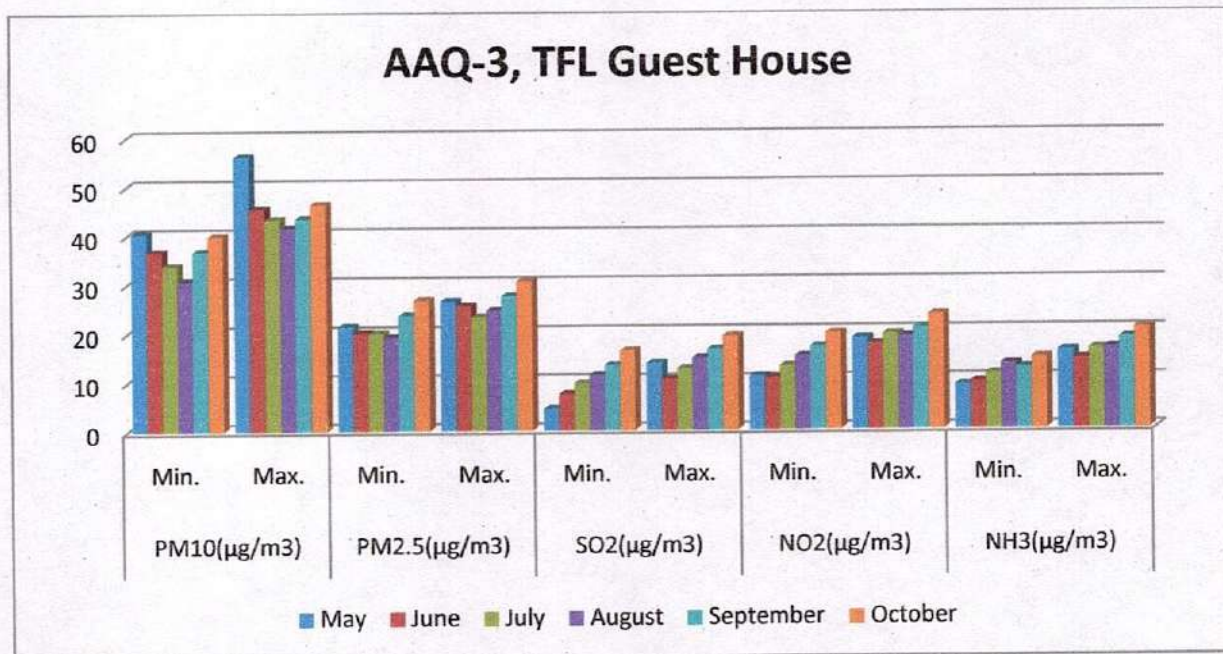


Ambient Air Quality Monitoring Results

AAQ3-TFL Guest House

Months	PM10($\mu\text{g}/\text{m}^3$)		PM2.5($\mu\text{g}/\text{m}^3$)		SO2($\mu\text{g}/\text{m}^3$)		NO2($\mu\text{g}/\text{m}^3$)		NH3($\mu\text{g}/\text{m}^3$)		VOC ($\mu\text{g}/\text{m}^3$)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
May	40.40	56.10	21.25	26.39	4.30	13.60	10.90	18.60	8.90	15.90	0
June	36.59	45.43	19.85	25.48	7.32	10.31	10.39	17.32	9.53	14.21	0
July	33.80	43.20	19.80	23.20	9.50	12.40	12.90	19.40	11.20	16.20	0
August	30.60	41.50	19.00	24.50	11.20	14.60	14.90	18.90	13.20	16.40	0
September	36.60	43.30	23.50	27.40	13.20	16.40	16.80	20.60	12.40	18.40	0
October	39.80	46.30	26.60	30.40	16.20	19.10	19.60	23.40	14.50	20.50	0
NAAQ Standards	100		60		80		80		400		

Graphical Representation

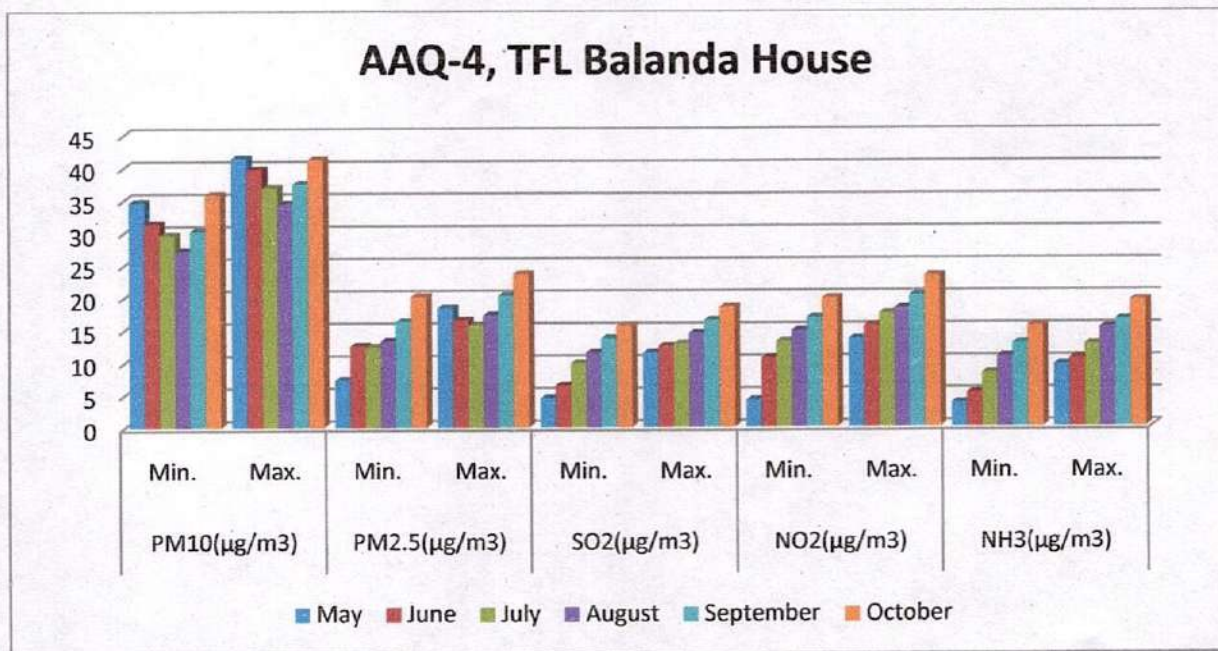


Ambient Air Quality Monitoring Results

AAQ4-TFL Balanda House

Months	PM10($\mu\text{g}/\text{m}^3$)		PM2.5($\mu\text{g}/\text{m}^3$)		SO2($\mu\text{g}/\text{m}^3$)		NO2($\mu\text{g}/\text{m}^3$)		NH3($\mu\text{g}/\text{m}^3$)		VOC ($\mu\text{g}/\text{m}^3$)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
May	34.60	41.40	7.25	18.32	4.40	11.40	4.10	13.50	3.60	9.50	0
June	31.28	39.68	12.49	16.43	6.37	12.41	10.54	15.46	5.12	10.43	0
July	29.60	36.80	12.30	15.60	9.80	12.80	13.10	17.40	8.20	12.60	0
August	27.20	34.40	13.20	17.20	11.40	14.40	14.80	18.20	10.80	15.20	0
September	30.20	37.40	16.20	20.20	13.60	16.40	16.80	20.20	12.80	16.40	0
October	35.80	41.20	20.10	23.60	15.50	18.40	19.80	23.30	15.50	19.40	0
NAAQ Standards	100		60		80		80		400		

Graphical Representation

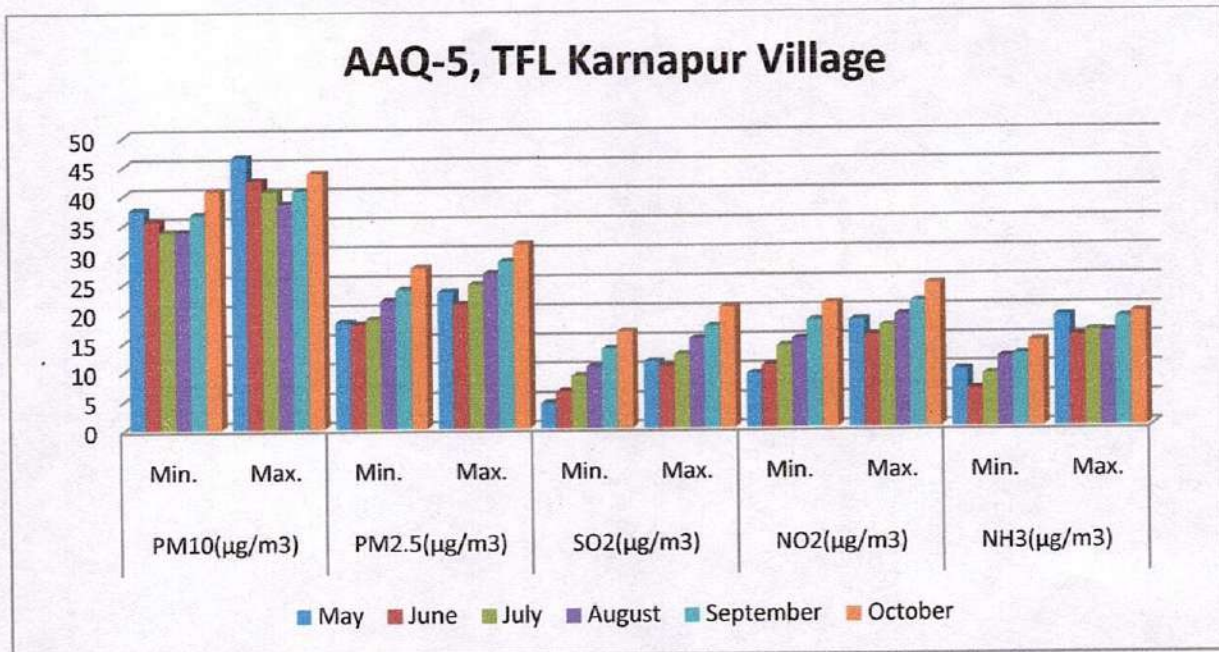


Ambient Air Quality Monitoring Results

AAQ5-TFL Karnapur Village

Months	PM10($\mu\text{g}/\text{m}^3$)		PM2.5($\mu\text{g}/\text{m}^3$)		SO2($\mu\text{g}/\text{m}^3$)		NO2($\mu\text{g}/\text{m}^3$)		NH3($\mu\text{g}/\text{m}^3$)		VOC ($\mu\text{g}/\text{m}^3$)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
May	37.40	46.40	18.11	23.28	4.20	11.20	9.10	18.20	9.60	18.80	0
June	35.46	42.35	17.69	21.14	6.12	10.39	10.46	15.54	6.24	15.25	0
July	33.60	40.50	18.60	24.50	8.80	12.40	13.80	17.20	8.80	16.20	0
August	33.60	38.40	20.90	26.40	10.40	15.10	15.00	19.10	11.80	16.00	0
September	36.60	40.50	23.60	28.40	13.40	17.20	18.20	21.30	12.20	18.40	0
October	40.60	43.60	27.40	31.40	16.40	20.50	21.10	24.40	14.50	19.40	0
NAAQ Standards	100		60		80		80		400		

Graphical Representation

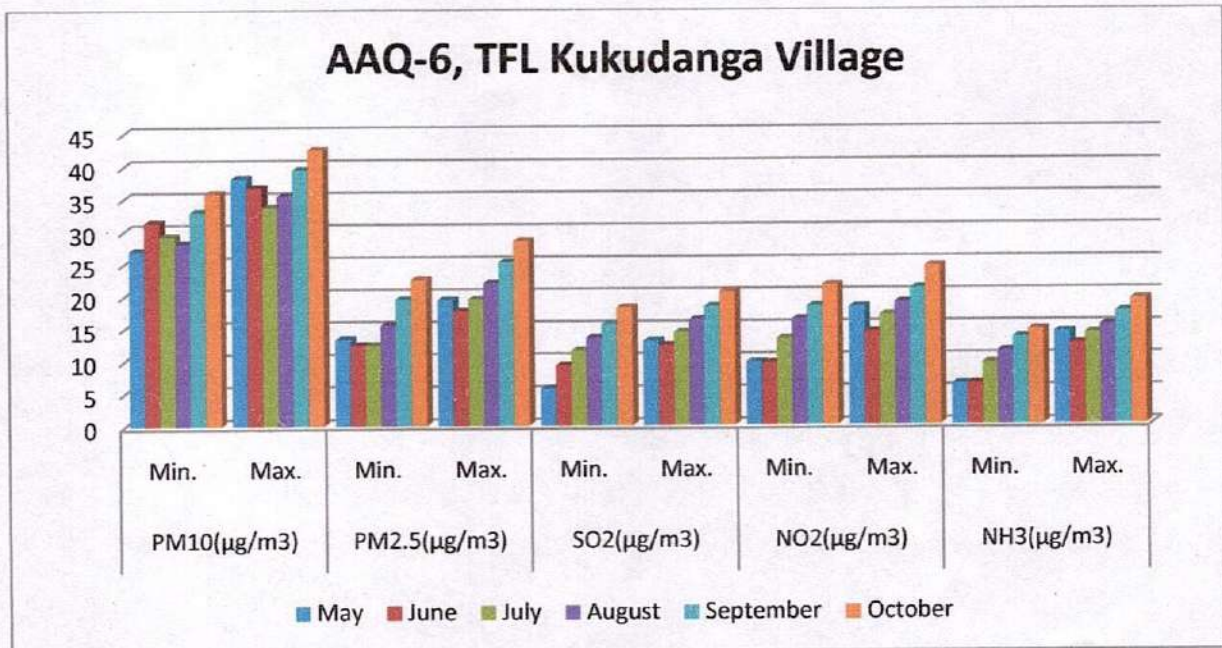


Ambient Air Quality Monitoring Results

AAQ6-TFL Kukudanga Village

Months	PM10($\mu\text{g}/\text{m}^3$)		PM2.5($\mu\text{g}/\text{m}^3$)		SO2($\mu\text{g}/\text{m}^3$)		NO2($\mu\text{g}/\text{m}^3$)		NH3($\mu\text{g}/\text{m}^3$)		VOC ($\mu\text{g}/\text{m}^3$)
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
May	27.00	38.10	13.19	19.32	5.60	12.90	9.60	18.10	6.10	14.10	0
June	31.29	36.56	12.28	17.59	9.11	12.18	9.48	14.21	6.12	12.30	0
July	29.20	33.60	12.30	19.40	11.40	14.20	13.20	16.80	9.40	13.90	0
August	28.10	35.40	15.40	21.90	13.40	16.20	16.20	18.80	11.20	15.20	0
September	32.90	39.40	19.40	25.10	15.40	18.20	18.20	20.90	13.30	17.20	0
October	35.80	42.50	22.50	28.40	18.10	20.50	21.50	24.40	14.50	19.20	0
NAAQ Standards	100		60		80		80		400		

Graphical Representation



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AAQ Observations:

PM10: The maximum and minimum concentrations for PM10 were recorded as **56.78 $\mu\text{g}/\text{m}^3$** at TFL Admin Building and **27.00 $\mu\text{g}/\text{m}^3$** at Kukudanga Village.

PM2.5: The maximum and minimum concentrations for PM2.5 were recorded as **31.40 $\mu\text{g}/\text{m}^3$** at Kukudanga village and **7.25 $\mu\text{g}/\text{m}^3$** at Balanda House.

SO2: The maximum and minimum concentrations for SO2 were recorded as **22.50 $\mu\text{g}/\text{m}^3$** at TLF Admin Building and **3.40 $\mu\text{g}/\text{m}^3$** at H.B Colony.

NO2: The maximum and minimum concentrations for NO2 were recorded as **24.60 $\mu\text{g}/\text{m}^3$** at TFL Admin Building and **4.10 $\mu\text{g}/\text{m}^3$** at Balanda House.

NH3: The maximum and minimum concentrations for NH3 were recorded as **25.60 $\mu\text{g}/\text{m}^3$** at TFL Admin Building and **3.60 $\mu\text{g}/\text{m}^3$** at Balanda House

The overall concentrations of PM10, PM2.5, SO2, NO2 and NH3 were observed to be well within the standards prescribed by Central Pollution Control Board (CPCB) for industrial, Rural, Residential and other area.

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3.0 Noise Monitoring Details

Accordingly, a Noise Monitoring was conducted at 06 locations during the period of 1st May 2024 to 31st October 2024.

(May 2024 –October 2024).The location of Ambient Noise sampling stations has been presented below in Table 4 & Table 5.

Table4: Details of sampling locations

S.No.	Location Name	With respect to project site	
		Direction	Distance
1	TFL Admin Building	-	-
2	H.B. Colony	ENE	1.2 km
3	TFL Guest House	-	-
4	Balanda Village	NW	2.5km
5	Karnapur Village	W	4.5km
6	Kukudanga Village	SW	2.5km

Table5: Details of Air Quality Monitoring Locations (May 2024 to October 2024)

S.No.	Sample Code	Sampling Locations	Geographical Locations
1	TFL/N1	TFL Admin Building	20°54'42.8"N , 85°09'38.4"E
2	TFL/N2	H.B Colony	20°54'19.3"N, 85°10'20.4"E
3	TFL/N3	TFL Guest House	20°54'14.8"N, 85°09'56.9"E
4	TFL/N4	Balanda Village	20°55'31.0"N, 85°09'26.8"E
5	TFL/N5	Karanapur Village	20°54'26.4"N, 85°07'06.1"E
6	TFL/N6	Kukudanga Village	20°53'23.3"N, 85°08'50.8"E

3.1 Results

The observations made on air quality parameters at 06 locations have been presented in the test reports. Minimum and maximum values, arithmetic mean values of the 24 hour / 8 hour average concentrations have also been computed and presented.

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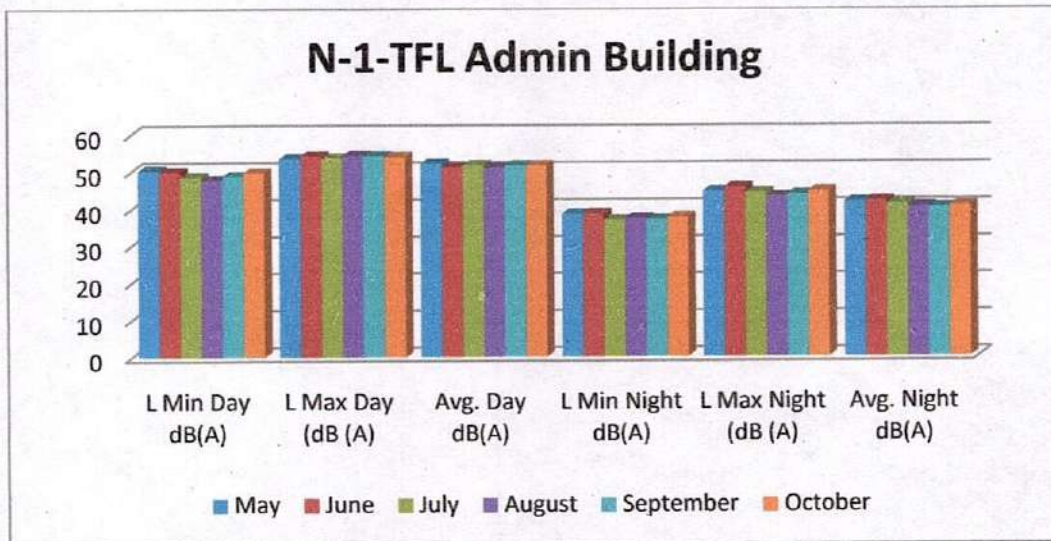


Ambient Noise Monitoring Results

N1-TFL Admin Building

Month of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
May	50.20	53.40	52.07	38.50	44.60	41.71
June	49.80	54.10	51.10	38.60	45.60	41.95
July	48.40	53.60	51.60	36.80	44.20	41.14
August	47.60	54.20	51.01	37.30	43.10	40.40
September	48.60	54.10	51.51	36.90	43.70	40.18
October	49.60	53.90	51.55	37.60	44.60	40.64

Graphical Representation



Observation:

The Noise level monitoring samplings in the TFL Admin Building are taken for 8 days for each month (May' 2024 to October' 2024). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, August month shows the highest level of **54.20 dB (A)** Day for L max Day, July month shows the minimum level of **36.80 dB (A)** Night for L min Night.

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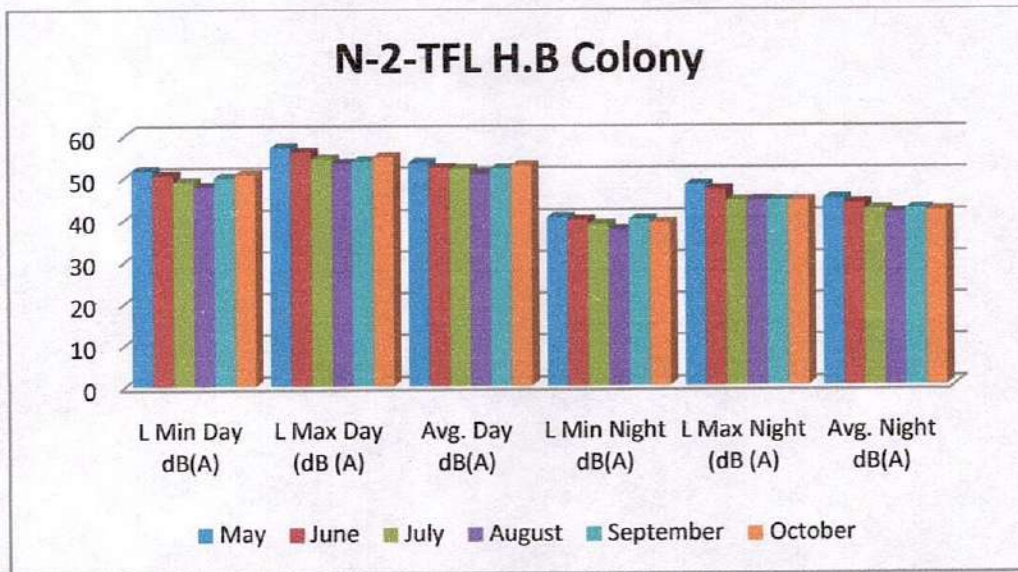


Ambient Noise Monitoring Results

N2-TFL H.B Colony

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
May	51.40	56.90	53.27	40.20	47.90	44.58
June	50.20	55.80	52.01	39.50	46.70	43.40
July	48.70	54.20	51.73	38.50	44.10	41.95
August	47.50	53.20	50.66	37.20	44.20	41.19
September	49.70	53.70	51.84	39.70	44.10	42.05
October	50.50	54.70	52.58	38.90	44.10	41.65

Graphical Representation



Observation:

The Noise level monitoring samplings in the TFL H.B Colony are taken for 8 days for each month (May' 2024 to October' 2024). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, May month shows the highest level of **56.90** dB (A) Day for L max Day, August month shows the minimum level of **37.20** dB (A) Night for L min Night.

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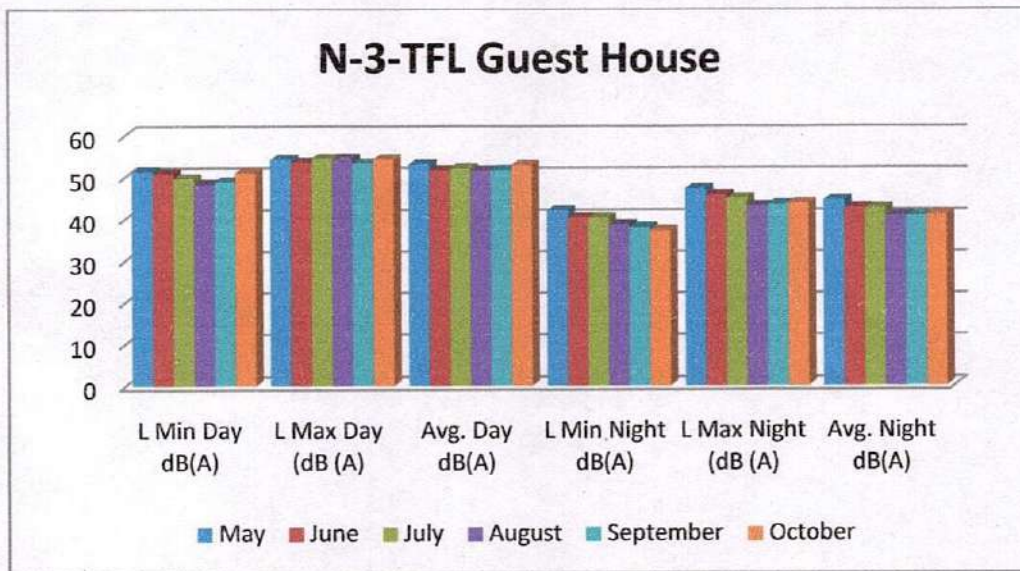


Ambient Noise Monitoring Results

N3-TFL Guest House

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
May	51.20	54.10	52.98	41.90	47.10	44.38
June	50.70	53.40	51.48	40.20	45.60	42.48
July	49.50	54.30	51.95	40.20	44.80	42.44
August	48.20	54.30	51.39	38.50	42.90	40.66
September	48.70	53.20	51.51	37.80	43.30	40.54
October	50.90	54.20	52.80	37.10	43.60	40.88

Graphical Representation

**Observation:**

The Noise level monitoring samplings in the TFL Gust House are taken for 8 days for each month (May' 2024 to October' 2024). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, June month shows the highest level of **54.40** dB (A) Day for L max Day, Oct month shows the minimum level of **37.10** dB (A) Night for L min Night.

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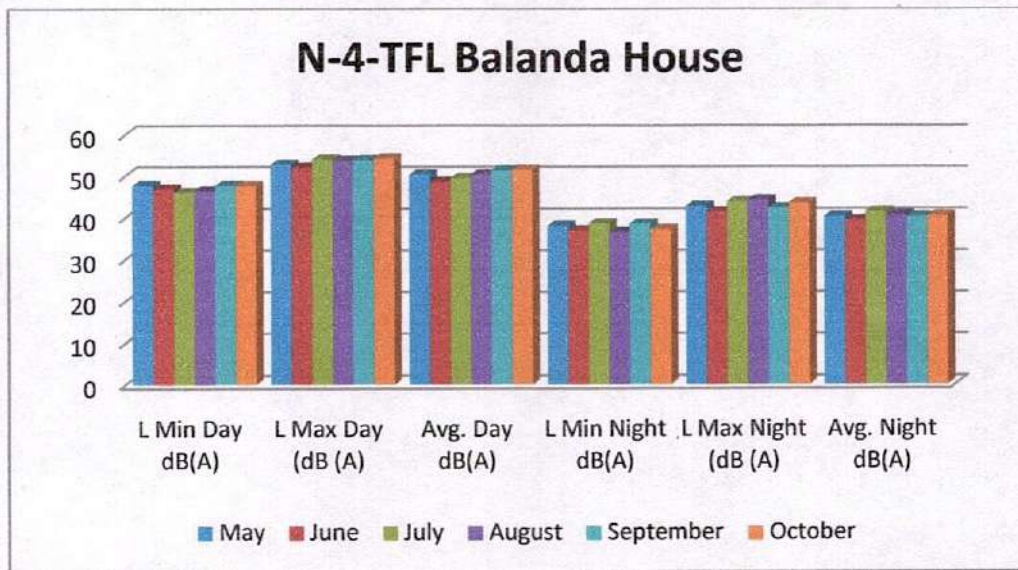


Ambient Noise Monitoring Results

N4-TFL Balanda House

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
May	47.60	52.70	50.27	37.90	42.60	40.24
June	46.70	51.90	48.54	36.80	41.30	39.35
July	45.90	53.90	49.40	38.50	43.70	41.33
August	46.30	53.70	50.25	36.40	44.10	40.56
September	47.50	53.80	51.25	38.40	42.20	40.18
October	47.50	54.20	51.41	37.10	43.40	40.41

Graphical Representation

**Observation:**

The Noise level monitoring samplings in the TFL Balanda House are taken for 8 days for each month (May' 2024 to October' 2024). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, August month shows the highest level of **54.20** dB (A) Day for L max Day, August month shows the minimum level of **36.40** dB (A) Night for L min Night.

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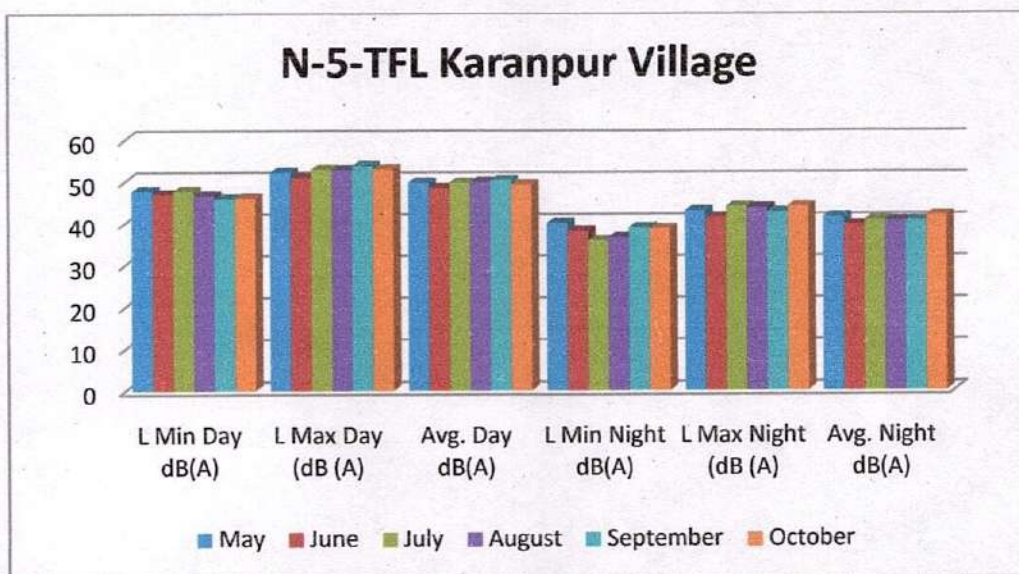


Ambient Noise Monitoring Results

N5-TFL Karanpur Village

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
May	47.60	52.10	49.68	39.90	42.80	41.34
June	46.80	50.80	48.33	37.90	41.20	39.39
July	47.60	52.80	49.63	35.70	43.80	40.55
August	46.50	52.70	49.80	36.40	43.50	40.35
September	45.70	53.70	50.13	38.70	42.50	40.39
October	45.90	52.90	49.16	38.50	43.90	41.64

Graphical Representation

**Observation:**

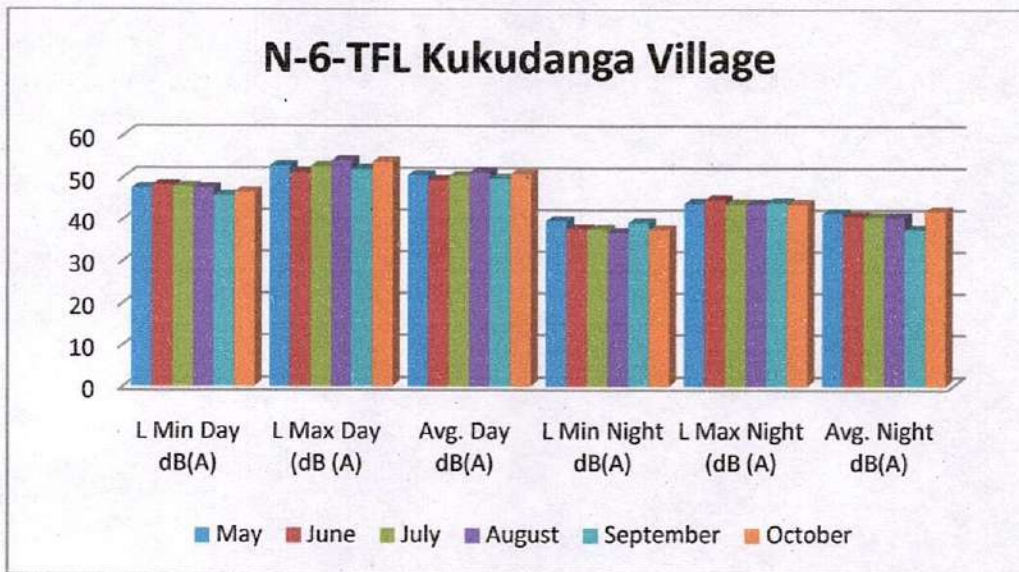
The Noise level monitoring samplings in the TFL Karanpur Village are taken for 8 days for each month (May' 2024 to October' 2024). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, September month shows the highest level of 53.70 dB (A) Day for L max Day, July month shows the minimum level of 35.70 dB (A) Night for L min Night.

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Ambient Noise Monitoring Results**N6-TFL Kukudanga Village**

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
May	47.30	52.60	50.36	39.40	43.60	41.21
June	47.90	50.90	49.15	37.40	44.50	40.50
July	47.60	52.50	50.18	37.30	43.50	40.34
August	47.30	53.90	51.10	36.60	43.50	40.31
September	45.50	51.80	49.56	38.90	43.80	37.20
October	46.30	53.60	50.66	37.20	43.50	41.80

Graphical Representation**Observation:**

The Noise level monitoring samplings in the TFL are taken for 8 days for each month (**May' 2024 to October' 2024**). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, August month shows the highest level of **54.20 dB (A)** Day for L max Day, July month shows the minimum level of **36.80 dB (A)** Night for L min Night.

The Detail Sampling monitoring reports for noise level for each month (May'2024 to October'2024) are all within the standard limits.

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Ground Water monitoring results:

The Ground Water (GW) Level and Condition is monitored in 3 different locations GW1-Tentulei Village, GW2-Balanda Village, GW3-Kukudang Village on following Dated: **30/05/2024, 18/06/2024, 30/07/2024, 23/08/2024, 20/09/2024, 22/10/2024.**

For various parameters. From the Reports, it is shows that sample results for GW-1, GW-2, GW-3 are within the acceptable Limits as per IS: 10500:2012 and are in **Good Condition**. The Detail Reports are Enclosed Below.

Surface Water monitoring results:

The Ground Water (GW) Level and Condition is monitored in 3 different locations SW1-Pump House, GW2- SW2-River Near Jatia Bridge SW3-River near PTBS Thermal Area on following Dated: **30/05/2024, 18/06/2024, 30/07/2024, 23/08/2024, 20/09/2024, 22/10/2024.**

For various parameters. From the Reports, it is shows that sample results for GW-1, GW-2, GW-3 are within the acceptable Limits as per IS: 10500:2012 and are in **Good Condition**. The Detail Reports are Enclosed Below.



Annexure-1

Environmental Clearance Letter

Nitya Laboratories



F. No. J-11011/231/2013-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA- II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi -3

Dated: 9th February, 2018

To

M/s Talcher Fertilizers Ltd
Village Vikrampur, Tehsil Talcher
District **Angul** (Odisha)

Sub: Setting up Ammonia & Urea Fertilizer Unit at Village Vikrampur, Tehsil Talcher, District Angul (Odisha) by M/s Talcher Fertilizers Ltd - Environmental Clearance -reg.

Sir,

This has reference to your proposal No. IA/OR/IND2/58560/2013 dated 11th October, 2017, submitting the EIA/EMP report with public consultation details on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for setting up ammonia & urea fertilizer unit based on coal gasification for production of 1.27 MMTPA of neem coated urea (end product) by M/s Talcher Fertilizers Ltd at Village Vikrampur, Tehsil Talcher, District Angul (Odisha).

3. The total land area of the project is 570 acre, out of which green belt will be developed in 180 acre. The cost of the project is Rs.10741.05 Crores. The project will provide employment to 1500 people during construction phase.

4. The proposed product/unit and capacity are as under:

S.No	Product/Unit	Capacity
1	Ammonia	2200 MTPD
2	Urea (Neem coated)	3850 MTPD
3	Coal Gasification Plant	Synthesis Gas: 242978 Nm ³ /hr

5. Total water requirement for the project is 49,200 m³/day. The permission for drawal of surface water from Brahmini River has been obtained from the State Government of Odisha vide letter No. 1513/SF/59 dated 3rd November, 2009.

The power requirement of 72 MW will be met from the Captive Power Plant. The raw Material required for the project are Coal, Pet Coke and lime stone. During initial stages of operation of the plant, coal shall be supplied through Bhubaneswari Coal Mine of M/s Mahanadi Coalfields Ltd. Later, the project proponent shall develop the dedicated coal mine for the procurement of coal in the desired quantity.

6. The project/activity is covered under category A of item 5(a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.

7. The terms of reference (ToR) for the project was initially granted on 26th November, 2013, and then extended up to 25th November, 2017. The ToR was transferred in the name of M/s Talcher Fertilizers Ltd from M/s Rashtriya Chemicals & Fertilizers Ltd, vide Ministry's letter dated 27th September, 2017. Public hearing was conducted by the State Pollution Control Board on 30th August, 2017.





8. The proposal for environmental clearance was considered by the EAC (Industry-2) in its meeting held on 12-13 October, 2017. The project proponent and the accredited consultant M/s Projects & Development India Ltd presented the EIA/EMP report. The committee found the EIA/EMP report satisfactory and recommended the proposal for environmental clearance with certain conditions.

9. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project '**Setting up Ammonia & Urea Fertilizer Unit for production of 1.27 MMTPA of Neem Coated Urea (end product)**' by M/s Talcher Fertilizers Ltd at Village Vikrampur, Tehsil Talcher, District Angul (Odisha), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:-

- (i) In view of the base line air quality data for PM₁₀ already exceeding the prescribed standards, one more season data to be collected to confirm the consistency of readings/values, and for suggesting mitigating measures accordingly.
- (ii) The project proponent shall take stringent mitigating measures to minimize the incremental concentration of air pollutants (mainly PM₁₀ & PM_{2.5}) to the extent possible due to the proposed industrial operations.
- (iii) The project proponent shall develop local air quality management plan in consultation with SPCB and implemented to achieve desired standards.
- (iv) The incremental ground level concentrations (GLCs) for PM₁₀, PM_{2.5}, SO₂ & NO₂ due to the increased vehicular and other allied/developmental activities, shall be analysed and reported for actual impact of the project, besides remedial measures.
- (v) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (vi) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (vii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (viii) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- (ix) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (x) Total fresh water requirement shall not exceed 49200 cum/day to be met from surface water from Brahmini River. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.
- (xiii) ETP sludge, process inorganic & evaporation salt, if any, shall be disposed off to the TSDF.

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- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xv) The company shall undertake waste minimization measures as below:-
- (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 30th August, 2017 shall be satisfactorily implemented
- (xviii) At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xix) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xx) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xxi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

9.1. The grant of environmental clearance is subject to compliance of other general conditions, as under:-

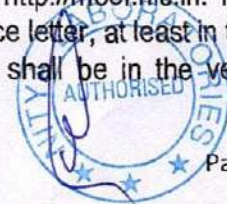
- (i) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

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- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- (v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (viii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ix) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.
- (x) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://moef.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular

SKD



language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

(xvi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

10. The Ministry may revoke or suspend the clearance, at subsequent stages, if implementation of any of the above conditions is not satisfactory.

11. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

12. The above conditions will be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

SK
9/2/2018
(S. K. Srivastava)
Scientist E

Copy to:-

1. The Additional PCCF (C), MoEF&CC Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar - 23 (Odisha)
2. The Secretary, Department of Forest and Environment, Government of Odisha, Bhubaneswar (Odisha)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII, Bhubaneswar -12 (Odisha)
5. Guard File/Monitoring File/Website/Record File

SK
9/2/2018
(S. K. Srivastava)
Scientist E





Tel : 2564033/2563924
EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org
Web site : www.osocboard.org

**OFFICE OF THE
STATE POLLUTION CONTROL BOARD, ODISHA**

(Department of Forest & Environment, Govt. of Odisha)
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII
Bhubaneswar – 751012

Through online/ By Speed Post

No. 12951 /IND-II-NOC-6253

Date 30.11.2019 /

OFFICE MEMORANDUM

In consideration of the application no. 2324926 received through online for obtaining Consent to Establish for M/s Talcher Fertilizers Ltd. (TFL), the State Pollution Control Board is pleased to convey its Consent to Establish under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 for following production/unit capacity:

Sl. No.	Name of the facility	Capacity
1.	Ammonia	2200 MTPD
2.	Urea (Neem Coated)	3850 MTPD
3.	Coal Gasification Plant	Synthesis Gas. 242978 Nm ³ /hr

with project cost of ₹ 13,277.00 Crores over an area of 490.7 acres. At - Talcher, P.O. – Vikrampur (as per plot nos. & Khata nos. mentioned in Application Form) in the District of Angul with following conditions:

GENERAL CONDITIONS:

1. This Consent to Establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years. The proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this Consent to Establish shall be sought by the proponent.
2. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
3. The Industry is to apply for grant of Consent to Operate under Section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board



4. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and / or Govt. of India as and when applicable.

SPECIAL CONDITIONS:

A. GENERAL:

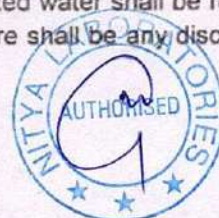
1. The proponent shall carryout construction activity of the proposed Fertilizer Plant as per Environmental Clearance granted by MoEF&CC, Govt. of India, vide No. J-11011/231/2013-IA-II (I), date 09.02.2018.
2. This Consent to Establish is granted for the capacity as mentioned above and any expansion in the capacity, change or modification in the process, addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area, fresh Consent to Establish has to be obtained from the Board. The proponent shall carry out construction activity as per approved revised lay out map (**enclosed**). If the proponent wants to change the approved plant layout map, they can submit a modified plant layout map with adequate justification for such modification.
3. The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report and project report.
4. The proponent shall obtain permission from concerned authorities for drawal of surface water / ground water.
5. The proponent shall identify the old contaminated sites of old plant and shall remediate the same before start of construction of new plant facilities.
6. A relatively thick green coverage may be provided on the north-west and east sides of the plant keeping in view the high noise and dust level.
7. At least 5% of the total energy use (plant & colony) shall be from non-conventional sources.
8. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
9. The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
10. The proponent shall comply to the provisions of E-Waste (Management) Rules, 2016 and shall handover e-waste to authorized collection centers/ register dismantlers/ recyclers for proper disposal of e-waste.
11. All the plastic waste generated from industry during construction and commissioning shall be collected and sent for co-processed in a cement kiln.
12. Monitoring of stack emissions, fugitive emissions, trade effluent and noise level shall be done as per CPCB regulations.
13. The unit shall explore the transportation of raw materials and products through rail instead of trucks.



14. A green belt of adequate width and density preferably with local species along the periphery of the unit shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% (163.9 acres) as proposed of the total land area shall be under permanent green cover, in such a manner that, atleast plantation shall be taken up at least in 20% of the total green belt area and progressively achieve 100% in a span of five years and under no circumstances this land earmarked for green belt shall be used for any other purpose.
15. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
16. The proponent should shall full-fledged environmental management cell and the head of environmental management cell shall report directly to the unit Chief Administrator (say M.D.) A detailed proposal to this effect is to be submitted.
17. The land on which the unit is proposed to be established shall be converted to industrial use Kisam by the competent authority. The copy of said land conversion document shall be submitted to the Board along with Consent to Operate application.
18. The Board may impose further conditions or modify the conditions stipulated in this order during installation and /or at the time of obtaining Consent to Operate and may revoke this clearance in case the stipulated conditions are not implemented and /or any information suppressed in the application form.
19. The industry shall apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board. No production activity shall commence prior to installation of all pollution control measures.
20. The unit shall abide by E (P) Act, 1986 and Rules framed thereunder.
21. Depending on the environmental condition, stricter standards may be imposed for the effluent or restriction for discharge may be made for which adequate facilities from the beginning shall be made to meet such situation in future

B. WATER POLLUTION:

22. The unit shall install online Continuous Effluent Quality Monitoring System (CEQMS) at the outlet of Effluent Treatment Plant (ETP) for online real time data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
23. The domestic wastewater generated from the industry shall be treated in sewage treatment plant to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for gardening and plantation. Under no circumstances there shall be any discharge of treated waste water to outside the factory premises.



Sl. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD(mg/l)	30
3.	TSS(mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

24. Use of treated as well as recycled water and rain water harvesting shall be widely adopted for conservation of water.
25. Process effluent / any wastewater shall not be allowed to mix with storm water. The proponent shall provide separate drain for storm water and process water.
26. The waste water generated in DM plant and Ammonia Plant during normal operation shall be treated in the In-plant Treatment Systems so that the same is recycled / neutralized in the plant and treated effluent shall be utilized for green belt and floor washings.
27. The proponent shall provide garland drains around coal storage area and all the stock pile area, followed by series of settling tanks to retain the solids, if any, in order to prevent damage to the surrounding land and water bodies.
28. The proponent shall construct, a full-fledged ETP of capacity 900 KLD for treatment of waste water generated from plant and treated water shall be completely reused. The proponent shall adopt Zero Liquid Discharge (ZLD) concept and under no circumstances the waste water shall be discharged to outside the factory premises.
29. The treated effluent shall be recycled and reused in the industry and/or used for water spraying or green belt development etc. The excess waste water shall be collected in Central Effluent Treatment Plant (CETP).
30. The treated waste water from the CETP shall be utilized after meeting the following standard.

Parameters	Limiting concentration in mg/l except for pH
pH	5.5 to 9.0
Suspended solids	100
BOD, 3days, 27°C	30
COD	250
Oil & Grease	10
Ammonical Nitrogen as N	50
Cyanide as CN	0.2
Phenolic compound	1.0
Copper (Total)	3.0
Iron (Total)	3.0
Free available Chlorine	0.5
Zinc	5.0
Chromium (Total)	0.2
Phosphate	5.0

31. Storm water shall not be allowed to mix with effluent, scrubber water and / or floor washing and shall be channelized through separate drains as per natural gradient, passing through High Density Polyethylene (HDPE) lined pits, each having holding capacity of 10 minutes (hourly average) of rainfall.



32. Rain water harvesting structure shall be developed inside the plant premises and maximum effort shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawl of fresh water from water bodies.

C. AIR POLLUTION:

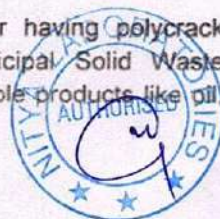
33. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area as per Annexure-I. Ambient air quality at the boundary of the plant premises shall meet the prescribed standards of the Board as per Annexure - II. The ambient air quality monitoring report shall be submitted to the Board every month.
34. The unit shall install online Continuous Stack Emission Monitoring Systems (CSEMS) at all the stacks of the plant for online real time monitoring for PM, SO₂ and Flouride and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
35. The unit shall install online Continuous Ambient Air Quality Monitoring Systems (CAAQMS) within and outside the plant premises atleast at four locations for online real time monitoring and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
36. Ambient Air Quality shall be maintained as per National Ambient Air Quality standard prescribed for industrial and mixed used area under E(P) Act, 1986.
37. Air compressor and DG set shall be acoustically designed and shall be housed in appropriate acoustic enclosures so that the noise level outside it shall conform to the prescribed norms.
38. The height of the stack attached to the D.G sets shall confirm to the following:
$$H = h + 0.2\sqrt{KVA}$$
 (Where, h = Height of the building where it is installed in meter KVA = Capacity of D.G Set and H = Height of the stack in meter above ground level)
39. The proponent shall install inbuilt system for removal of H₂S and Carbonyl Sulphide & Sulphur shall be recovered in the form of elemental Sulphur.
40. Wet limestone shall be used for flue gas desulphurization for 95% control of SO₂. Low NO_x burners and selective catalyst reduction (SCR) shall be provided for high efficiency NO_x control. Electrostatic Precipitator shall be installed for control of Particulate Matters.
41. Raw materials and products shall be stored in covered sheds and adequate dust suppression measures shall be taken to control fugitive emission from handling of raw materials and products.
42. Working area including the roads surrounding the plant shall be asphalted or concreted & water sprinkling system shall be installed to suppress the fugitive dust emission.
43. Both dust suppression (dry fog) and extraction (bag filter) system shall be provided at all dust generating source such as crushing, screening & material transfer points etc. to control fugitive emission.



44. The unit shall provide adequate, both dust suppression (dry fog) and extraction (bag filter) system at all potential dust generating sources including Coal Handling Plant so that particulate matter emission shall not exceed 100 mg/Nm^3 . Stack height for de-dusting unit shall be calculated as per the formula $H = 74Q^{0.27}$, where H and Q are stack height in meter and Particulate Matter (PM) emission in ton/hr respectively.
45. The proponent shall install Pneumatic dust handling system in all Bag Filter hoppers with common silo and telescopic chute arrangement. Mechanical operated system for timely collection and removal of the flue dust generated in air pollution control device shall be installed.
46. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
47. All Pollution control equipment may be provided with separate electricity meter and totalizer for continuous recording of power consumption. The amperage of the ID fan may also be recorded continuously. Non-functioning of Pollution control equipment should be recorded in the same logbook along with reasons for not running the Pollution Control Equipment
48. The unit shall provide porthole and platform at suitable location with safe approach to conduct emission and monitoring at all the stacks.

D. SOLID AND HAZARDOUS WASTE:

49. The industry shall develop hazardous waste disposal site as per guideline of Central Pollution Control Board, Delhi for disposal of Hazardous Waste.
50. Sludge from raw Water Treatment Plant (WTP) shall be dewatered (centrifuged) with Decanter and the solid cake shall be used as manure after proper conditioning. Sludge from ETP shall be dewatered through suitable processes (decanter / Pressure Belt Filter). Solid cake of ETP shall be used either as manure or disposed off along with bottom ash.
51. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc., Flame arresters shall be provided on tank farm, and solvent transfer shall be one through pumps.
52. All the Hazardous Wastes generated from the unit shall be stored under covered shed on concrete platforms and drain arrangement for collection of spillage in any before going for final disposal to the Hazardous Waste disposal site/ through CPCB/SPCB authorised vendors.
53. Coal tar generated if any from Coal Gasification plant shall be stored in an impervious pit and disposed off through authorized operators.
54. The proponent shall establish Mechanized Waste Converter having polycrack method and other similar method for processing of Municipal Solid Waste generated from the unit, under covered shed to produce valuable products like oil, water, gas, carbon, metal, glass etc.



55. The other solid waste generated from the unit shall be suitably disposed off without causing any public nuisance or environmental contamination.
56. A Solid Waste Management Cell shall be created under Environmental Management Cell and complete utilization of all solid waste shall be envisaged and implemented in a sustained manner. All the available research and development options shall be scouted in this regard. The exact utilization of solid waste shall be finalized in consultation with the State Pollution Control Board.
57. The industry shall obtain authorization for management of Hazardous Waste as per provisions of Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time.
58. Municipal Solid Waste generated from the unit shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.

Encl: Approved plant layout map and Annexures

30/11/19
MEMBER SECRETARY

To

The CEO,
M/s Talcher Fertilizers Limited (TFL),
2nd floor PARC Building,
GAIL Training Institute,
Noida Sector 16A, District - Gautam Budha Nagar,
Tehsil: Noida.

Memo No. 12952 /Date 30.11.2019 /

Copy forwarded to:

1. The Collector & District Magistrate, Angul
2. The District Industries Centre, Angul.
3. The Director, Factories & Boiler, Bhubaneswar
4. The Regional Officer, SPC Board, Angul.
5. Consent to Operate Section, SPC Board, BBSR.
6. The DFO, Angul.
7. Hazardous Waste Management Section SPC Board, BBSR.
8. Copy to Guard file.

30/11/19
CHIEF ENV. ENGINEER



टिप्पणः

1. अब कभी और अद्य भी किसी अपने-अपने प्रवृत्ति के लिये दो क्रमिक प्रदूषण दिनों पर प्रापित मूल्य, उपर्युक्त विनिर्दिष्ट सीमा से अधिक हो तो इसे नियमित या निरंतर प्रदूषण न्याय अतिरिक्त प्रत्येक कठोराने के लिये पर्याप्त कारण समझा जायेगा।

[फा. सं. क्यू 15017/43/2007-सो.पी.डब्ल्यू.]

रजनीश दुबे, संयुक्त सचिव

टिप्पणः मूल नियम भारत के राजपत्र में असाधारण सं.का.आ. 644 (अ), तारीख 19 नवम्बर 1986 द्वारा प्रकाशित किये गये थे और पश्चातवर्ती संशोधन सं.का.आ. 433 (अ), तारीख 18 अप्रैल 1987, सा.क.नि. 176 (अ), तारीख 2 अप्रैल 1998 और हाल में ही सा.क.नि. 97 (अ), तारीख 18 फरवरी 2009; सा.क.नि. 146 (अ), तारीख 4 मार्च, 2009; सा.क.नि. 512 (अ), तारीख 9 जुलाई, 2009; सा.क.नि. 543 (अ), तारीख 22 जुलाई, 2009; सा.क.नि. 598 (अ), तारीख 21 अगस्त, 2009; और सा.क.नि. 974 (अ) तारीख, 04 नवम्बर 2009 द्वारा प्रकाशित किए गए।

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 16th November, 2009

G.S.R. 826(E).— In exercise of the powers conferred by section 6 and section 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. (1) These rules may be called the Environment (Protection) Seventh Amendment Rules, 2009.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986 (hereinafter referred to as the said rules), in rule 3, in sub-rule (3B), for the words, brackets, figures and letters, "in columns (3) to (5) of Schedule VII", the words, brackets, figures and letters "in columns (4) and (5) of Schedule VII" shall be substituted.

3. For Schedule VII to the said rules and entries relating thereto, the following Schedule and entries shall be substituted, namely:—

"[SCHEDULE VII]

[See rule 3(3B)]

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual* 24 hours**	50 80	20 80	- Improved West and Gaeke - Ultraviolet fluorescence
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual* 24 hours**	50 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenic) - Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM ₁₀ , µg/m ³	Annual* 24 hours**	50 100	50 100	- Gravimetric - FOEM - Beta attenuation
4	Particulate Matter (size less than 2.5µm) or PM _{2.5} , µg/m ³	Annual* 24 hours**	40 60	40 50	- Gravimetric - FOEM - Beta attenuation



(1)	(2)	(3)	(4)	(5)	(6)
5	Ozone (O ₃) µg/m ³	8 hours** 1 hour**	100 180	100 180	- UV photometric - Chemiluminescence - Chemical Method
6	Lead (Pb) µg/m ³	Annual* 24 hours**	0.50 1.0	0.50 1.0	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
7	Carbon Monoxide(CO) mg/m ³	8 hours** 1 hour**	02 04	02 04	- Non Dispersive Infra Red (NDIR) spectroscopy
8	Ammonia(NH ₃) µg/m ³	Annual* 24 hours**	100 400	100 400	- Chemiluminescence - Indophenol blue method
9	Benzene (C ₆ H ₆) µg/m ³	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m ³	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m ³	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m ³	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 164 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be compiled with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note.— Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.”

[F. No. Q-1501743/2007-CPW]

RAJNEESH DUBE, Jt. Secy

Note.— The principal rules were published in the Gazette of India, Extraordinary vide number S.O.844(E), dated the 19th November, 1986; and subsequently amended vide numbers S.O. 433(E), dated the 18th April, 1987; G.S.R. 176 (E), dated the 2nd April 1996; and were recently amended vide numbers G.S.R. 97(E), dated the 18th February, 2009; G.S.R. 149(E), dated the 4th March, 2009; G.S.R. 512(E), dated the 9th July, 2009; G.S.R. 543(I), dated the 22nd July, 2009; G.S.R. 595(E), dated the 21st August, 2009; and G.S.R. 794(E), dated the 4th November, 2009.



The Environment (Protection) Rules, 1986

[SCHEDULE III]
(See rule 3)

AMBIENT AIR QUALITY STANDARDS IN RESPECT OF NOISE

Area Code	Category of Area	Limits in dB(A) Leq.	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note

1. Day time is reckoned in between 6 a.m. and 9 p.m.
2. Night time is reckoned in between 9 p.m. and 6 a.m.
3. Silence zone is defined as areas upto 100 meters around such premises as hospitals, educational institutions and courts. The Silence Zones are to be declared by the Competent Authority.

Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these zones.

4. Mixed categories of areas should be declared as one of the four above mentioned categories by the Competent Authority and the corresponding standards shall apply.



Sl. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD(mg/l)	30
3.	TSS(mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

24. Use of treated as well as recycled water and rain water harvesting shall be widely adopted for conservation of water.
25. Process effluent / any wastewater shall not be allowed to mix with storm water. The proponent shall provide separate drain for storm water and process water.
26. The waste water generated in DM plant and Ammonia Plant during normal operation shall be treated in the In-plant Treatment Systems so that the same is recycled / neutralized in the plant and treated effluent shall be utilized for green belt and floor washings.
27. The proponent shall provide garland drains around coal storage area and all the stock pile area, followed by series of settling tanks to retain the solids, if any, in order to prevent damage to the surrounding land and water bodies.
28. The proponent shall construct, a full-fledged ETP of capacity 900 KLD for treatment of waste water generated from plant and treated water shall be completely reused. The proponent shall adopt Zero Liquid Discharge (ZLD) concept and under no circumstances the waste water shall be discharged to outside the factory premises.
29. The treated effluent shall be recycled and reused in the industry and/or used for water spraying or green belt development etc. The excess waste water shall be collected in Central Effluent Treatment Plant (CETP).
30. The treated waste water from the CETP shall be utilized after meeting the following standard.

Parameters	Limiting concentration in mg/l except for pH
pH	5.5 to 9.0
Suspended solids	100
BOD, 3days, 27°C	30
COD	250
Oil & Grease	10
Ammonical Nitrogen as N	50
Cyanide as CN	0.2
Phenolic compound	1.0
Copper (Total)	3.0
Iron (Total)	3.0
Free available Chlorine	0.5
Zinc	5.0
Chromium (Total)	0.2
Phosphate	5.0

31. Storm water shall not be allowed to mix with effluent, scrubber water and / or floor washing and shall be channelized through separate drains as per natural gradient, passing through High Density Polyethylene (HDPE) lined pits, each having holding capacity of 10 minutes (hourly average) of rainfall.



14. A green belt of adequate width and density preferably with local species along the periphery of the unit shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% (163.9 acres) as proposed of the total land area shall be under permanent green cover, in such a manner that, atleast plantation shall be taken up at least in 20% of the total green belt area and progressively achieve 100% in a span of five years and under no circumstances this land earmarked for green belt shall be used for any other purpose.
15. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
16. The proponent should shall full-fledged environmental management cell and the head of environmental management cell shall report directly to the unit Chief Administrator (say M.D.). A detailed proposal to this effect is to be submitted.
17. The land on which the unit is proposed to be established shall be converted to industrial use Kisam by the competent authority. The copy of said land conversion document shall be submitted to the Board along with Consent to Operate application.
18. The Board may impose further conditions or modify the conditions stipulated in this order during installation and /or at the time of obtaining Consent to Operate and may revoke this clearance in case the stipulated conditions are not implemented and /or any information suppressed in the application form.
19. The industry shall apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board. No production activity shall commence prior to installation of all pollution control measures.
20. The unit shall abide by E (P) Act, 1986 and Rules framed thereunder.
21. Depending on the environmental condition, stricter standards may be imposed for the effluent or restriction for discharge may be made for which adequate facilities from the beginning shall be made to meet such situation in future

B. WATER POLLUTION:

22. The unit shall install online Continuous Effluent Quality Monitoring System (CEQMS) at the outlet of Effluent Treatment Plant (ETP) for online real time data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
23. The domestic wastewater generated from the industry shall be treated in sewage treatment plant to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for gardening and plantation. Under no circumstances there shall be any discharge of treated waste water to outside the factory premises.



4. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and / or Govt. of India as and when applicable.

SPECIAL CONDITIONS:

A. GENERAL:

1. The proponent shall carryout construction activity of the proposed Fertilizer Plant as per Environmental Clearance granted by MoEF&CC, Govt. of India, vide No. J-11011/231/2013-IA-II (I), date 09.02.2018.
2. This Consent to Establish is granted for the capacity as mentioned above and any expansion in the capacity, change or modification in the process, addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area, fresh Consent to Establish has to be obtained from the Board. The proponent shall carry out construction activity as per approved revised lay out map (enclosed). If the proponent wants to change the approved plant layout map, they can submit a modified plant layout map with adequate justification for such modification.
3. The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report and project report.
4. The proponent shall obtain permission from concerned authorities for drawal of surface water / ground water.
5. The proponent shall identify the old contaminated sites of old plant and shall remediate the same before start of construction of new plant facilities.
6. A relatively thick green coverage may be provided on the north-west and east sides of the plant keeping in view the high noise and dust level.
7. At least 5% of the total energy use (plant & colony) shall be from non-conventional sources.
8. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
9. The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
10. The proponent shall comply to the provisions of E-Waste (Management) Rules, 2016 and shall handover e-waste to authorized collection centers/ register dismantlers/ recyclers for proper disposal of e-waste.
11. All the plastic waste generated from industry during construction and commissioning shall be collected and sent for co-processed in a cement kiln.
12. Monitoring of stack emissions, fugitive emissions, trade effluent and noise level shall be done as per CPCB regulations.
13. The unit shall explore the transportation of raw materials and products through rail instead of trucks.





Tel : 2564033/2563924
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E-mail: paribesh1@ospcboard.org
Web site : www.ospcboard.org

**OFFICE OF THE
STATE POLLUTION CONTROL BOARD, ODISHA**

(Department of Forest & Environment, Govt. of Odisha)
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII
Bhubaneswar – 751012

Through online/ By Speed Post

No. 12951 /IND-II-NOC-6253

Date 30.11.2019 /

OFFICE MEMORANDUM

In consideration of the application no. 2324926 received through online for obtaining Consent to Establish for M/s Talcher Fertilizers Ltd. (TFL), the State Pollution Control Board is pleased to convey its Consent to Establish under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 for following production/unit capacity:

Sl. No.	Name of the facility	Capacity
1.	Ammonia	2200 MTPD
2.	Urea (Neem Coated)	3850 MTPD
3.	Coal Gasification Plant	Synthesis Gas: 242978 Nm ³ /hr

with project cost of ₹ 13,277.00 Crores over an area of 490.7 acres, At - Talcher, P.O. – Vikrampur (as per plot nos. & Khata nos. mentioned in Application Form) in the District of Angul with following conditions:

GENERAL CONDITIONS:

1. This Consent to Establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years. The proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this Consent to Establish shall be sought by the proponent.
2. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
3. The Industry is to apply for grant of Consent to Operate under Section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board



32. Rain water harvesting structure shall be developed inside the plant premises and maximum effort shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawl of fresh water from water bodies.

C. AIR POLLUTION:

33. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area as per Annexure-I. Ambient air quality at the boundary of the plant premises shall meet the prescribed standards of the Board as per Annexure - II. The ambient air quality monitoring report shall be submitted to the Board every month.
34. The unit shall install online Continuous Stack Emission Monitoring Systems (CSEMS) at all the stacks of the plant for online real time monitoring for PM, SO₂ and Flouride and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
35. The unit shall install online Continuous Ambient Air Quality Monitoring Systems (CAAQMS) within and outside the plant premises atleast at four locations for online real time monitoring and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
36. Ambient Air Quality shall be maintained as per National Ambient Air Quality standard prescribed for industrial and mixed used area under E(P) Act, 1986.
37. Air compressor and DG set shall be acoustically designed and shall be housed in appropriate acoustic enclosures so that the noise level outside it shall conform to the prescribed norms.
38. The height of the stack attached to the D.G sets shall confirm to the following:
$$H = h + 0.2\sqrt{KVA}$$
 (Where, h = Height of the building where it is installed in meter KVA = Capacity of D.G Set and H = Height of the stack in meter above ground level)
39. The proponent shall install inbuilt system for removal of H₂S and Carbonyl Sulphide & Sulphur shall be recovered in the form of elemental Sulphur.
40. Wet limestone shall be used for flue gas desulphurization for 95% control of SO₂. Low NOx burners and selective catalyst reduction (SCR) shall be provided for high efficiency NOx control. Electrostatic Precipitator shall be installed for control of Particulate Matters.
41. Raw materials and products shall be stored in covered sheds and adequate dust suppression measures shall be taken to control fugitive emission from handling of raw materials and products.
42. Working area including the roads surrounding the plant shall be asphalted or concreted & water sprinkling system shall be installed to suppress the fugitive dust emission.
43. Both dust suppression (dry fog) and extraction (bag filter) system shall be provided at all dust generating source such as crushing, screening & material transfer points etc. to control fugitive emission.



44. The unit shall provide adequate, both dust suppression (dry fog) and extraction (bag filter) system at all potential dust generating sources including Coal Handling Plant so that particulate matter emission shall not exceed 100 mg/Nm^3 . Stack height for de-dusting unit shall be calculated as per the formula $H = 74Q^{0.27}$, where H and Q are stack height in meter and Particulate Matter (PM) emission in ton/hr respectively.
45. The proponent shall install Pneumatic dust handling system in all Bag Filter hoppers with common silo and telescopic chute arrangement. Mechanical operated system for timely collection and removal of the flue dust generated in air pollution control device shall be installed.
46. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
47. All Pollution control equipment may be provided with separate electricity meter and totalizer for continuous recording of power consumption. The amperage of the ID fan may also be recorded continuously. Non-functioning of Pollution control equipment should be recorded in the same logbook along with reasons for not running the Pollution Control Equipment
48. The unit shall provide porthole and platform at suitable location with safe approach to conduct emission and monitoring at all the stacks.

D. SOLID AND HAZARDOUS WASTE:

49. The industry shall develop hazardous waste disposal site as per guideline of Central Pollution Control Board, Delhi for disposal of Hazardous Waste.
50. Sludge from raw Water Treatment Plant (WTP) shall be dewatered (centrifuged) with Decanter and the solid cake shall be used as manure after proper conditioning. Sludge from ETP shall be dewatered through suitable processes (decanter / Pressure Belt Filter). Solid cake of ETP shall be used either as manure or disposed off along with bottom ash.
51. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc., Flame arresters shall be provided on tank farm, and solvent transfer shall be one through pumps.
52. All the Hazardous Wastes generated from the unit shall be stored under covered shed on concrete platforms and drain arrangement for collection of spillage in any before going for final disposal to the Hazardous Waste disposal site/ through CPCB/SPCB authorised vendors.
53. Coal tar generated if any from Coal Gasification plant shall be stored in an impervious pit and disposed off through authorized operators.
54. The proponent shall establish Mechanized Waste Converter having polycrack method and other similar method for processing of Municipal Solid Waste generated from the unit, under covered shed to produce valuable products like oil, water, gas, carbon, metal, glass etc.



55. The other solid waste generated from the unit shall be suitably disposed off without causing any public nuisance or environmental contamination.
56. A Solid Waste Management Cell shall be created under Environmental Management Cell and complete utilization of all solid waste shall be envisaged and implemented in a sustained manner. All the available research and development options shall be scouted in this regard. The exact utilization of solid waste shall be finalized in consultation with the State Pollution Control Board.
57. The industry shall obtain authorization for management of Hazardous Waste as per provisions of Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time.
58. Municipal Solid Waste generated from the unit shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.

Encl: Approved plant layout map and Annexures

30/11/19
MEMBER SECRETARY

To
The CEO,
M/s Talcher Fertilizers Limited (TFL),
2nd floor PARC Building,
GAIL Training Institute,
Noida Sector 16A, District - Gautam Budha Nagar,
Tehsil: Noida.

Memo No. 12952 /Date 30.11.2019 /

Copy forwarded to:

1. The Collector & District Magistrate, Angul.
2. The District Industries Centre, Angul.
3. The Director, Factories & Boiler, Bhubaneswar.
4. The Regional Officer, SPC Board, Angul.
5. Consent to Operate Section, SPC Board, BBSR.
6. The DFO, Angul.
7. Hazardous Waste Management Section SPC Board, BBSR.
8. Copy to Guard file.

30/11/19
CHIEF ENV. ENGINEER



alc

टिप्पण :

1. जब कभी और जहाँ भी किसी उपने-उपने प्रवर्ग के लिये दो क्रमिक प्रयोग दिनों पर मापित मूल्य, उपर विनिर्दिष्ट सीमा से अधिक हो तो इसे नियमित या निरंतर प्रयोग तथा अतिरिक्त प्रयोग करने के लिये पर्याप्त कारण समझा जायेगा।

[फा. सं. क्र. 15017/43/2007-सो.पी.डब्ल्यू.]

रजनीरा दुबे, संपुक्त सचिव

टिप्पण : मूल नियम भारत के राजपत्र में असाधारण सं.का.आ 844 (अ), तारीख 19 नवम्बर 1986 द्वारा प्रकाशित किये गये थे और पश्चातवर्ती संशोधन सं.का.आ.433 (अ), तारीख 18 अप्रैल 1987, सा.क.नि. 176 (अ), तारीख 2 अप्रैल 1998 और हाल में ही सा.क.नि. 97 (अ), तारीख 18 फरवरी 2009; सा.क.नि. 149 (अ), तारीख 4 मार्च, 2009; सा.क.नि. 512 (अ), तारीख 9 जुलाई, 2008; सा.क.नि. 543 (अ), तारीख 22 जुलाई, 2009; सा.क.नि. 586 (अ), तारीख 21 अगस्त, 2009; और सा.क.नि. 974 (अ) तारीख, 04 नवम्बर 2009 द्वारा प्रकाशित किए गए।

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 16th November, 2009

G.S.R. 826(E).— In exercise of the powers conferred by section 6 and section 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. (1) These rules may be called the Environment (Protection) Seventh Amendment Rules, 2009.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986 (hereinafter referred to as the said rules), in rule 3, in sub-rule (3B), for the words, brackets, figures and letters, "in columns (3) to (5) of Schedule VII", the words, brackets, figures and letters "in columns (4) and (5) of Schedule VII" shall be substituted.

3. For Schedule VII to the said rules and entries relating thereto, the following Schedule and entries shall be substituted, namely:—

“(SCHEDULE VII)

[See rule 3(3B)]

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual* 24 hours**	50 80	20 80	• Improved West and Gaeke • Ultraviolet fluorescence
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual* 24 hours**	40 80	30 80	• Modified Jacob & Hochheiser (Na-Araenite) • Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM ₁₀ , µg/m ³	Annual* 24 hours**	50 100	50 100	• Gravimetric • TOEM • Beta attenuation
4	Particulate Matter (size less than 2.5µm) or PM _{2.5} , µg/m ³	Annual* 24 hours**	40 60	40 50	• Gravimetric • TOEM • Beta attenuation



(1)	(2)	(3)	(4)	(5)	(6)
5	Ozone (O ₃) µg/m ³	8 hours** 1 hour**	100 180	100 180	- UV photometric - Chemiluminescence - Chemical Method
6	Lead (Pb) µg/m ³	Annual* 24 hours**	0.50 1.0	0.50 1.0	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
7	Carbon Monoxide(CO) mg/m ³	8 hours** 1 hour**	02 04	02 04	- Non Dispersive Infra Red (NDIR) spectroscopy
8	Ammonia(NH ₃) µg/m ³	Annual* 24 hours**	100 400	100 400	- Chemiluminescence - Indophenol blue method
9	Benzene (C ₆ H ₆) µg/m ³	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m ³	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m ³	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m ³	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 164 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note.— Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.”

[F. No. Q-15017/43/2007-CPW]

RAJNEESH DUBE, Jt. Secy

Note.— The principal rules were published in the Gazette of India, Extraordinary vide number S.O.844(E), dated the 19th November, 1980; and subsequently amended vide numbers S.O. 433(E), dated the 18th April, 1987; G.S.R. 176 (E), dated the 2nd April 1996; and were recently amended vide numbers G.S.R. 97(E), dated the 18th February, 2009; G.S.R. 149(E), dated the 4th March, 2009; G.S.R. 512(E), dated the 9th July, 2009; G.S.R. 543(I), dated the 22nd July, 2009; G.S.R. 595(E), dated the 21st August, 2009; and G.S.R. 794(E), dated the 4th November, 2009.



The Environment (Protection) Rules, 1986

[SCHEDULE III]
(See rule 3)

AMBIENT AIR QUALITY STANDARDS IN RESPECT OF NOISE

Area Code	Category of Area	Limits in dB(A) Leq.	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note

1. Day time is reckoned in between 6 a.m. and 9 p.m.
2. Night time is reckoned in between 9 p.m. and 6 a.m.
3. Silence zone is defined as areas upto 100 meters around such premises as hospitals, educational institutions and courts. The Silence Zones are to be declared by the Competent Authority.

Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these zones.

4. Mixed categories of areas should be declared as one of the four above mentioned categories by the Competent Authority and the corresponding standards shall apply.



Baseline Monitoring Report Results
AAQM Reports
(May 2024 to October 2024)

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003238F, 3336F, 3393F, 3463F, 3567F, 3690F,
3750F, 3885F, 4026F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs $\mu\text{g}/\text{m}^3$
02/05/2024	23.18	52.17	12.18	16.50	14.10	ND
06/05/2024	22.14	50.43	10.27	18.60	10.20	ND
09/05/2024	24.98	54.23	11.10	20.10	11.40	ND
13/05/2024	21.30	54.69	12.37	19.90	12.40	ND
16/05/2024	22.48	51.32	13.60	14.40	13.60	ND
20/05/2024	24.10	56.78	15.00	17.60	10.60	ND
23/05/2024	21.32	51.32	14.10	20.40	10.40	ND
27/05/2024	24.34	52.14	12.40	16.30	14.80	ND
30/05/2024	25.36	53.35	14.60	15.10	13.10	ND
No. of Observation	9	9	9	9	9	9
Minimum	21.30	50.43	10.27	14.40	10.20	-
Maximum	25.36	56.78	15.00	20.40	14.80	-
Average	23.24	52.94	12.85	17.66	12.29	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



TC-6366



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/101
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/05/2024	ND	ND
06/05/2024	ND	ND
09/05/2024	ND	ND
13/05/2024	ND	ND
16/05/2024	ND	ND
20/05/2024	ND	ND
23/05/2024	ND	ND
27/05/2024	ND	ND
30/05/2024	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003239F, 3337F, 3394F, 3464F, 3568F, 3691F,
3751F, 3886F, 4027F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs $\mu\text{g}/\text{m}^3$
02/05/2024	19.60	46.40	7.10	12.00	9.10	ND
06/05/2024	21.50	38.30	5.60	11.10	13.00	ND
09/05/2024	18.65	44.10	8.20	9.90	15.60	ND
13/05/2024	20.39	43.90	4.10	15.60	11.60	ND
16/05/2024	24.78	45.60	8.30	13.60	14.40	ND
20/05/2024	22.36	40.40	16.50	12.40	15.40	ND
23/05/2024	20.89	46.40	5.40	10.40	10.30	ND
27/05/2024	25.47	44.10	3.40	16.10	12.10	ND
30/05/2024	22.69	47.90	9.80	9.90	13.60	ND
No. of Observation	9	9	9	9	9	9
Minimum	18.65	38.30	3.40	9.90	9.10	-
Maximum	25.47	47.90	16.50	16.10	15.60	-
Average	21.81	44.12	7.60	12.33	12.79	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec. 3(i)] 16.11.2009, ND-Not Detected.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/102
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/05/2024	ND	ND
06/05/2024	ND	ND
09/05/2024	ND	ND
13/05/2024	ND	ND
16/05/2024	ND	ND
20/05/2024	ND	ND
23/05/2024	ND	ND
27/05/2024	ND	ND
30/05/2024	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003240F, 3338F, 3395F, 3465F, 3569F, 3692F,
3752F, 3887F, 4028F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/05/2024	24.36	52.10	10.40	13.40	11.10	ND
06/05/2024	25.89	55.00	9.60	15.60	10.40	ND
09/05/2024	21.25	40.40	4.30	16.40	14.60	ND
13/05/2024	25.48	45.60	7.10	17.10	13.10	ND
16/05/2024	26.39	47.90	11.00	14.20	14.20	ND
20/05/2024	22.28	56.10	8.60	18.60	12.30	ND
23/05/2024	23.49	53.10	7.10	15.40	15.90	ND
27/05/2024	22.18	40.90	5.50	11.10	10.70	ND
30/05/2024	24.19	46.40	13.60	10.90	8.90	ND
No. of Observation	9	9	9	9	9	9
Minimum	21.25	40.40	4.30	10.90	8.90	-
Maximum	26.39	56.10	13.60	18.60	15.90	-
Average	23.95	48.61	8.58	14.74	12.36	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q /VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II sec. 3(i)] 15.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/103
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/05/2024	ND	ND
06/05/2024	ND	ND
09/05/2024	ND	ND
13/05/2024	ND	ND
16/05/2024	ND	ND
20/05/2024	ND	ND
23/05/2024	ND	ND
27/05/2024	ND	ND
30/05/2024	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003241F, 3339F, 3396F, 3466F, 3570F, 3693F,
3753F, 3888F, 4029F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/05/2024	15.56	39.60	7.10	10.90	8.20	ND
06/05/2024	14.68	37.00	5.60	12.50	5.40	ND
09/05/2024	7.25	38.40	4.40	4.10	3.60	ND
13/05/2024	17.45	34.60	9.90	9.30	7.10	ND
16/05/2024	15.39	40.60	11.40	8.40	8.50	ND
20/05/2024	14.29	37.10	8.40	5.60	9.50	ND
23/05/2024	13.18	41.40	5.60	10.60	6.60	ND
27/05/2024	15.69	34.70	7.10	13.50	5.40	ND
30/05/2024	18.32	36.90	10.50	9.10	6.90	ND
No. of Observation	9	9	9	9	9	9
Minimum	7.25	34.60	4.40	4.10	3.60	-
Maximum	18.32	41.40	11.40	13.50	9.50	-
Average	14.65	37.81	7.78	9.33	6.80	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



TC-6366



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/104
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/05/2024	ND	ND
06/05/2024	ND	ND
09/05/2024	ND	ND
13/05/2024	ND	ND
16/05/2024	ND	ND
20/05/2024	ND	ND
23/05/2024	ND	ND
27/05/2024	ND	ND
30/05/2024	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003242F, 3340F, 3397F, 3467F, 3571F, 3694F,
3754F, 3889F, 4030F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/05/2024	21.25	43.10	7.10	13.10	10.20	ND
06/05/2024	20.69	45.20	5.60	15.00	9.60	ND
09/05/2024	18.57	40.10	7.20	14.40	10.40	ND
13/05/2024	20.36	42.20	4.20	13.60	11.40	ND
16/05/2024	21.45	38.20	5.40	15.60	12.50	ND
20/05/2024	23.28	37.40	8.80	18.20	13.30	ND
23/05/2024	21.29	46.40	9.60	12.50	15.40	ND
27/05/2024	22.78	45.50	11.20	17.20	18.80	ND
30/05/2024	18.11	42.10	10.20	9.10	17.30	ND
No. of Observation	9	9	9	9	9	9
Minimum	18.11	37.40	4.20	9.10	9.60	-
Maximum	23.28	46.40	11.20	18.20	18.80	-
Average	20.86	42.24	7.70	14.30	13.21	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(f)] 16.11.2009, ND-Not Detected,



TC-6366



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/105
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/05/2024	ND	ND
06/05/2024	ND	ND
09/05/2024	ND	ND
13/05/2024	ND	ND
16/05/2024	ND	ND
20/05/2024	ND	ND
23/05/2024	ND	ND
27/05/2024	ND	ND
30/05/2024	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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 Post Vikrampur, Distt. Angul-759 106
 Odisha, India

ULR No.: TC636624000003243F, 3341F, 3398F, 3468F, 3572F, 3695F,
 3755F, 3890F, 4031F
 Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
 Purpose of Monitoring : To Check the Pollution Load
 Method of Sampling : IS 5182 (Part 14)
 Monitoring Conducted By : Mr. Manas Satapathy
 Sampling Duration (Hrs.) : 24 Hrs.
 Sampling Location : AAQ-6, Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) µg/m ³	Particulate Matter (PM10) µg/m ³	Sulphur Dioxide (as SO2) µg/m ³	Nitrogen Dioxide (as NO2) µg/m ³	Ammonia (as NH3) µg/m ³	VOCs, µg/m ³
02/05/2024	15.51	32.20	11.10	11.20	8.10	ND
06/05/2024	17.59	35.10	7.20	9.60	6.40	ND
09/05/2024	13.39	37.80	9.40	12.10	7.10	ND
13/05/2024	15.12	30.60	5.60	15.00	6.10	ND
16/05/2024	13.19	33.20	12.90	10.10	8.40	ND
20/05/2024	17.29	35.10	8.10	12.60	9.60	ND
23/05/2024	17.89	38.10	10.10	13.40	11.10	ND
27/05/2024	18.47	30.20	7.40	18.10	13.60	ND
30/05/2024	19.32	27.00	11.20	17.40	14.10	ND
No. of Observation	9	9	9	9	9	9
Minimum	13.19	27.00	5.60	9.60	6.10	-
Maximum	19.32	38.10	12.90	18.10	14.10	-
Average	16.42	33.26	9.22	13.28	9.39	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/106
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/05/2024	ND	ND
06/05/2024	ND	ND
09/05/2024	ND	ND
13/05/2024	ND	ND
16/05/2024	ND	ND
20/05/2024	ND	ND
23/05/2024	ND	ND
27/05/2024	ND	ND
30/05/2024	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004040F, 4103F, 4171F, 4276F, 4322F, 4372F,
4546F, 4711F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
03/06/2024	18.29	48.29	11.49	14.16	12.15	ND
06/06/2024	17.20	45.12	11.32	15.20	9.39	ND
28/06/2024	20.32	49.28	10.36	16.29	10.42	ND
13/06/2024	19.12	43.21	9.12	17.25	11.12	ND
17/06/2024	17.24	46.56	10.27	13.18	12.35	ND
20/06/2024	20.49	50.12	13.24	15.92	9.10	ND
24/06/2024	18.34	47.68	12.10	15.46	11.21	ND
27/06/2024	20.39	48.13	10.44	13.15	12.14	ND
No. of Observation	8	8	8	8	8	8
Minimum	17.20	43.21	9.12	13.15	9.10	-
Maximum	20.49	50.12	13.24	17.25	12.35	-
Average	18.92	47.30	11.04	15.08	10.99	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ /VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/101
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/06/2024	ND	ND
06/06/2024	ND	ND
28/06/2024	ND	ND
13/06/2024	ND	ND
17/06/2024	ND	ND
20/06/2024	ND	ND
24/06/2024	ND	ND
27/06/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004041F, 4104F, 4172F, 4277F, 4323F, 4373F,
4547F, 4712F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
03/06/2024	17.29	40.27	9.29	11.32	8.12	ND
06/06/2024	19.21	34.30	7.21	10.42	10.21	ND
28/06/2024	16.48	42.16	7.14	10.92	11.46	ND
13/06/2024	18.35	38.49	6.29	13.28	10.58	ND
17/06/2024	21.20	42.32	7.32	12.16	13.24	ND
20/06/2024	20.48	36.58	12.12	10.42	12.43	ND
24/06/2024	17.58	41.24	9.48	11.22	13.28	ND
27/06/2024	23.28	40.20	10.28	14.23	11.23	ND
No. of Observation	8	8	8	8	8	8
Minimum	16.48	34.30	6.29	10.42	8.12	-
Maximum	23.28	42.32	12.12	14.23	13.28	-
Average	19.23	39.45	8.64	11.75	11.32	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



TC-6366



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/102
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/06/2024	ND	ND
06/06/2024	ND	ND
28/06/2024	ND	ND
13/06/2024	ND	ND
17/06/2024	ND	ND
20/06/2024	ND	ND
24/06/2024	ND	ND
27/06/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004042F, 4105F, 4173F, 4278F, 4324F, 4374F,
4548F, 4713F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/06/2024	23.18	43.28	9.32	12.17	10.38	ND
06/06/2024	22.14	43.59	8.10	10.39	9.53	ND
28/06/2024	20.68	41.21	7.32	13.13	12.14	ND
13/06/2024	23.53	39.58	8.35	15.46	10.39	ND
17/06/2024	25.48	42.34	10.31	13.21	12.54	ND
20/06/2024	21.49	45.43	9.54	17.32	11.24	ND
24/06/2024	22.46	45.12	8.24	13.28	14.21	ND
27/06/2024	19.85	36.59	7.43	10.39	10.70	ND
No. of Observation	8	8	8	8	8	8
Minimum	19.85	36.59	7.32	10.39	9.53	-
Maximum	25.48	45.43	10.31	17.32	14.21	-
Average	22.35	42.14	8.58	13.17	11.39	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



TC-6366



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/103
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/06/2024	ND	ND
06/06/2024	ND	ND
28/06/2024	ND	ND
13/06/2024	ND	ND
17/06/2024	ND	ND
20/06/2024	ND	ND
24/06/2024	ND	ND
27/06/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004043F, 4106F, 4174F, 4279F, 4325F, 4375F,
4549F, 4714F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
03/06/2024	13.28	36.59	8.19	11.43	9.43	ND
06/06/2024	12.93	32.26	6.37	13.27	6.39	ND
28/06/2024	13.43	34.43	9.43	10.54	5.12	ND
13/06/2024	14.32	31.28	10.44	13.29	8.54	ND
17/06/2024	15.48	34.37	12.41	15.46	9.24	ND
20/06/2024	14.29	34.28	9.32	12.16	10.43	ND
24/06/2024	12.49	39.68	9.48	11.14	7.24	ND
27/06/2024	16.43	32.15	8.54	10.54	6.56	ND
No. of Observation	8	8	8	8	8	8
Minimum	12.49	31.28	6.37	10.54	5.12	-
Maximum	16.43	39.68	12.41	15.46	10.43	-
Average	14.08	34.38	9.27	12.23	7.87	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



TC-6366



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/104
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/06/2024	ND	ND
06/06/2024	ND	ND
28/06/2024	ND	ND
13/06/2024	ND	ND
17/06/2024	ND	ND
20/06/2024	ND	ND
24/06/2024	ND	ND
27/06/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004044F, 4107F, 4175F, 4280F, 4326F, 4376F,
4550F, 4715F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/06/2024	20.43	40.12	8.15	12.18	9.29	ND
06/06/2024	17.69	42.35	6.21	14.26	8.37	ND
28/06/2024	18.26	37.68	8.20	13.17	9.12	ND
13/06/2024	19.10	40.12	6.38	12.42	7.43	ND
17/06/2024	20.32	36.59	6.12	14.23	6.24	ND
20/06/2024	21.14	35.46	7.24	15.48	10.43	ND
24/06/2024	20.15	42.14	8.26	10.46	14.21	ND
27/06/2024	20.58	40.17	10.39	15.54	15.25	ND
No. of Observation	8	8	8	8	8	8
Minimum	17.69	35.46	6.12	10.46	6.24	-
Maximum	21.14	42.35	10.39	15.54	15.25	-
Average	19.71	39.33	7.62	13.47	10.04	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(f)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/105
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/06/2024	ND	ND
06/06/2024	ND	ND
28/06/2024	ND	ND
13/06/2024	ND	ND
17/06/2024	ND	ND
20/06/2024	ND	ND
24/06/2024	ND	ND
27/06/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec. 3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004045F, 4108F, 4176F, 4281F, 4327F, 4377F,
4551F, 4716F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6, Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
03/06/2024	14.28	31.29	10.39	12.49	9.43	ND
06/06/2024	17.59	32.10	9.11	10.54	7.30	ND
28/06/2024	12.49	36.56	10.32	11.21	6.12	ND
13/06/2024	14.21	34.21	11.38	12.40	8.43	ND
17/06/2024	12.28	32.24	10.33	11.34	9.12	ND
20/06/2024	14.20	33.16	12.18	9.48	9.32	ND
24/06/2024	15.32	35.49	9.32	11.42	10.32	ND
27/06/2024	16.50	31.39	10.86	14.21	12.30	ND
No. of Observation	8	8	8	8	8	8
Minimum	12.28	31.29	9.11	9.48	6.12	-
Maximum	17.59	36.56	12.18	14.21	12.30	-
Average	14.61	33.31	10.49	11.64	9.04	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



TC-6366



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/106
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6, Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/06/2024	ND	ND
06/06/2024	ND	ND
28/06/2024	ND	ND
13/06/2024	ND	ND
17/06/2024	ND	ND
20/06/2024	ND	ND
24/06/2024	ND	ND
27/06/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004757F, 4809F, 4849F, 4898F, 4968F, 5087F,
5202F, 5284F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/07/2024	16.40	45.20	14.40	11.20	14.50	ND
04/07/2024	15.60	42.60	15.20	13.60	11.20	ND
08/07/2024	18.20	46.40	13.40	14.20	12.50	ND
11/07/2024	16.40	41.20	11.20	15.20	13.10	ND
15/07/2024	15.60	43.20	13.40	11.40	14.20	ND
18/07/2024	18.80	47.20	11.20	13.20	11.60	ND
22/07/2024	16.20	45.30	14.60	12.80	13.50	ND
25/07/2024	18.20	46.80	13.20	11.20	13.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	15.60	41.20	11.20	11.20	11.20	-
Maximum	18.80	47.20	15.20	15.20	14.50	-
Average	16.93	44.74	13.33	12.85	13.00	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II, sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/07/101
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/07/2024	ND	ND
04/07/2024	ND	ND
08/07/2024	ND	ND
11/07/2024	ND	ND
15/07/2024	ND	ND
18/07/2024	ND	ND
22/07/2024	ND	ND
25/07/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec. 3(i)] 16.11.2009, ND-Not Detected.



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 Post Vikrampur, Distt. Angul-759 106
 Odisha, India

ULR No.: TC636624000004758F, 4810F, 4850F, 4899F, 4969F, 5088F,
 5203F, 5285F
 Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
 Purpose of Monitoring : To Check the Pollution Load
 Method of Sampling : IS 5182 (Part 14)
 Monitoring Conducted By : Mr. Manas Satapathy
 Sampling Duration (Hrs.) : 24 Hrs.
 Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) µg/m ³	Particulate Matter (PM10) µg/m ³	Sulphur Dioxide (as SO2) µg/m ³	Nitrogen Dioxide (as NO2) µg/m ³	Ammonia (as NH3) µg/m ³	VOCs, µg/m ³
01/07/2024	19.40	36.40	11.50	10.40	10.20	ND
04/07/2024	21.50	31.50	9.40	9.80	12.60	ND
08/07/2024	18.60	39.40	10.20	12.50	13.20	ND
11/07/2024	16.80	35.30	8.40	11.40	12.40	ND
15/07/2024	19.20	39.40	10.40	10.60	11.20	ND
18/07/2024	18.40	32.40	10.40	12.60	10.60	ND
22/07/2024	19.40	38.50	11.20	10.20	11.60	ND
25/07/2024	21.40	36.40	12.50	12.60	13.50	ND
No. of Observation	8	8	8	8	8	8
Minimum	16.80	31.50	8.40	9.80	10.20	-
Maximum	21.50	39.40	12.50	12.60	13.50	-
Average	19.34	36.16	10.50	11.26	11.91	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



TC-8366



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/07/102
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/07/2024	ND	ND
04/07/2024	ND	ND
08/07/2024	ND	ND
11/07/2024	ND	ND
15/07/2024	ND	ND
18/07/2024	ND	ND
22/07/2024	ND	ND
25/07/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004759F, 4811F, 4851F, 4900F, 4970F, 5089F,
5204F, 5286F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/07/2024	20.80	40.20	11.20	14.80	12.80	ND
04/07/2024	20.50	41.20	10.50	12.90	11.20	ND
08/07/2024	22.40	39.50	9.50	16.40	15.40	ND
11/07/2024	20.50	37.20	10.40	17.20	12.80	ND
15/07/2024	23.20	39.20	12.40	16.40	14.60	ND
18/07/2024	19.80	42.60	11.60	19.40	13.20	ND
22/07/2024	20.60	43.20	10.40	16.20	16.20	ND
25/07/2024	21.50	33.80	9.80	13.40	12.60	ND
No. of Observation	8	8	8	8	8	8
Minimum	19.80	33.80	9.50	12.90	11.20	-
Maximum	23.20	43.20	12.40	19.40	16.20	-
Average	21.16	39.61	10.73	15.84	13.60	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/07/103
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/07/2024	ND	ND
04/07/2024	ND	ND
08/07/2024	ND	ND
11/07/2024	ND	ND
15/07/2024	ND	ND
18/07/2024	ND	ND
22/07/2024	ND	ND
25/07/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Odisha, India

ULR No.: TC636624000004760F, 4812F, 4852F, 4901F, 4971F, 5090F,
5205F, 5287F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
01/07/2024	12.40	34.20	10.50	13.60	11.50	ND
04/07/2024	14.20	30.30	9.80	15.20	9.80	ND
08/07/2024	15.60	31.20	11.20	13.10	8.20	ND
11/07/2024	12.40	29.60	12.80	15.90	10.30	ND
15/07/2024	13.40	31.80	10.40	17.40	11.20	ND
18/07/2024	12.30	31.80	11.80	14.90	12.60	ND
22/07/2024	14.60	36.80	12.00	15.50	9.20	ND
25/07/2024	15.20	30.20	10.00	13.90	8.90	ND
No. of Observation	8	8	8	8	8	8
Minimum	12.30	29.60	9.80	13.10	8.20	-
Maximum	15.60	36.80	12.80	17.40	12.60	-
Average	13.76	31.99	11.06	14.94	10.21	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/07/104
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/07/2024	ND	ND
04/07/2024	ND	ND
08/07/2024	ND	ND
11/07/2024	ND	ND
15/07/2024	ND	ND
18/07/2024	ND	ND
22/07/2024	ND	ND
25/07/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Odisha, India

ULR No.: TC636624000004761F, 4813F, 4853F, 4902F, 4972F, 5091F,
5206F, 5288F

Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/07/2024	18.60	36.40	10.40	15.60	11.30	ND
04/07/2024	20.60	39.40	9.40	16.20	10.20	ND
08/07/2024	19.50	35.40	10.20	15.90	12.60	ND
11/07/2024	21.60	38.20	8.80	14.60	9.80	ND
15/07/2024	22.40	34.20	9.10	17.20	8.80	ND
18/07/2024	24.50	33.60	10.80	16.20	12.40	ND
22/07/2024	23.10	40.50	11.50	13.80	16.20	ND
25/07/2024	21.90	38.60	12.40	17.20	13.80	ND
No. of Observation	8	8	8	8	8	8
Minimum	18.60	33.60	8.80	13.80	8.80	-
Maximum	24.50	40.50	12.40	17.20	16.20	-
Average	21.53	37.04	10.33	15.84	11.89	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II sec-3(i)] 16.11.2009, ND-Not Detected.



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Odisha, India

Test Report No.: NL/2024/TFL/07/105
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/07/2024	ND	ND
04/07/2024	ND	ND
08/07/2024	ND	ND
11/07/2024	ND	ND
15/07/2024	ND	ND
18/07/2024	ND	ND
22/07/2024	ND	ND
25/07/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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 Odisha, India

ULR No.: TC636624000004762F, 4814F, 4854F, 4903F, 4973F, 5092F,
 5206F, 5289F
 Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
 Purpose of Monitoring : To Check the Pollution Load
 Method of Sampling : IS 5182 (Part 14)
 Monitoring Conducted By : Mr. Manas Satapathy
 Sampling Duration (Hrs.) : 24 Hrs.
 Sampling Location : AAQ-6, Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) µg/m ³	Particulate Matter (PM10) µg/m ³	Sulphur Dioxide (as SO2) µg/m ³	Nitrogen Dioxide (as NO2) µg/m ³	Ammonia (as NH3) µg/m ³	VOCs, µg/m ³
01/07/2024	16.80	29.20	12.60	15.80	11.20	ND
04/07/2024	19.40	30.50	11.40	14.20	10.10	ND
08/07/2024	14.50	33.60	12.60	15.20	9.40	ND
11/07/2024	12.30	32.40	13.40	14.60	10.90	ND
15/07/2024	14.60	30.60	12.40	14.20	11.80	ND
18/07/2024	12.80	31.40	14.20	16.80	11.50	ND
22/07/2024	13.80	32.60	11.40	13.20	13.40	ND
25/07/2024	14.80	29.60	12.20	15.50	13.90	ND
No. of Observation	8	8	8	8	8	8
Minimum	12.30	29.20	11.40	13.20	9.40	-
Maximum	19.40	33.60	14.20	16.80	13.90	-
Average	14.88	31.24	12.53	14.94	11.53	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark: NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec-3(i)] 16.11.2009, ND-Not Detected,



TC-6366

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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/07/106
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/07/2024	ND	ND
04/07/2024	ND	ND
08/07/2024	ND	ND
11/07/2024	ND	ND
15/07/2024	ND	ND
18/07/2024	ND	ND
22/07/2024	ND	ND
25/07/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010110, 202408050110, 202408080110, 202408120110
202408150110, 202408190110, 202408220110, 202408260110
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Load
Purpose of Monitoring : IS 5182 (Part 14)
Method of Sampling : Mr. Manas Satapathy
Monitoring Conducted By : 24 Hrs.
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/08/2024	18.40	40.90	12.80	14.20	12.50	ND
05/08/2024	19.20	39.90	13.40	16.20	14.20	ND
08/08/2024	20.10	42.10	15.20	17.20	15.00	ND
12/08/2024	19.80	38.90	14.10	16.90	15.40	ND
15/08/2024	17.40	40.10	16.00	18.20	20.10	ND
19/08/2024	20.90	44.20	14.50	17.00	14.20	ND
22/08/2024	18.10	41.60	16.60	18.50	15.60	ND
26/08/2024	20.00	42.50	15.90	17.70	16.10	ND
No. of Observation	8	8	8	8	8	8
Minimum	17.40	38.90	12.80	14.20	12.50	-
Maximum	20.90	44.20	16.60	18.50	20.10	-
Average	19.24	41.28	14.81	16.99	15.39	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Odisha, IndiaTest Report No.: 202408010110, 202408050110, 202408080110, 202408120110
202408150110, 202408190110, 202408220110, 202408260110

Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
 Purpose of Monitoring : To Check the Pollution Load
 Method of Sampling : IS 5182 (Part 14)
 Monitoring Conducted By : Mr. Manas Satapathy
 Sampling Duration (Hrs.) : 24 Hrs.
 Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/08/2024	ND	ND
05/08/2024	ND	ND
08/08/2024	ND	ND
12/08/2024	ND	ND
15/08/2024	ND	ND
19/08/2024	ND	ND
22/08/2024	ND	ND
26/08/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010111, 202408050111, 202408080111, 202408120111
202408150111, 202408190111, 202408220111, 202408260111
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
01/08/2024	22.50	33.50	13.40	15.80	12.50	ND
05/08/2024	23.40	30.20	11.80	14.20	13.90	ND
08/08/2024	20.60	36.50	12.40	15.10	15.40	ND
12/08/2024	19.80	33.40	10.60	13.20	11.80	ND
15/08/2024	21.20	37.50	13.20	16.00	12.60	ND
19/08/2024	20.90	30.20	12.50	15.60	13.20	ND
22/08/2024	22.40	36.80	13.90	16.40	14.80	ND
26/08/2024	19.00	34.50	14.40	17.20	16.80	ND
No. of Observation	8	8	8	8	8	8
Minimum	19.00	30.20	10.60	13.20	11.80	-
Maximum	23.40	37.50	14.40	17.20	16.80	-
Average	21.23	34.08	12.78	15.44	13.88	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010111, 202408050111, 202408080111, 202408120111
202408150111, 202408190111, 202408220111, 202408260111
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/08/2024	ND	ND
05/08/2024	ND	ND
08/08/2024	ND	ND
12/08/2024	ND	ND
15/08/2024	ND	ND
19/08/2024	ND	ND
22/08/2024	ND	ND
26/08/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Odisha, India

Test Report No.: 202408010111, 202408050111, 202408080111, 202408120111
202408150111, 202408190111, 202408220111, 202408260111
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/08/2024	22.50	36.90	13.50	16.20	14.10	ND
05/08/2024	21.60	37.60	12.80	14.90	13.20	ND
08/08/2024	24.50	36.20	11.20	15.60	14.50	ND
12/08/2024	19.0	34.40	13.60	18.20	13.60	ND
15/08/2024	21.50	36.80	14.60	18.90	16.40	ND
19/08/2024	22.50	39.80	13.30	17.20	14.00	ND
22/08/2024	23.40	41.50	13.20	15.80	15.10	ND
26/08/2024	22.90	30.60	11.50	16.00	14.60	ND
No. of Observation	8	8	8	8	8	8
Minimum	19.00	30.60	11.20	14.90	13.20	-
Maximum	24.50	41.50	14.60	18.90	16.40	-
Average	22.24	36.73	12.96	16.60	14.44	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010111, 202408050111, 202408080111, 202408120111
202408150111, 202408190111, 202408220111, 202408260111
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/08/2024	ND	ND
05/08/2024	ND	ND
08/08/2024	ND	ND
12/08/2024	ND	ND
15/08/2024	ND	ND
19/08/2024	ND	ND
22/08/2024	ND	ND
26/08/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(f)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010113, 202408050113, 202408080113, 202408120113
202408150113, 202408190113, 202408220113, 202408260113
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/08/2024	15.20	31.40	12.30	15.40	13.20	ND
05/08/2024	16.60	29.10	11.40	14.80	11.40	ND
08/08/2024	13.20	28.40	13.10	16.20	10.80	ND
12/08/2024	14.40	27.20	14.40	17.40	13.50	ND
15/08/2024	15.80	29.50	12.50	15.00	13.90	ND
19/08/2024	14.00	30.20	13.20	16.80	15.20	ND
22/08/2024	16.10	34.40	14.40	18.20	11.80	ND
26/08/2024	17.20	28.50	12.90	16.00	11.00	ND
No. of Observation	8	8	8	8	8	8
Minimum	13.20	27.20	11.40	14.80	10.80	-
Maximum	17.20	34.40	14.40	18.20	15.20	-
Average	15.31	29.84	13.03	16.23	12.60	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010113, 202408050113, 202408080113, 202408120113
202408150113, 202408190113, 202408220113, 202408260113
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/08/2024	ND	ND
05/08/2024	ND	ND
08/08/2024	ND	ND
12/08/2024	ND	ND
15/08/2024	ND	ND
19/08/2024	ND	ND
22/08/2024	ND	ND
26/08/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010114, 202408050114, 202408080114, 202408120114
202408150114, 202408190114, 202408220114, 202408260114
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
01/08/2024	23.40	34.40	13.20	18.20	14.20	ND
05/08/2024	21.80	36.80	11.40	15.60	11.80	ND
08/08/2024	20.90	33.60	12.30	16.40	13.50	ND
12/08/2024	24.50	37.00	10.40	15.00	12.60	ND
15/08/2024	23.90	35.20	11.80	16.20	11.90	ND
19/08/2024	26.40	36.20	13.20	17.40	14.60	ND
22/08/2024	25.10	38.40	14.40	18.50	15.20	ND
26/08/2024	24.00	37.10	15.10	19.10	16.00	ND
No. of Observation	8	8	8	8	8	8
Minimum	20.90	33.60	10.40	15.00	11.80	-
Maximum	26.40	38.40	15.10	19.10	16.00	-
Average	21.25	36.09	12.73	17.05	13.73	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010114, 202408050114, 202408080114, 202408120114
202408150114, 202408190114, 202408220114, 202408260114
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/08/2024	ND	ND
05/08/2024	ND	ND
08/08/2024	ND	ND
12/08/2024	ND	ND
15/08/2024	ND	ND
19/08/2024	ND	ND
22/08/2024	ND	ND
26/08/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010115, 202408050115, 202408080115, 202408120115
202408150115, 202408190115, 202408220115, 202408260115
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-6, Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs $\mu\text{g}/\text{m}^3$
01/08/2024	18.00	28.10	14.50	17.40	13.90	ND
05/08/2024	21.90	31.60	13.40	16.20	12.40	ND
08/08/2024	17.20	35.40	14.00	17.10	11.20	ND
12/08/2024	16.40	34.10	15.30	18.20	12.30	ND
15/08/2024	17.20	32.60	15.00	17.00	14.20	ND
19/08/2024	15.40	30.40	16.20	18.80	15.10	ND
22/08/2024	16.00	30.80	13.80	16.50	14.30	ND
26/08/2024	18.50	33.80	14.90	17.20	15.20	ND
No. of Observation	8	8	8	8	8	8
Minimum	15.40	28.10	13.40	16.20	11.20	-
Maximum	21.90	35.40	16.20	18.80	15.20	-
Average	17.58	32.10	14.64	17.30	13.58	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010115, 202408050115, 202408080115, 202408120115
202408150115, 202408190115, 202408220115, 202408260115
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
01/08/2024	ND	ND
05/08/2024	ND	ND
08/08/2024	ND	ND
12/08/2024	ND	ND
15/08/2024	ND	ND
19/08/2024	ND	ND
22/08/2024	ND	ND
26/08/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020110, 202409050110, 202409090110, 202409120110
202409160110, 202409190110, 202409230110, 202409260110
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/09/2024	23.50	44.80	14.60	13.70	14.40	ND
05/09/2024	21.60	42.50	16.20	19.20	16.20	ND
09/09/2024	22.40	44.60	17.40	19.90	17.10	ND
12/09/2024	21.70	40.50	16.20	18.80	17.50	ND
16/09/2024	20.90	42.30	18.40	20.50	22.40	ND
19/09/2024	23.10	46.50	16.80	19.30	16.40	ND
23/09/2024	20.50	43.40	19.20	21.50	17.30	ND
26/09/2024	23.80	44.60	17.10	20.10	18.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	20.50	40.50	14.60	13.70	14.40	-
Maximum	23.80	46.50	19.20	21.50	22.40	-
Average	22.19	43.65	16.99	19.13	17.46	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec. 3(i)] 16.11.2009, ND-Not Detected.



Issued To **M/s Talcher Fertilizers Limited**Post Vikrampur, Distt. Angul-759 106
Odisha, IndiaTest Report No.: 202409020110, 202409050110, 202409090110, 202409120110
202409160110, 202409190110, 202409230110, 202409260110

Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
 Purpose of Monitoring : To Check the Pollution Load
 Method of Sampling : IS 5182 (Part 14)
 Monitoring Conducted By : Mr. Manas Satapathy
 Sampling Duration (Hrs.) : 24 Hrs.
 Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/09/2024	ND	ND
05/09/2024	ND	ND
09/09/2024	ND	ND
12/09/2024	ND	ND
16/09/2024	ND	ND
19/09/2024	ND	ND
23/09/2024	ND	ND
26/09/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Odisha, India

Test Report No.: 202409020111, 202409050111, 202409090111, 202409120111

Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
 Purpose of Monitoring : To Check the Pollution Load
 Method of Sampling : IS 5182 (Part 14)
 Monitoring Conducted By : Mr. Manas Satapathy
 Sampling Duration (Hrs.) : 24Hrs
 Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/09/2024	25.50	36.40	15.20	17.80	14.50	ND
05/09/2024	26.40	33.40	14.60	18.10	16.20	ND
09/09/2024	23.70	39.40	14.40	16.80	17.40	ND
12/09/2024	22.40	37.10	13.30	16.90	14.80	ND
16/09/2024	23.30	40.80	15.70	18.20	14.60	ND
19/09/2024	23.30	34.20	14.50	17.50	15.20	ND
23/09/2024	25.50	39.20	15.90	18.20	16.00	ND
26/09/2024	22.40	37.60	16.40	19.40	19.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	22.40	33.40	13.30	16.80	14.50	-
Maximum	26.40	40.80	16.40	19.40	19.40	-
Average	24.06	37.26	15.00	17.86	16.01	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Test Report No.: 202409020111, 202409050111, 202409090111, 202409120111
202409160111, 202409190111, 202409230111, 202409260111
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/09/2024	ND	ND
05/09/2024	ND	ND
09/09/2024	ND	ND
12/09/2024	ND	ND
16/09/2024	ND	ND
19/09/2024	ND	ND
23/09/2024	ND	ND
26/09/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020111, 202409050111, 202409090111, 202409120111
202409160111, 202409190111, 202409230111, 202409260111
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/08/2024	26.10	40.20	15.50	18.20	12.40	ND
05/08/2024	25.50	41.10	14.80	16.80	15.20	ND
08/08/2024	27.20	39.90	13.20	17.70	16.40	ND
12/08/2024	23.50	38.80	15.60	20.30	15.60	ND
15/08/2024	24.50	39.10	16.40	20.60	18.40	ND
19/08/2024	26.60	41.20	15.30	19.90	16.20	ND
22/08/2024	27.40	43.30	15.80	17.80	17.30	ND
26/08/2024	26.80	36.60	14.40	18.90	16.60	ND
No. of Observation	8	8	8	8	8	8
Minimum	23.50	36.60	13.20	16.80	12.40	-
Maximum	27.40	43.30	16.40	20.60	18.40	-
Average	25.95	40.03	15.13	18.78	16.01	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020111, 202409050111, 202409090111, 202409120111
202409160111, 202409190111, 202409230111, 202409260111
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/09/2024	ND	ND
05/09/2024	ND	ND
09/09/2024	ND	ND
12/09/2024	ND	ND
16/09/2024	ND	ND
19/09/2024	ND	ND
23/09/2024	ND	ND
26/09/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Test Report No.: 202409020113, 202409050113, 202409090113, 202409120113
202409160113, 202409190113, 202409230113, 202409260113
Test Report Date: 01/10/2024

Sample Particulars

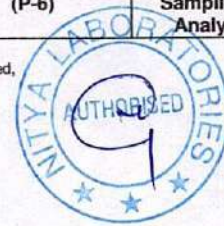
Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs ₃ $\mu\text{g}/\text{m}^3$
02/09/2024	18.40	35.50	14.30	17.40	16.20	ND
05/09/2024	19.20	33.20	13.60	16.80	13.40	ND
09/09/2024	16.20	32.10	15.20	18.20	12.80	ND
12/09/2024	17.40	30.20	16.40	19.40	14.40	ND
16/09/2024	18.80	32.50	14.90	17.20	15.10	ND
19/09/2024	17.20	33.20	15.20	18.80	16.40	ND
23/09/2024	19.10	37.40	16.40	20.20	13.10	ND
26/09/2024	20.20	31.50	14.90	18.40	14.90	ND
No. of Observation	8	8	8	8	8	8
Minimum	16.20	30.20	13.60	16.80	12.80	-
Maximum	20.20	37.40	16.40	20.20	16.40	-
Average	18.31	33.20	15.11	18.30	14.54	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020113, 202409050113, 202409090113, 202409120113
202409160113, 202409190113, 202409230113, 202409260113
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/09/2024	ND	ND
05/09/2024	ND	ND
09/09/2024	ND	ND
12/09/2024	ND	ND
16/09/2024	ND	ND
19/09/2024	ND	ND
23/09/2024	ND	ND
26/09/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020114, 202409050114, 202409090114, 202409120114,
202409160114, 202409190114, 202409230114, 202409260114
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/09/2024	26.40	37.40	16.20	21.30	12.20	ND
05/09/2024	25.60	39.10	14.50	18.80	13.40	ND
09/09/2024	23.60	36.60	15.30	19.40	15.50	ND
12/09/2024	27.50	38.40	13.40	18.20	14.60	ND
16/09/2024	26.90	37.10	14.20	19.20	13.90	ND
19/09/2024	28.40	39.20	15.20	20.40	16.60	ND
23/09/2024	27.10	40.50	16.40	20.80	17.20	ND
26/09/2024	26.00	39.30	17.20	21.10	18.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	23.60	36.60	13.40	18.20	12.20	-
Maximum	28.40	40.50	17.20	21.30	18.40	-
Average	26.44	38.45	15.30	19.90	15.23	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020114, 202409050114, 202409090114, 202409120114,
202409160114, 202409190114, 202409230114, 202409260114
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/09/2024	ND	ND
05/09/2024	ND	ND
09/09/2024	ND	ND
12/09/2024	ND	ND
16/09/2024	ND	ND
19/09/2024	ND	ND
23/09/2024	ND	ND
26/09/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020115, 202409050115, 202409090115, 202409120115
202409160115, 202409190115, 202409230115, 202409260115
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
02/09/2024	22.90	32.90	16.50	19.80	15.10	ND
05/09/2024	25.10	36.60	15.40	18.20	14.40	ND
09/09/2024	22.40	39.40	16.20	19.40	13.30	ND
12/09/2024	20.10	38.80	17.40	20.20	14.40	ND
16/09/2024	21.20	37.70	17.20	19.90	16.20	ND
19/09/2024	19.40	36.60	18.20	20.80	17.10	ND
23/09/2024	20.50	35.80	15.60	19.40	16.30	ND
26/09/2024	22.50	37.80	16.80	20.90	17.20	ND
No. of Observation	8	8	8	8	8	8
Minimum	19.40	32.90	15.40	18.20	13.30	-
Maximum	25.10	39.40	18.20	20.90	17.20	-
Average	21.76	36.95	16.66	19.83	15.50	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/ 01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020115, 202409050115, 202409090115, 202409120115
202409160115, 202409190115, 202409230115, 202409260115
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
02/09/2024	ND	ND
05/09/2024	ND	ND
09/09/2024	ND	ND
12/09/2024	ND	ND
16/09/2024	ND	ND
19/09/2024	ND	ND
23/09/2024	ND	ND
26/09/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030110, 202410070110, 202410100110, 202410140110
202410170110, 202410210110, 202410240110, 202410280110
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/10/2024	27.40	47.90	17.20	19.50	17.40	ND
07/10/2024	24.50	45.40	19.50	22.50	19.60	ND
10/10/2024	25.50	47.20	20.10	23.10	20.50	ND
14/10/2024	24.90	43.20	19.50	21.40	20.00	ND
17/10/2024	24.60	45.20	21.50	23.30	25.50	ND
21/10/2024	26.20	49.50	19.90	22.80	19.60	ND
24/10/2024	23.70	46.20	22.50	24.60	20.90	ND
28/10/2024	26.90	47.80	20.70	23.30	21.10	ND
No. of Observation	8	8	8	8	8	8
Minimum	23.70	43.20	17.20	19.50	17.40	-
Maximum	27.40	49.50	22.50	24.60	25.50	-
Average	25.46	46.55	20.11	22.56	20.58	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030110, 202410070110, 202410100110, 202410140110
202410170110, 202410210110, 202410240110, 202410280110
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/10/2024	ND	ND
07/10/2024	ND	ND
10/10/2024	ND	ND
14/10/2024	ND	ND
17/10/2024	ND	ND
21/10/2024	ND	ND
24/10/2024	ND	ND
28/10/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759-106
Odisha, India

Test Report No.: 202410030111, 202410070111, 202410100111, 202410140111
202410170111, 202410210111, 202410240111, 202410280111
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/10/2024	28.40	39.20	17.40	20.80	17.50	ND
07/10/2024	29.20	36.20	16.80	21.40	19.30	ND
10/10/2024	26.20	41.20	17.10	19.20	20.60	ND
14/10/2024	25.50	40.20	16.20	18.50	16.80	ND
17/10/2024	26.80	43.60	18.00	20.30	17.10	ND
21/10/2024	25.20	37.50	16.60	19.50	17.60	ND
24/10/2024	27.40	42.80	17.80	20.20	18.20	ND
28/10/2024	25.50	40.80	18.40	21.50	21.30	ND
No. of Observation	8	8	8	8	8	8
Minimum	25.20	36.20	16.20	18.50	16.80	-
Maximum	29.20	40.20	18.40	21.50	21.30	-
Average	26.78	65.19	17.29	20.18	18.55	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030111, 202410070111, 202410100111, 202410140111
202410170111, 202410210111, 202410240111, 202410280111
Test Report Date: 07/11/2024

Sample Particulars

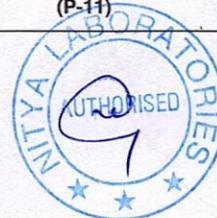
Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/10/2024	ND	ND
07/10/2024	ND	ND
10/10/2024	ND	ND
14/10/2024	ND	ND
17/10/2024	ND	ND
21/10/2024	ND	ND
24/10/2024	ND	ND
28/10/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030111, 202410070111, 202410100111, 202410140111
202410170111, 202410210111, 202410240111, 202410280111
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/10/2024	29.80	43.20	18.50	21.20	14.50	ND
07/10/2024	28.20	44.50	17.60	19.60	17.50	ND
10/10/2024	30.40	42.90	16.20	20.70	18.40	ND
14/10/2024	26.60	41.70	18.20	23.40	17.60	ND
17/10/2024	27.80	42.50	19.10	22.80	20.50	ND
21/10/2024	29.50	44.20	18.30	21.40	19.50	ND
24/10/2024	30.10	46.30	18.40	20.80	20.30	ND
28/10/2024	29.50	39.80	17.50	21.10	18.10	ND
No. of Observation	8	8	8	8	8	8
Minimum	26.60	39.80	16.20	19.60	14.50	-
Maximum	30.40	46.30	19.10	23.40	20.50	-
Average	28.99	43.14	17.98	21.38	18.30	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030111, 202410070111, 202410100111, 202410140111
202410170111, 202410210111, 202410240111, 202410280111
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/10/2024	ND	ND
07/10/2024	ND	ND
10/10/2024	ND	ND
14/10/2024	ND	ND
17/10/2024	ND	ND
21/10/2024	ND	ND
24/10/2024	ND	ND
28/10/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030113, 202410070113, 202410100113, 202410140113
202410170113, 202410210113, 202410240113, 202410280113
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/10/2024	22.50	38.40	17.20	20.50	19.40	ND
07/10/2024	23.50	36.40	15.50	19.80	16.40	ND
10/10/2024	20.50	37.40	17.40	21.40	15.80	ND
14/10/2024	21.20	35.80	18.20	22.60	17.40	ND
17/10/2024	21.80	37.50	16.90	20.50	18.20	ND
21/10/2024	20.10	38.10	17.30	21.50	18.40	ND
24/10/2024	22.60	41.20	18.40	23.30	15.50	ND
28/10/2024	23.60	37.20	16.90	21.50	16.90	ND
No. of Observation	8	8	8	8	8	8
Minimum	20.10	35.80	15.50	19.80	15.50	-
Maximum	23.60	41.20	18.40	23.30	19.40	-
Average	21.98	37.75	17.23	21.39	17.25	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030113, 202410070113, 202410100113, 202410140113
202410170113, 202410210113, 202410240113, 202410280113
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-4, Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/10/2024	ND	ND
07/10/2024	ND	ND
10/10/2024	ND	ND
14/10/2024	ND	ND
17/10/2024	ND	ND
21/10/2024	ND	ND
24/10/2024	ND	ND
28/10/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030114, 202410070114, 202410100114, 202410140114
202410170114, 202410210114, 202410240114, 202410280114
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO ₂) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO ₂) $\mu\text{g}/\text{m}^3$	Ammonia (as NH ₃) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/10/2024	29.50	41.50	19.00	24.40	14.50	ND
07/10/2024	28.60	42.20	18.50	21.80	15.60	ND
10/10/2024	27.40	40.60	17.20	22.50	17.20	ND
14/10/2024	30.40	41.50	16.40	21.10	16.90	ND
17/10/2024	29.80	40.60	17.20	24.40	15.20	ND
21/10/2024	31.40	42.30	18.50	23.50	18.20	ND
24/10/2024	30.20	43.60	19.20	24.00	19.40	ND
28/10/2024	29.50	42.80	20.50	23.90	16.50	ND
No. of Observation	8	8	8	8	8	8
Minimum	27.40	40.60	16.40	21.10	14.50	-
Maximum	31.40	43.60	20.50	24.40	19.40	-
Average	29.60	41.89	18.31	23.20	16.69	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Odisha, India

Test Report No.: 202410030114, 202410070114, 202410100114, 202410140114,
202410170114, 202410210114, 202410240114, 202410280114
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-5, Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/10/2024	ND	ND
07/10/2024	ND	ND
10/10/2024	ND	ND
14/10/2024	ND	ND
17/10/2024	ND	ND
21/10/2024	ND	ND
24/10/2024	ND	ND
28/10/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030115, 202410070115, 202410100115, 202410140115
202410170115, 202410210115, 202410240115, 202410280115
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24Hrs
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants					
	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Sulphur Dioxide (as SO2) $\mu\text{g}/\text{m}^3$	Nitrogen Dioxide (as NO2) $\mu\text{g}/\text{m}^3$	Ammonia (as NH3) $\mu\text{g}/\text{m}^3$	VOCs, $\mu\text{g}/\text{m}^3$
03/10/2024	25.50	35.80	19.20	22.40	17.40	ND
07/10/2024	28.40	39.40	18.40	21.50	16.50	ND
10/10/2024	25.60	42.50	18.10	22.60	15.40	ND
14/10/2024	24.20	41.20	20.50	23.30	16.60	ND
17/10/2024	24.50	40.50	19.80	22.80	18.40	ND
21/10/2024	22.50	39.90	20.40	24.40	19.20	ND
24/10/2024	23.60	38.20	18.50	22.50	14.50	ND
28/10/2024	25.60	40.20	18.20	23.30	15.80	ND
No. of Observation	8	8	8	8	8	8
Minimum	22.50	35.80	18.10	21.50	14.50	-
Maximum	28.40	42.50	20.50	24.40	19.20	-
Average	24.99	39.71	19.14	22.85	16.73	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AAQ/VOC/01

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030115, 202410070115, 202410100115, 202410140115
202410170115, 202410210115, 202410240115, 202410280115
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : **Ambient Air Quality Monitoring**
Purpose of Monitoring : To Check the Pollution Load
Method of Sampling : IS 5182 (Part 14)
Monitoring Conducted By : Mr. Manas Satapathy
Sampling Duration (Hrs.) : 24 Hrs.
Sampling Location : AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants	
	Methane HC $\mu\text{g}/\text{m}^3$	Non Methane HC $\mu\text{g}/\text{m}^3$
03/10/2024	ND	ND
07/10/2024	ND	ND
10/10/2024	ND	ND
14/10/2024	ND	ND
17/10/2024	ND	ND
21/10/2024	ND	ND
24/10/2024	ND	ND
28/10/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark:

NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected.



Test Reports of Noise Monitoring (May 2024 to October 2024)

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003244F, 3342F, 3399F, 3469F, 3573F, 3696F,
3756F, 3891F, 4032F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/05/2024	51.5	40.3	IS9989
2	06/05/2024	53.2	38.5	IS 9989
3	09/05/2024	52.3	41.3	IS 9989
4	13/05/2024	50.2	42.8	IS 9989
5	16/05/2024	53.4	44.6	IS 9989
6	20/05/2024	51.9	41.1	IS 9989
7	23/05/2024	52.6	43.9	IS 9989
8	27/05/2024	50.9	42.8	IS 9989
9	30/05/2024	52.6	40.1	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003245F, 3343F, 3400F, 3470F, 3574F, 3697F,
3757F, 3892F, 4033F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-2, H.B.Colony

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/05/2024	56.9	46.5	IS9989
2	06/05/2024	54.0	45.1	IS 9989
3	09/05/2024	51.5	46.3	IS 9989
4	13/05/2024	53.6	47.9	IS 9989
5	16/05/2024	54.1	45.2	IS 9989
6	20/05/2024	52.9	42.5	IS 9989
7	23/05/2024	51.4	40.2	IS 9989
8	27/05/2024	51.9	42.9	IS 9989
9	30/05/2024	53.1	44.6	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



TC-6366



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003246F, 3344F, 3401F, 3471F, 3575F, 3698F,
3758F, 3893F, 4034F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/05/2024	53.5	42.9	IS9989
2	06/05/2024	52.1	43.8	IS 9989
3	09/05/2024	53.6	41.9	IS 9989
4	13/05/2024	52.4	42.5	IS 9989
5	16/05/2024	51.7	44.6	IS 9989
6	20/05/2024	53.8	46.8	IS 9989
7	23/05/2024	54.1	45.7	IS 9989
8	27/05/2024	53.2	43.9	IS 9989
9	30/05/2024	52.4	47.1	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To **M/s Talcher Fertilizers Limited**
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003247F, 3345F, 3402F, 3472F, 3576F, 3699F,
3759F, 3894F, 4035F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-4, Balanda House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/05/2024	50.7	40.5	IS9989
2	06/05/2024	47.6	39.5	IS 9989
3	09/05/2024	49.5	41.6	IS 9989
4	13/05/2024	50.6	38.5	IS 9989
5	16/05/2024	48.6	37.9	IS 9989
6	20/05/2024	49.3	40.8	IS 9989
7	23/05/2024	51.8	42.6	IS 9989
8	27/05/2024	52.7	41.1	IS 9989
9	30/05/2024	51.6	39.7	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000003248F, 3346F, 3403F, 3473F, 3577F, 3700F,
3760F, 3895F, 4035F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/05/2024	48.6	40.5	IS9989
2	06/05/2024	49.3	41.6	IS 9989
3	09/05/2024	51.7	40.9	IS 9989
4	13/05/2024	48.7	42.6	IS 9989
5	16/05/2024	49.2	40.8	IS 9989
6	20/05/2024	52.1	39.9	IS 9989
7	23/05/2024	49.6	41.7	IS 9989
8	27/05/2024	47.6	42.8	IS 9989
9	30/05/2024	50.3	41.3	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



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Odisha, India

ULR No.: TC636624000003249F, 3347F, 3404F, 3474F, 3578F, 3701F,
3761F, 3896F, 4036F
Test Report Date: 10/06/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-6, Kukudanga Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/05/2024	48.6	40.2	IS9989
2	06/05/2024	49.3	39.4	IS 9989
3	09/05/2024	51.7	41.6	IS 9989
4	13/05/2024	49.8	39.9	IS 9989
5	16/05/2024	51.7	41.7	IS 9989
6	20/05/2024	52.6	43.6	IS 9989
7	23/05/2024	51.4	41.8	IS 9989
8	27/05/2024	50.8	42.6	IS 9989
9	30/05/2024	47.3	40.1	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004046F, 4109F, 4177F, 4282F, 4328F, 4378F,
4552F, 4717F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/06/2024	50.8	38.5	IS9989
2	06/06/2024	51.5	39.9	IS 9989
3	28/06/2024	51.2	40.5	IS 9989
4	13/06/2024	49.8	43.2	IS 9989
5	17/06/2024	54.1	45.6	IS 9989
6	20/06/2024	50.6	42.1	IS 9989
7	24/06/2024	51.4	44.6	IS 9989
8	27/06/2024	49.8	41.2	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004047F, 4110F, 4178F, 4283F, 4329F, 4379F,
4553F, 4718F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : Ambient Noise
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-2, H.B.Colony

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/06/2024	55.8	45.2	IS9989
2	06/06/2024	53.7	43.1	IS 9989
3	28/06/2024	50.9	46.7	IS 9989
4	13/06/2024	51.2	46.5	IS 9989
5	17/06/2024	52.8	43.6	IS 9989
6	20/06/2024	51.0	41.4	IS 9989
7	24/06/2024	50.2	39.5	IS 9989
8	27/06/2024	50.5	41.2	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004048F, 4111F, 4179F, 4284F, 4330F, 4380F,
4554F, 4719F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/06/2024	52.1	40.9	IS9989
2	06/06/2024	50.7	41.1	IS 9989
3	28/06/2024	52.9	40.2	IS 9989
4	13/06/2024	51.0	42.5	IS 9989
5	17/06/2024	50.8	43.2	IS 9989
6	20/06/2024	51.2	45.6	IS 9989
7	24/06/2024	53.4	44.2	IS 9989
8	27/06/2024	52.1	42.1	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004049F, 4112F, 4180F, 4285F, 4331F, 4381F,
4555F, 4720F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-4, Balanda House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/06/2024	51.9	39.4	IS9989
2	06/06/2024	46.8	37.6	IS 9989
3	28/06/2024	46.9	40.2	IS 9989
4	13/06/2024	47.9	39.5	IS 9989
5	17/06/2024	47.6	36.8	IS 9989
6	20/06/2024	46.7	39.8	IS 9989
7	24/06/2024	49.8	41.3	IS 9989
8	27/06/2024	50.7	40.2	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004050F, 4113F, 4181F, 4286F, 4332F, 4382F,
4556F, 4721F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/06/2024	46.8	37.9	IS9989
2	06/06/2024	48.9	40.2	IS 9989
3	28/06/2024	50.6	39.5	IS 9989
4	13/06/2024	46.9	40.4	IS 9989
5	17/06/2024	46.8	39.5	IS 9989
6	20/06/2024	50.8	40.2	IS 9989
7	24/06/2024	48.9	40.2	IS 9989
8	27/06/2024	46.9	41.2	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004051F, 4114F, 4182F, 4287F, 4333F, 4383F,
4557F, 4722F
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-6, Kukudanga Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/06/2024	47.9	39.5	IS9989
2	06/06/2024	47.9	37.4	IS 9989
3	28/06/2024	49.8	40.1	IS 9989
4	13/06/2024	48.7	40.2	IS 9989
5	17/06/2024	47.9	41.6	IS 9989
6	20/06/2024	50.3	44.5	IS 9989
7	24/06/2024	50.9	40.3	IS 9989
8	27/06/2024	49.8	40.4	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004763F, 4815F, 4855F, 4904F, 4974F, 5093F,
5207F, 5290F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/07/2024	52.5	36.8	IS9989
2	04/07/2024	50.8	38.5	IS 9989
3	08/07/2024	53.4	42.1	IS 9989
4	11/07/2024	48.4	41.8	IS 9989
5	15/07/2024	52.8	44.2	IS 9989
6	18/07/2024	49.6	43.8	IS 9989
7	22/07/2024	53.6	42.4	IS 9989
8	25/07/2024	51.7	39.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004764F, 4816F, 4856F, 4905F, 4975F, 5094F,
5208F, 5291F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-2, H.B.Colony

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/07/2024	54.2	43.8	IS9989
2	04/07/2024	52.8	44.1	IS 9989
3	08/07/2024	51.9	42.7	IS 9989
4	11/07/2024	49.6	43.9	IS 9989
5	15/07/2024	50.2	41.1	IS 9989
6	18/07/2024	52.6	38.5	IS 9989
7	22/07/2024	53.8	39.3	IS 9989
8	25/07/2024	48.7	42.2	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004765F, 4817F, 4857F, 4906F, 4976F, 5095F,
5209F, 5292F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/07/2024	51.1	41.5	IS9989
2	04/07/2024	52.8	43.7	IS 9989
3	08/07/2024	54.3	42.9	IS 9989
4	11/07/2024	53.1	40.2	IS 9989
5	15/07/2024	49.5	44.8	IS 9989
6	18/07/2024	52.2	41.9	IS 9989
7	22/07/2024	51.8	43.7	IS 9989
8	25/07/2024	50.8	40.8	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004766F, 4818F, 4858F, 4907F, 4977F, 5096F,
5210F, 5293F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-4, Balanda House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/07/2024	49.5	41.1	IS9989
2	04/07/2024	48.6	39.8	IS 9989
3	08/07/2024	45.9	42.3	IS 9989
4	11/07/2024	49.2	41.7	IS 9989
5	15/07/2024	46.3	38.5	IS 9989
6	18/07/2024	49.7	40.6	IS 9989
7	22/07/2024	52.1	42.9	IS 9989
8	25/07/2024	53.9	43.7	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004767F, 4819F, 4859F, 4907F, 4978F, 5097F,
5211F, 5294F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/07/2024	48.5	35.7	IS9989
2	04/07/2024	50.1	38.5	IS 9989
3	08/07/2024	52.8	40.2	IS 9989
4	11/07/2024	48.9	42.5	IS 9989
5	15/07/2024	47.6	43.8	IS 9989
6	18/07/2024	49.2	38.4	IS 9989
7	22/07/2024	51.3	41.8	IS 9989
8	25/07/2024	48.6	43.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No.: TC636624000004768F, 4820F, 4860F, 4908F, 4979F, 5098F,
5212F, 5295F
Test Report Date: 01/08/2024

Sample Particulars

Nature of the Sample : **Ambient Noise**
Purpose of Monitoring : To Check the Pollution Loads
Method of Sampling : IS:9989
Instrument Used : Sound Level Meter
Sampling Location : N-6, Kukudanga Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/07/2024	49.2	37.3	IS9989
2	04/07/2024	50.1	39.7	IS 9989
3	08/07/2024	52.5	42.5	IS 9989
4	11/07/2024	50.7	43.5	IS 9989
5	15/07/2024	49.6	38.5	IS 9989
6	18/07/2024	47.6	42.9	IS 9989
7	22/07/2024	49.5	37.8	IS 9989
8	25/07/2024	52.2	40.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers LimitedPost Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010116, 202408050116, 202408080116, 202408120116

202408150116, 202408190116, 202408220116, 202408260116

Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/08/2024	51.8	37.3	IS9989
2	05/08/2024	52.6	39.5	IS 9989
3	08/08/2024	54.2	40.8	IS 9989
4	12/08/2024	50.3	42.9	IS 9989
5	15/08/2024	51.8	43.1	IS 9989
6	19/08/2024	47.6	41.7	IS 9989
7	22/08/2024	51.2	39.4	IS 9989
8	26/08/2024	48.6	38.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers LimitedPost Vikrampur, Distt. Angul-759 106
Odisha, IndiaTest Report No.: 202408010117, 202408050117, 202408080117, 202408120117,
202408150117, 202408190117, 202408220117, 202408260117
Test Report Date: 03/09/2024**Sample Particulars**

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-2, H.B.Colony

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/08/2024	53.2	41.8	IS9989
2	05/08/2024	52.1	42.9	IS 9989
3	08/08/2024	50.4	40.4	IS 9989
4	12/08/2024	50.9	41.7	IS 9989
5	15/08/2024	48.7	39.6	IS 9989
6	19/08/2024	51.6	37.2	IS 9989
7	22/08/2024	50.91	41.7	IS 9989
8	26/08/2024	47.5	44.2	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
 Post Vikrampur, Distt. Angul-759 106
 Odisha, India

Test Report No.: 202408010118, 202408050118, 202408080118, 202408120118
 202408150118, 202408190118, 202408220118, 202408260118
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/08/2024	52.5	40.1	IS9989
2	05/08/2024	54.3	42.4	IS 9989
3	08/08/2024	53.1	40.3	IS 9989
4	12/08/2024	50.8	38.9	IS 9989
5	15/08/2024	48.2	42.9	IS 9989
6	19/08/2024	50.7	40.4	IS 9989
7	22/08/2024	49.7	41.8	IS 9989
8	26/08/2024	51.8	38.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To **M/s Talcher Fertilizers Limited**Test Report No.: 202408010119, 202408050119, 202408080119, 202408120119
202408150119, 202408190119, 202408220119, 202408260119Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-4, Balanda House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/08/2024	51.2	38.6	IS9989
2	05/08/2024	47.9	36.4	IS 9989
3	08/08/2024	46.3	40.2	IS 9989
4	12/08/2024	52.4	39.6	IS 9989
5	15/08/2024	48.3	40.8	IS 9989
6	19/08/2024	53.7	42.3	IS 9989
7	22/08/2024	50.9	44.1	IS 9989
8	26/08/2024	51.3	42.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To **M/s Talcher Fertilizers Limited**Test Report No.: 202408010120, 202408050120, 202408080120, 202408120120
202408150120, 202408190120, 202408220120, 202408260120Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/08/2024	49.6	36.4	IS9989
2	05/08/2024	47.5	40.5	IS 9989
3	08/08/2024	50.9	42.5	IS 9989
4	12/08/2024	51.3	40.7	IS 9989
5	15/08/2024	49.6	39.9	IS 9989
6	19/08/2024	46.5	37.2	IS 9989
7	22/08/2024	52.7	43.5	IS 9989
8	26/08/2024	50.3	42.1	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202408010121, 202408050121, 202408080121, 202408120121
202408150121, 202408190121, 202408220121, 202408260121
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-6, Kukudanga Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/08/2024	52.8	39.6	IS9989
2	05/08/2024	53.9	41.2	IS 9989
3	08/08/2024	50.4	43.5	IS 9989
4	12/08/2024	48.2	40.8	IS 9989
5	15/08/2024	47.3	36.6	IS 9989
6	19/08/2024	49.6	38.9	IS 9989
7	22/08/2024	52.8	39.2	IS 9989
8	26/08/2024	53.8	42.7	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
 Post Vikrampur, Distt. Angul-759 106
 Odisha, India

Test Report No.: 202409020116, 202409050116, 202409090116, 202409120116
 202409160116, 202409190116, 202409230116, 202409260116
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/09/2024	52.8	39.7	IS9989
2	05/09/2024	51.1	37.8	IS 9989
3	09/09/2024	52.7	42.4	IS 9989
4	12/09/2024	53.2	43.7	IS 9989
5	16/09/2024	54.1	40.7	IS 9989
6	19/09/2024	49.7	42.8	IS 9989
7	23/09/2024	48.6	37.4	IS 9989
8	26/09/2024	49.9	36.9	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers LimitedPost Vikrampur, Distt. Angul-759 106
Odisha, IndiaTest Report No.: 202409020117, 202409050117, 202409090117, 202409120117
202409160117, 202409190117, 202409230117, 202409260117
Test Report Date: 01/10/2024**Sample Particulars**

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-2, H.B.Colony

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/09/2024	50.8	43.5	IS9989
2	05/09/2024	53.7	44.1	IS 9989
3	09/09/2024	52.2	42.4	IS 9989
4	12/09/2024	51.7	39.7	IS 9989
5	16/09/2024	50.2	41.1	IS 9989
6	19/09/2024	53.7	39.7	IS 9989
7	23/09/2024	52.7	43.2	IS 9989
8	26/09/2024	49.7	42.7	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers LimitedPost Vikrampur, Distt. Angul-759 106
Odisha, IndiaTest Report No.: 202409020118, 202409050118, 202409090118, 202409120118
202409160118, 202409190118, 202409230118, 202409260118
Test Report Date: 01/10/2024**Sample Particulars**

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/09/2024	50.5	42.8	IS9989
2	05/09/2024	53.2	41.1	IS 9989
3	09/09/2024	51.8	43.3	IS 9989
4	12/09/2024	48.7	37.8	IS 9989
5	16/09/2024	50.5	40.1	IS 9989
6	19/09/2024	52.7	38.9	IS 9989
7	23/09/2024	51.9	39.4	IS 9989
8	26/09/2024	52.8	40.9	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
 Post Vikrampur, Distt. Angul-759 106
 Odisha, India

Test Report No.: 202409020119, 202409050119, 202409090119, 202409120119
 202409160119, 202409190119, 202409230119, 202409260119
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-4, Balanda House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/09/2024	53.3	39.4	IS9989
2	05/09/2024	49.7	38.5	IS 9989
3	09/09/2024	47.5	42.2	IS 9989
4	12/09/2024	50.2	41.1	IS 9989
5	16/09/2024	51.1	38.4	IS 9989
6	19/09/2024	51.9	40.2	IS 9989
7	23/09/2024	52.5	41.9	IS 9989
8	26/09/2024	53.8	39.7	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
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Odisha, India

Test Report No.: 202409020120, 202409050120, 202409090120, 202409120120
202409160120, 202409190120, 202409230120, 202409260120
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/09/2024	48.1	38.7	IS9989
2	05/09/2024	45.7	39.1	IS 9989
3	09/09/2024	48.9	40.5	IS 9989
4	12/09/2024	52.8	42.5	IS 9989
5	16/09/2024	53.4	41.1	IS 9989
6	19/09/2024	48.9	39.5	IS 9989
7	23/09/2024	53.7	41.2	IS 9989
8	26/09/2024	49.5	40.5	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202409020121, 202409050121, 202409090121, 202409120121
202409160121, 202409190121, 202409230121, 202409260121
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-6, Kukudanga Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/09/2024	50.2	41.5	IS9989
2	05/09/2024	51.4	38.9	IS 9989
3	09/09/2024	48.5	40.5	IS 9989
4	12/09/2024	46.7	41.5	IS 9989
5	16/09/2024	45.5	39.8	IS 9989
6	19/09/2024	51.5	41.2	IS 9989
7	23/09/2024	50.9	40.5	IS 9989
8	26/09/2024	51.8	43.8	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030116, 202410070116, 202410100116, 202410140116
202410170116, 202410210116, 202410240116, 202410280116
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/10/2024	50.5	37.6	IS9989
2	07/10/2024	52.5	39.3	IS 9989
3	10/10/2024	53.9	40.7	IS 9989
4	14/10/2024	51.8	41.9	IS 9989
5	17/10/2024	50.9	43.3	IS 9989
6	21/10/2024	51.6	44.6	IS 9989
7	24/10/2024	49.6	39.1	IS 9989
8	28/10/2024	51.6	38.6	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030117, 202410070117, 202410100117, 202410140117
202410170117, 202410210117, 202410240117, 202410280117
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-2, H.B.Colony

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/10/2024	51.3	41.3	IS9989
2	07/10/2024	52.2	42.6	IS 9989
3	10/10/2024	54.5	44.1	IS 9989
4	14/10/2024	53.6	41.6	IS 9989
5	17/10/2024	52.2	38.9	IS 9989
6	21/10/2024	54.7	41.8	IS 9989
7	24/10/2024	50.5	42.2	IS 9989
8	28/10/2024	51.6	40.7	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: 202410030118, 202410070118, 202410100118, 202410140118
202410170118, 202410210118, 202410240118, 202410280118
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/10/2024	53.7	40.8	IS9989
2	07/10/2024	50.9	43.6	IS 9989
3	10/10/2024	51.5	41.5	IS 9989
4	14/10/2024	51.6	39.5	IS 9989
5	17/10/2024	52.8	42.5	IS 9989
6	21/10/2024	54.2	39.6	IS 9989
7	24/10/2024	53.6	37.1	IS 9989
8	28/10/2024	54.1	42.4	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To **M/s Talcher Fertilizers Limited**Post Vikrampur, Distt. Angul-759 106
Odisha, IndiaTest Report No.: 202410030119, 202410070119, 202410100119, 202410140119
202410170119, 202410210119, 202410240119, 202410280119

Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-4, Balanda House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/10/2024	51.3	37.6	IS9989
2	07/10/2024	47.5	40.2	IS 9989
3	10/10/2024	49.6	40.8	IS 9989
4	14/10/2024	52.4	42.9	IS 9989
5	17/10/2024	53.6	37.1	IS 9989
6	21/10/2024	54.2	39.2	IS 9989
7	24/10/2024	50.8	43.4	IS 9989
8	28/10/2024	51.9	42.1	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Issued To M/s Talcher Fertilizers Limited
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Odisha, India

Test Report No.: 202410030120, 202410070120, 202410100120, 202410140120
202410170120, 202410210120, 202410240120, 202410280120
Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
Purpose of Monitoring : IS:9989
Method of Sampling : Sound Level Meter
Instrument Used : N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/10/2024	50.1	40.2	IS9989
2	07/10/2024	46.3	41.3	IS 9989
3	10/10/2024	45.9	38.5	IS 9989
4	14/10/2024	50.2	40.2	IS 9989
5	17/10/2024	51.1	43.7	IS 9989
6	21/10/2024	52.9	42.5	IS 9989
7	24/10/2024	49.2	43.9	IS 9989
8	28/10/2024	47.6	42.8	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



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Odisha, IndiaTest Report No.: 202410030121, 202410070121, 202410100121, 202410140121
202410170121, 202410210121, 202410240121, 202410280121

Test Report Date: 07/11/2024

Sample Particulars

Nature of the Sample : To Check the Pollution Loads
 Purpose of Monitoring : IS:9989
 Method of Sampling : Sound Level Meter
 Instrument Used : N-6, Kukudanga Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/10/2024	52.6	43.5	IS9989
2	07/10/2024	47.9	40.5	IS 9989
3	10/10/2024	50.1	42.6	IS 9989
4	14/10/2024	48.6	43.4	IS 9989
5	17/10/2024	46.3	37.2	IS 9989
6	21/10/2024	53.4	42.9	IS 9989
7	24/10/2024	52.8	43.3	IS 9989
8	28/10/2024	53.6	41.4	IS 9989

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM – 06AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



**Test Reports of Ground Water and Surface Water
Quality Monitoring
(May 2024 to October 2024)**

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003993F
Test Report Date: 11/06/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW1		
				Desirable	Permissible	
1	pH	-	7.43	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	25.5	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	230	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	130	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	120	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	60	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	24.6	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.14	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	36	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	12.69	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.07	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND [DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003993F
Test Report Date: 11/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW1			
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	52.85	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.56	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



(AUTHORISED SIGNATORY)
(RHYTHEM BASSON*)

Nitya Laboratories

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/107
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS:10500:2012		Protocol
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	8.20	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003994F
Test Report Date: 11/06/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	pH	-	7.12	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	^o C	25.1	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	280	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	140	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	110	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	66	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	20.5	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.32	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	40	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	9.25	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.11	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.10	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



Nitya Laboratories

TC-6366

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003994F
Test Report Date: 11/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	57.36	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.86	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

Nitya Laboratories

Issued To **M/s Talcher Fertilizers Limited**
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/05/108
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	9.12	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003995F
Test Report Date: 11/06/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	pH	-	7.32	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	26.1	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	260	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	150	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	120	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	91	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	20.39	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.60	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	42	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	11.56	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.05	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.15	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



TC-6366

**Nitya Laboratories**

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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003995F
Test Report Date: 11/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	58.4	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.26	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Test Report No.: NL/2024/TFL/05/109
Test Report Date: 11/05/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.36	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Odisha, India

ULR No. : TC63662400003996F
Test Report Date: 11/06/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : SW1-Pump House

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW1					
1	pH	-	7.31	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.4	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	210	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	100	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	80	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	56	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	15.20	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	1.96	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	24	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	6.9	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.08	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.10	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



TC-6366



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000003996F
Test Report Date: 11/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1				
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	40.32	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.25	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	2	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	5.8	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	6	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	698	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC63662400003997F
Test Report Date: 11/06/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : SW2-River Near Jatia Bridge

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW2				
				A*	B*	C*	D*	
1	pH	-	7.71	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	^o C	25.9	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	120	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	110	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	84	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	23.19	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	4.49	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	46	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	5.39	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.10	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.15	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Odisha, India

ULR No. : TC636624000003997F
Test Report Date: 11/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW2					
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	28.63	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	1.79	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	8	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.1	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	3	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	18	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	1405	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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(RHYTHM BASSON*)

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Odisha, India

ULR No. : TC636624000003998F
Test Report Date: 11/06/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 04/06/2024
Test Started on : 04/06/2024
Test Completed : 10/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/05/2024
Place of Sampling : SW3-River Near PTBS Thermal Area

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3				
				A*	B*	C*	D*	
1	pH	-	7.58	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	24.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	210	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	110	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	90	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	64	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	28.48	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	2.15	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	32	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	7.86	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.11	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.12	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Odisha, India

ULR No.: TC636624000003998F
Test Report Date: 11/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW3					
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	45.36	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	1.9	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	4	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.9	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	3	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	219	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

ULR No. : TC636624000004340F
Test Report Date: 29/06/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW1		
				Desirable	Permissible	
1	pH	-	7.45	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	^o C	25.4	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	214	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	120	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	120	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	60	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	24.6	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.14	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	36	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	7.29	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.07	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND [DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



Nitya Laboratories

TC-6366

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Odisha, India

ULR No. : TC636624000004340F
Test Report Date: 29/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	52.85	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.56	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

Nitya Laboratories

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Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No.: NL/2024/TFL/06/107
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS:10500:2012		Protocol
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	8.20	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Odisha, India

ULR No. : TC63662400004341F
Test Report Date: 29/06/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
1	pH	-	7.12	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	25.1	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	280	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	140	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	110	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	66	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	20.5	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.32	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	40	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	9.72	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.11	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.10	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



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Odisha, India

ULR No. : TC636624000004341F
Test Report Date: 29/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	57.36	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.86	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



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(RHYTHM BASSON*)

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Test Report No.: NL/2024/TFL/06/108
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	9.12	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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ULR No. : TC636624000004342F
Test Report Date: 29/06/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	pH	-	7.32	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	26.1	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	260	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	150	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	120	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	91	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	20.39	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.60	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	42	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	10.93	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.05	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.15	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.

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TC-6366



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ULR No. : TC636624000004342F
Test Report Date: 29/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	58.4	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.26	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)



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Test Report No.: NL/2024/TFL/06/109
Test Report Date: 08/07/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.36	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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ULR No. : TC636624000004343F
Test Report Date: 29/06/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : SW1-Pump House

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol	
				SW1					
				A*	B*	C*	D*		
1	pH	-	7.31	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)	
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)	
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.	
4	Temperature	°C	25.4	Note-5	-	-	Note-5	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	210	-	-	-	-	IS:3025 (P-16)	
6	Total Hardness as (CaCO ₃)	mg/l	100	-	-	-	-	IS:3025 (P-21)	
7	Total Alkalinity as CaCO ₃	mg/l	80	-	-	-	-	IS:3025 (P-23)	
8	Chlorides as Cl	mg/l	56	*	*	*	*	IS:3025(P-32)	
9	Sulphate as SO ₄	mg/l	15.20	*	*	*	*	APHA 23 rd Ed.	
10	Nitrates as NO ₃	mg/l	1.96	10	-	-	20	IS:3025 (P-34)	
11	Calcium as Ca	mg/l	24	-	-	-	-	IS:3025 (P-40)	
12	Magnesium as Mg	mg/l	9.72	-	-	-	-	APHA 23 rd Ed.	
13	Fluoride as F	mg/l	0.08	2.0	15	-	15	IS:3025 (P-60)	
14	Iron (as Fe)	mg/l	0.10	3.0	3.0	-	3.0	APHA 23 rd Ed.	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.	
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.	
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.	

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Odisha, India

ULR No. : TC636624000004343F
Test Report Date: 29/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1				
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	40.32	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.25	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	2	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	5.8	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	698	-	-	-	-	IS 1622

Remark:
ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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(RHYTHM BASSON*)



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ULR No. : TC636624000004344F
Test Report Date: 29/06/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : SW2-River Near Jatia Bridge

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW2				
				A*	B*	C*	D*	
1	pH	-	7.71	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.9	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	120	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	110	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	84	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	23.19	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	4.49	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	46	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	1.21	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.10	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.15	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



TC-6366

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ULR No. : TC636624000004344F
Test Report Date: 29/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW2					
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	28.63	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	1.79	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	8	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.1	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	3	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	18	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	1405	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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ULR No. : TC636624000004345F
Test Report Date: 29/06/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 22/06/2024
Test Started on : 22/06/2024
Test Completed : 28/06/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 18/06/2024
Place of Sampling : SW3-River Near PTBS Thermal Area

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3	A*	B*	C*	
1	pH	-	7.58	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	^o C	24.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	210	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	110	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	90	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	64	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	28.48	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	2.15	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	32	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	8.72	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.11	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.12	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

Nitya Laboratories



TC-6366

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ULR No. : TC636624000004345F
Test Report Date: 29/06/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3	A*	B*	C*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	45.36	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	1.9	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	4	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.9	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	3	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	219	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHEM BASSON*)

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Test Report No. : 20240730110
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
1	pH	-	7.55	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	25.8	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	230	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	140	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	130	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	70	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	28.60	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.20	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	42	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	8.50	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.16	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.10	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 rd Ed.



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Test Report No. : 20240730110
Test Report Date: 09/08/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW1		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	46.50	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	2.20	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Test Report No. : 20240730110
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS:10500:2012		Protocol
				Desirable	Permissible	
			GW1			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	7.80	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 20240730111
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	pH	-	7.26	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	^o C	25.8	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	260	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	120	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	90	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	60	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	32.40	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.46	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	38	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	6.07	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.18	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.18	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



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Test Report No. : 20240730111
Test Report Date: 09/08/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
			GW2	Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	52.40	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	2.80	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Test Report No. : 20240730111
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.30	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 20240730112
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
1	pH	-	7.52	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	25.9	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	280	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	170	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	140	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	80	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	30.40	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.80	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	48	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	12.15	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.22	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	0.26	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



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Test Report No. : 20240730112
Test Report Date: 09/08/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	51.20	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	1.50	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY)
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Test Report No. : 20240730112
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	8.20	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 20240730113
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : SW1-Pump House

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1	A*	B*	C*	
1	pH	-	7.23	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.9	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	246	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	120	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	100	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	50	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	19.60	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.99	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	32	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	9.72	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.10	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.14	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 20240730113
Test Report Date: 09/08/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
			SW1	A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	38.60	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.60	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	6	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.1	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	788	-	-	-	-	IS 1622

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHEN BASSON*)

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Test Report No. : 20240730114
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : SW2-River Near Jatia Bridge

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
1	pH	-	7.66	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.1	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	300	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	150	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	130	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	92	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	30.60	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	3.20	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	50	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	6.07	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.16	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.21	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 20240730114
Test Report Date: 09/08/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol	
				SW2					
				A*	B*	C*	D*		
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.	
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.	
23	Sodium as Na	mg/l	26.80	-	-	-	-	APHA 23 rd Ed.	
24	Potassium as K	mg/l	1.54	-	-	-	-	APHA 23 rd Ed.	
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)	
26	Total Suspended Solids	mg/l	11	100	600	200	Note-2	IS:3025 (P-17)	
27	Dissolved Oxygen as DO	mg/l	5.9	-	-	-	-	IS:3025 (P-38)	
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)	
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)	
30	Total Coliform*	MPN/100ml	999	-	-	-	-	IS 1622	

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Test Report No. : 20240730115
Test Report Date: 09/08/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 03/08/2024
Test Started on : 03/08/2024
Test Completed : 08/08/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 30/07/2024
Place of Sampling : SW3-River Near PTBS Thermal Area

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3	A*	B*	C*	
1	pH	-	7.46	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	^o C	24.6	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	228	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	120	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	100	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	60	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	25.10	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	1.88	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	28	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	12.15	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.20	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.10	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 20240730115
Test Report Date: 09/08/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
			SW3	A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	41.60	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.60	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	8	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.2	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	3	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	18	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	284	-	-	-	-	IS 1622

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

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(RHYTHEM BASSON*)



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Odisha, India

Test Report No. : 202408230122
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW1		
				Desirable	Permissible	
1	pH	-	7.42	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	°C	24.9	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	260	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	150	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	140	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	62	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	30.20	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.31	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	48	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	7.29	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.14	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND	ND	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND	ND	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND	ND	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND	ND	1.5	APHA 23 rd Ed.



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Test Report No. : 202408230122
Test Report Date: 03/09/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol	
				GW1	Desirable		Permissible
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.	
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.	
24	Sodium as Na	mg/l	43.30	-	-	APHA 23 rd Ed.	
25	Potassium as K	mg/l	3.10	-	-	APHA 23 rd Ed.	
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)	
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)	
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622	

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Odisha, India

Test Report No. : 202408230122
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS:10500:2012		Protocol
				Desirable	Permissible	
			GW1			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	9.20	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202408230123
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	pH	-	7.19	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	^o C	25.2	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	278	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	130	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	100	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	70	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	38.40	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.54	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	44	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	4.86	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.15	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.21	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	ND [DL- 0.05]	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



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Test Report No. : 202408230123
Test Report Date: 03/09/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	48.50	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	3.80	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

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202408230122 202408230123
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	9.40	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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202408230122 202408230124
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	pH	-	7.40	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
5	Temperature	^o C	25.2	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	298	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO ₃)	mg/l	180	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO ₃	mg/l	150	200	600	IS:3025 (P-23)
9	Chlorides as Cl	mg/l	74	250	1000	IS:3025(P-32)
10	Sulphate as SO ₄	mg/l	35.20	200	400	APHA 23 rd Ed.
11	Nitrates as NO ₃	mg/l	0.72	45	No Relaxation	IS:3025 (P-34)
12	Calcium as Ca	mg/l	54	75	200	IS:3025 (P-40)
13	Magnesium as Mg	mg/l	10.93	30	100	APHA 23 rd Ed.
14	Fluoride as F	mg/l	0.16	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.16	0.3	No Relaxation	APHA 23 rd Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
19	Zinc as Zn	mg/l	0.31	5	15	APHA 23 rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



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Test Report No. : 202408230124
Test Report Date: 03/09/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
24	Sodium as Na	mg/l	50.10	-	-	APHA 23 rd Ed.
25	Potassium as K	mg/l	2.90	-	-	APHA 23 rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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202408230122 202408230124
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.40	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202408230125
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : SW1-Pump House

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol	
				SW1					
				A*	B*	C*	D*		
1	pH	-	7.34	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)	
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)	
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.	
4	Temperature	°C	26.3	Note-5	-	-	Note-5	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	264	-	-	-	-	IS:3025 (P-16)	
6	Total Hardness as (CaCO ₃)	mg/l	140	-	-	-	-	IS:3025 (P-21)	
7	Total Alkalinity as CaCO ₃	mg/l	120	-	-	-	-	IS:3025 (P-23)	
8	Chlorides as Cl	mg/l	58	*	*	*	*	IS:3025(P-32)	
9	Sulphate as SO ₄	mg/l	24.60	*	*	*	*	APHA 23 rd Ed.	
10	Nitrates as NO ₃	mg/l	0.82	10	-	-	20	IS:3025 (P-34)	
11	Calcium as Ca	mg/l	30	-	-	-	-	IS:3025 (P-40)	
12	Magnesium as Mg	mg/l	15.79	-	-	-	-	APHA 23 rd Ed.	
13	Fluoride as F	mg/l	0.14	2.0	15	-	15	IS:3025 (P-60)	
14	Iron (as Fe)	mg/l	0.19	3.0	3.0	-	3.0	APHA 23 rd Ed.	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.	
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.	
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.	



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Test Report No. : 202408230125
Test Report Date: 03/09/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1	A*	B*	C*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	32.50	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.10	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	8	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.3	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	542	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

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202408230122
Test Report Date: 03/09/2024

202408230126

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : SW2-River Near Jatia Bridge

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW2	A*	B*	C*	
1	pH	-	7.55	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	170	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	150	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	80	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	40.50	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	2.90	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	56	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	7.29	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.20	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.26	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Odisha, India

Test Report No. : 202408230126
Test Report Date: 03/09/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW2				
			A*	B*	C*	D*		
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	24.50	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.08	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	14	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.1	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	15	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	900	-	-	-	-	IS 1622

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)



Nitya Laboratories

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

Test Report No. : 202408230127
Test Report Date: 03/09/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 27/08/2024
Test Started on : 27/08/2024
Test Completed : 02/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 23/08/2024
Place of Sampling : SW3-River Near PTBS Thermal Area

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3	A*	B*	C*	
1	pH	-	7.36	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.2	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	250	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	130	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	110	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	72	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	34.20	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	1.50	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	30	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	13.36	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.16	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.12	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 202408230127
Test Report Date: 03/09/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW3					
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	36.60	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.04	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	10	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.0	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	284	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Test Report No. : 202408230122
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW1			
1	pH	-	7.50	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
4	Temperature	^o C	25.2	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	290	500	2000	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	170	200	600	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	160	200	600	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	60	250	1000	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	40.50	200	400	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.20	45	No Relaxation	IS:3025 (P-34)
11	Calcium as Ca	mg/l	40	75	200	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	17.01	30	100	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.08	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.10	0.3	No Relaxation	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND	ND	No Relaxation	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	0.24	ND	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND	ND	No Relaxation	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND	ND	1.5	APHA 23 rd Ed.



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Test Report No. : 202408230122
Test Report Date: 01/10/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW1	Desirable	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
23	Sodium as Na	mg/l	40.60	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.90	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
27	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Odisha, India

Test Report No. : 202408230122
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS:10500:2012		Protocol
				GW1		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.90	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202408230123
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : Ground Water
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
1	pH	-	7.29	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
4	Temperature	^o C	25.6	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	284	500	2000	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	150	200	600	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	120	200	600	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	64	250	1000	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	39.80	200	400	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.38	45	No Relaxation	IS:3025 (P-34)
11	Calcium as Ca	mg/l	48	75	200	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	7.29	30	100	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.18	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.17	0.3	No Relaxation	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	0.20	5	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.



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Test Report No. : 202408230123
Test Report Date: 01/10/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
20	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
23	Sodium as Na	mg/l	43.70	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	4.20	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
27	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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(RHYTHM BASSON*)

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Post Vikrampur, Distt. Angul-759 106
Odisha, India

202408230122 202408230123
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW2			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	11.90	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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202408230122 202408230124
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
1	pH	-	7.61	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
4	Temperature	^o C	24.8	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	500	2000	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	190	200	600	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	160	200	600	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	80	250	1000	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	42.60	200	400	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.78	45	No Relaxation	IS:3025 (P-34)
11	Calcium as Ca	mg/l	60	75	200	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	9.72	30	100	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.20	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.12	0.3	No Relaxation	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	0.45	5	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.



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Test Report No. : 202408230124
Test Report Date: 01/10/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
23	Sodium as Na	mg/l	46.60	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	4.40	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
27	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark:
ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

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(RHYTHM BASSON*)



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Post Vikrampur, Distt. Angul-759 106
Odisha, India

202408230122 202408230124
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	9.80	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202408230125
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : SW1-Pump House

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1	A*	B*	C*	
1	pH	-	7.46	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	26.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	286	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	154	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	130	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	64	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	320.40	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.66	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	40	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	13.12	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.23	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.25	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Odisha, India

Test Report No. : 202408230125
Test Report Date: 01/10/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1				
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	34.40	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.30	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	12	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.0	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	700	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHEM BASSON*)

Nitya Laboratories

Issued To M/s Talcher Fertilizers Limited
Post Vikrampur, Distt. Angul-759 106
Odisha, India

202408230122 202408230126
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : SW2-River Near Jatia Bridge

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW2				
				A*	B*	C*	D*	
1	pH	-	7.55	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	170	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	150	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	80	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	40.50	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	2.90	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	56	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	7.29	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.20	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.26	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 202408230126
Test Report Date: 01/10/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW2					
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	24.50	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.08	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	14	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.1	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	15	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	700	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

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Test Report No. : 202408230127
Test Report Date: 01/10/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 25/09/2024
Test Started on : 25/09/2024
Test Completed : 30/09/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 20/09/2024
Place of Sampling : SW3-River Near PTBS Thermal Area

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3				
				A*	B*	C*	D*	
1	pH	-	7.36	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.2	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	250	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	130	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	110	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	72	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	34.20	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	1.50	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	30	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	13.36	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.16	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.12	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 202408230127
Test Report Date: 01/10/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol	
				SW3					
				A*	B*	C*	D*		
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.	
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.	
23	Sodium as Na	mg/l	36.60	-	-	-	-	APHA 23 rd Ed.	
24	Potassium as K	mg/l	3.04	-	-	-	-	APHA 23 rd Ed.	
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)	
26	Total Suspended	mg/l	10	100	600	200	Note-2	IS:3025 (P-17)	
27	Dissolved Oxygen as	mg/l	6.0	-	-	-	-	IS:3025 (P-38)	
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)	
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)	
30	Total Coliform*	MPN/100ml	500	-	-	-	-	IS 1622	

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Test Report No. : 202410220110
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW1			
1	pH	-	7.68	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
4	Temperature	^o C	25.8	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	310	500	2000	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	184	200	600	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	170	200	600	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	70	250	1000	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	46.20	200	400	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.34	45	No Relaxation	IS:3025 (P-34)
11	Calcium as Ca	mg/l	46	75	200	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	16.76	30	100	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.12	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.15	0.3	No Relaxation	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND	ND	No Relaxation	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	0.37	ND	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND	ND	No Relaxation	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND	ND	1.5	APHA 23 rd Ed.



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Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW1		
				Desirable	Permissible	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
23	Sodium as Na	mg/l	32.40	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.50	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
27	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



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Test Report No. : 202410220110
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS:10500:2012		Protocol
				GW1		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	12.40	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202410220112
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
1	pH	-	7.38	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.
4	Temperature	°C	25.9	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	318	500	2000	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	142	200	600	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	110	200	600	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	60	250	1000	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	46.20	200	400	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.54	45	No Relaxation	IS:3025 (P-34)
11	Calcium as Ca	mg/l	50	75	200	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	4.13	30	100	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.26	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.25	0.3	No Relaxation	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	0.38	5	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.



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Test Report Date: 05/11/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW2		
				Desirable	Permissible	
20	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
23	Sodium as Na	mg/l	35.20	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.70	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
27	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622



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Test Report No. : 202410220112
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : GW2-Balanda Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	11.90	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202410220113
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol	
				GW3	Desirable		Permissible
1	pH	-	7.74	6.5-8.5	6.5-8.5	IS:3025 (P-11)	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Turbidity	NTU	<1	1	5	APHA 23 rd Ed.	
4	Temperature	^o C	25.4	-	-	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	360	500	2000	IS:3025 (P-16)	
6	Total Hardness as (CaCO ₃)	mg/l	194	200	600	IS:3025 (P-21)	
7	Total Alkalinity as CaCO ₃	mg/l	170	200	600	IS:3025 (P-23)	
8	Chlorides as Cl	mg/l	84	250	1000	IS:3025(P-32)	
9	Sulphate as SO ₄	mg/l	48.20	200	400	APHA 23 rd Ed.	
10	Nitrates as NO ₃	mg/l	0.84	45	No Relaxation	IS:3025 (P-34)	
11	Calcium as Ca	mg/l	52	75	200	IS:3025 (P-40)	
12	Magnesium as Mg	mg/l	15.55	30	100	APHA 23 rd Ed.	
13	Fluoride as F	mg/l	0.11	1.0	1.5	IS:3025 (P-60)	
14	Iron (as Fe)	mg/l	0.22	0.3	No Relaxation	APHA 23 rd Ed.	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 rd Ed.	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 rd Ed.	
18	Zinc as Zn	mg/l	0.62	5	15	APHA 23 rd Ed.	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 rd Ed.	
20	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 rd Ed.	



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Test Report No. : 202410220113
Test Report Date: 05/11/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				GW3		
				Desirable	Permissible	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 rd Ed.
23	Sodium as Na	mg/l	41.20	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	4.20	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
27	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas

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Test Report No. : 202410220113
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Ground Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : GW3-Kukudang Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
			GW3			
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.10	-	-	APHA 23 rd Ed.
3	P Alkalinity as CaCO ₃	mg/l	BDL	-	-	IS:3025 (P-23)



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Test Report No. : 202410220114
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : SW1-Pump House

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW1	A*	B*	C*	
1	pH	-	7.58	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	26.3	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	308	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	162	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	140	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	70	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	108.20	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	0.78	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	50	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	8.99	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.30	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.28	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 202410220114
Test Report Date: 05/11/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol	
				SW1					
				A*	B*	C*	D*		
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.	
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.	
23	Sodium as Na	mg/l	30.60	-	-	-	-	APHA 23 rd Ed.	
24	Potassium as K	mg/l	3.10	-	-	-	-	APHA 23 rd Ed.	
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)	
26	Total Suspended	mg/l	16	100	600	200	Note-2	IS:3025 (P-17)	
27	Dissolved Oxygen as	mg/l	5.8	-	-	-	-	IS:3025 (P-38)	
28	Biological Oxygen Demand as BOD	mg/l	6	30	350	100	100	IS:3025 (P-44)	
29	Chemical Oxygen Demand as COD	mg/l	30	250	-	-	250	IS:3025 (P-58)	
30	Total Coliform*	MPN/100ml	900	-	-	-	-	IS 1622	

Remark: ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Test Report No. : 202410220115
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : SW2-River Near Jatia Bridge

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				A*	B*	C*	D*	
			SW2					
1	pH	-	7.69	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.3	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	364	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	186	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	160	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	90	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	50.20	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	1.40	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	60	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	8.74	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.30	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.18	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	ND [DL- 0.05]	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 202410220115
Test Report Date: 05/11/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW2				
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	28.20	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	2.90	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	12	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.2	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	788	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*-Marine Coastal Areas



(AUTHORISED SIGNATORY)
(RHYTHM BASSON*)

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Odisha, India

Test Report No. : 202410220116
Test Report Date: 05/11/2024

Sample Particulars

Nature of the Sample : **Surface Water**
Sample Quantity & Packaging : 1 Liter, Pet Bottle
Sample Received at Lab : 28/10/2024
Test Started on : 28/10/2024
Test Completed : 04/11/2024
Method of Sampling : SOP/B/D-3
Date of Sampling : 22/10/2024
Place of Sampling : SW3-River Near PTBS Thermal Area

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
				SW3	A*	B*	C*	
1	pH	-	7.46	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 rd Ed.
4	Temperature	°C	25.9	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	294	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO ₃)	mg/l	144	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO ₃	mg/l	120	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	84	*	*	*	*	IS:3025(P-32)
9	Sulphate as SO ₄	mg/l	44.80	*	*	*	*	APHA 23 rd Ed.
10	Nitrates as NO ₃	mg/l	1.28	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	38	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	11.90	-	-	-	-	APHA 23 rd Ed.
13	Fluoride as F	mg/l	0.22	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.19	3.0	3.0	-	3.0	APHA 23 rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 rd Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 rd Ed.
18	Zinc as Zn	mg/l	0.16	5.0	15	-	15	APHA 23 rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 rd Ed.



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Test Report No. : 202410220116
Test Report Date: 05/11/2024

Analysis Report

Sr. No.	Parameters	Unit	Test Results	Permissible Limits				Protocol
			SW3	A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 rd Ed.
23	Sodium as Na	mg/l	32.50	-	-	-	-	APHA 23 rd Ed.
24	Potassium as K	mg/l	3.36	-	-	-	-	APHA 23 rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	13	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	5.7	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	26	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	542	-	-	-	-	IS 1622

Remark:

ND-Not Detected, DL-Detection Limit, A*- Inland Surface Water, B*-Public Sewer, C*-Land for Irrigation, D*- Marine Coastal Areas

