



Ref. No: TSSEZL/ ENV/MoEF/1289/2023

Dated: 19th April' 2023

To,

**Addl. Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (EZ), A/3, Chandrasekharpur,
Bhubaneswar-751023**

e-mail: roez.bsr-mef@nic.in

Sub: Submission of Half yearly compliance status report of Environment Clearance conditions for the period of October' 2022 – March' 2023 for Development of Multi Product SEZ/Industrial Park by M/s. Tata Steel Special Economic Zone at Gopalpur, Ganjam, Odisha.

Ref: Environmental clearance vide MOEF letter No: F- No. 21-136/2015-IA-III dated 20th September' 2018 and letter no F- No. 21-136/2015-IA-III dated 28th December'2018.

Dear Sir,

With reference to the subject referred above, we are hereby submitting the half yearly Environmental & CRZ Clearance compliance status report for development of multi product SEZ/Industrial Park by Tata Steel Special Economic Zone in soft format through e-mail (roez.bsr-mef@nic.in) for your kind perusal.

We look forward for your further guidance which shall certainly help us in our endeavor for further improving upon our environmental management practices.

Thanking You,

Yours faithfully,

For Tata Steel Special Economic Zone Limited

Satya Narayan Pradhan
Asst. Manager - (Safety, Health & Environment)

Enclosure: As above.

Copy for kind information to:

- The Member Secretary, Central Pollution Control Board, Southern Enclave, Block- 502, 5th & 6th Floor, 1582, Rajdanga Main Road, Kolkata-700101, West Bengal.
- The Member Secretary, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar – 751012.
- The Regional Officer, State Pollution Control Board, Berhampur, Ganjam, Odisha.

TATA STEEL SPECIAL ECONOMIC ZONE LIMITED

(A 100% subsidiary of Tata Steel Limited)

Regd. Off : Fortune Towers, 2nd Floor, Chandrasekharpur, Bhubaneswar-751023
Tel. No. 0674-6651019 Web www.tatasteelsez.com E-mail : contact@tatasteelsez.com
CIN : U45201OR2006PLC008971

TATA STEEL SPECIAL ECONOMIC ZONE LTD

Half-Yearly Compliance Report

On Environmental & CRZ Clearance Conditions

**(MoEF Letter Ref No: -21-136/2015-IA-III, dated 20th
September'2018 & F- No. 21-136/2015-IA-III dated 28th
December'2018)**

Period: October'2022 – March '2023

**Submitted By:
Tata Steel Special Economic Zone Ltd
M/s. Tata Steel Limited
2 B, Fortune Tower, 2nd Floor,
Chandrasekharpur
Bhubaneswar -751023
(Odisha)**



List of Annexures

Sl. No	Title of the Annexure	Annexure No.
1	Environment Monitoring Results of last Six months (October' 2022– March' 2023)	I
2	CSR Activities & expenditure details.	II



Compliance to the Environmental & CRZ Clearance Letter No: -21-136/2015-IA-III dated 20.09.2018 in respect of Development of Multi-product SEZ/Industrial Park at Gopalpur, Ganjam, Odisha by M/s Tata Steel Special Economic Zone Limited.

PART A-SPECIFIC CONDITIONS:

I. Construction Phase

SI	Specific Condition	Compliance Status (October '2022 – March'2023)
(i)	The project proponent shall ensure that the project is in consonance with the new Coastal Zone Management Plan prepared by the State Government under the provisions of CRZ Notification, 2011.	The project has been approved based on the new coastal zone management plan. All the applicable provisions of CRZ notification, 2011 shall be complied.
(ii)	All the recommendations of Odisha Coastal Zone Management Authority (OCZMA) vide letter no. 71/OCZMA dated 31.08.2017 shall be complied in letter and spirit.	Compliance shall be secured by the project proponent for all the recommendations of Odisha Coastal Zone Management Authority (OCZMA) as prescribed.
(iii)	Screens and trash bars shall be provided to avoid entry of fishes and fish larvae into the system.	The construction of the Desalination Plant is yet to commence. Once the plant is constructed, this provision shall be complied.
(iv)	There shall be no disturbance to the sand dunes.	Project will not make disturbance to the sand dunes.
(v)	No construction works other than those permitted in CRZ Notification shall be carried out in CRZ area.	Noted, Compliance shall be ensured.
(vi)	Though the sumps and pump house are located beyond CRZ area, in view of its proximity to sea necessary prior permission shall be obtained for construction of sumps from the competent authority. Copy of permission shall be submitted to the concerned Regional Office of the Ministry prior to the commencement of work.	As on date, the sumps and pump house are not located beyond CRZ area. In future, necessary compliances shall be ensured.
(vii)	No use of ground water for proposed multi-product SEZ/industrial park	Noted, Compliance shall be ensured.
(viii)	2% of the project cost shall be apportioned for marine and coastal biodiversity protection and conservation measures, to be spent by the project proponent.	TSSEZL will spend 2% of the project cost for marine and coastal biodiversity protection and conservation measures once the Desalination Plant and Common Effluent Treatment Plant is constructed and made operational.
(ix)	'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Complied. CTE has been obtained from OSPCB for Phase I developmental activity on dated: 29.03.2019 and Amended CTE no 3779/IND-II-CTE-6254 ON 17.03.2023.

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GOPALPUR, ODISHA

SI	Specific Condition	Compliance Status (October '2022 – March'2023)
(x)	The project proponent shall report to the State Pollution Control Board about the compliance of the prescribed standards for all discharges from the Industrial Area into the sea.	At present, there is no discharge from the Industrial Park to the outside area or the sea. All wastewater discharge; when generated, shall be as per wastewater discharge standards of OSPCB. It will be monitored periodically, and the results will be reported to CPCB/OSPCB as per stipulated in the condition of EC.
(xi)	All the provisions of the CRZ Notification, 2011 shall be strictly complied with, and in case of any change in scope of work, necessary recommendations from the OCZMA shall be obtained for further consideration by the concerned regulatory authority.	At present, there is no change in the scope of the work of the project. All provision of the CRZ Notification, 2011 will be strictly complied with & in case of any change in the scope in future, necessary recommendations from OCZMA shall be obtained.
(xii)	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.	Presently, there is no generation of hazardous and other wastes from the project site. Necessary authorizations will be obtained envisaging the generations of Hazardous and solid waste from the project in due course.
(xiii)	Air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.	Complied. For air pollution prevention, Control, and management: Natural elevations are being maintained by proper planning and engineering assessments. Plantation at designated places along plot boundary has been made to control air pollution right from the construction phase. Optimal quantity of accumulated rainwater is being used for construction activities. PUC- certified vehicles are being used. Regular Environmental monitoring of the pollution parameters by NABL and MoEF &CC accredited lab. Env. Monitoring is being conducted and reported to OSPCB regularly. Environmental Monitoring Report Enclosed as Annexure -I
(xiv)	This environmental clearance is only for the said Industrial Area. Any other activity within the Industrial Area would require separate environmental clearance, as applicable under EIA Notification, 2006 as amended from time to time. For all the individual units, environmental clearances, as applicable, shall be obtained from the respective regulatory authorities.	Shall be complied as per the requirements of individual member industrial units with respect to EIA notification 2006. Separate EC will be obtained by the individual industries as per requirements.
(xv)	To achieve the Zero Liquid Discharge, wastewater generated from different industrial operations shall be properly collected, treated to the prescribed standards,	Yes, the existing companies in the site are operating on a Zero Liquid Discharge (ZLD) Concept. Hence, recycling of waste has not been taken up by the TSSEZL as of now. However, TSSEZL has plans to set



Sl	Specific Condition	Compliance Status (October '2022 – March'2023)
	and then recycled or reused for the identified uses	up common facilities for waste treatment, recycle and disposal.
(xvi)	The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured/recorded to ensure the water balance as projected by the project proponent. The record shall be submitted to the concerned Regional Office of the Ministry along with six monthly monitoring reports.	One storm water reservoir has already been constructed inside the project area and two more storm water reservoirs are being excavated inside the project area for catering to the need of the upcoming industries. At present, very small chunk of the harvested storm water is being used for construction/operation purpose. The monitoring & measurement of usage of water by member industries and reporting the same to Regional Office of MOEF shall be made upon commencement of supply from the said reservoirs in future.
(xvii)	Special purpose vehicle shall be established for implementation, monitoring and compliance of the environmental safeguards	Tata Steel Special Economic Zone itself is the Special Purpose vehicle for implementation, monitoring and compliance of the safeguards. Environmental review and monitoring are being performed by the EMC on regular basis.
(xviii)	Solid wastes shall be collected, treated disposed in accordance with the Solid Waste Management Rules, 2016. No municipal waste shall be disposed off outside the premises.	Compliance shall be ensured.
(xix)	All the recommendation of the EMP shall be complied with in letter and spirit.	Noted, Compliance shall be ensured.
(xx)	The member units shall provide storage tanks for storage of effluent for monitoring the characteristics of effluent before taking into the CETP for further treatment.	No effluent generation inside the Industrial Park. The Common Effluent Treatment Plant (CETP) is yet to be constructed and made operational
(xxi)	Proper meters with recording facilities shall be provided to monitor the effluent quality and quantity sent from member industries to CETP and from CETP to the final disposal/re-use on a continuous basis.	Not applicable as the Common Effluent Treatment Plant (CETP) is yet to be constructed and made operational.
(xxii)	Member industries shall treat the effluent to meet the prescribed CETP inlet norms.	Not applicable as the Common Effluent Treatment Plant (CETP) is yet to be constructed and made operational.
(xxiii)	The project proponent shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.	Environment Monitoring Cell is in place. Environmental monitoring data and suggestions are being reviewed periodically.
(xxiv)	Internal Road widths within the industrial area shall be minimum 18 m ROW.	Complied. All internal roads are & shall be with RoW of >25 m width as per the approved master plan of the project.



SI	Specific Condition	Compliance Status (October '2022 – March'2023)
(xxv)	Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms	Being Complied.
(xxvi)	Any hazardous waste generated during development/ construction phase, shall be disposed of as per applicable rules and norms with necessary approvals of the State.	No hazardous wastes have been generated during the construction.
(xxvii)	The D.G. sets to be used during development/construction phase shall be low sulphur diesel type and shall conform to Environment (Protection) Rules prescribed for air and noise emission standards	No DG sets are being used at present for construction activities.
(xxviii)	Vehicles hired for bringing construction material to the site shall be in good condition and should have a pollution check certificate and shall conform to applicable air and noise emission standards and shall be operated only during non-peak hours.	Complied. Only PUC-certified vehicles are being used in construction activities, water-sprinkled for dust control on unpaved roads, and speed-limit controlled to minimize fugitive dust, good condition vehicles and low or no-horn use maintained for less noise levels, vehicle movement minimized or restricted, periodical monitoring and checking of vehicles as per OSPCB norms.
(xxix)	Ambient noise levels shall conform to the prescribed standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during development/ construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB	Complied. Ambient noise level monitoring is being carried out by NABL, MoEF & CC accredited environmental consultant on regular basis and being reported to the statutory authorities as per the requirement of the statutes. Enclosed as Annexure-I. Adequate measures have been taken to reduce ambient air and noise level during construction phase.
(xxx)	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August 2003 and 25th January 2016.	Complied Fly ash are being used in construction activities along with ready-mix concrete and fly ash-mix bricks or blocks, as building material for construction.
(xxxi)	Storm water control and its re-use as per CGWB and BIS standards for various applications.	One retention pond has been constructed with capacity of 6 lakh cum and two more are under construction for storage of storm water and its re-use for various applications.
(xxxii)	Water demand during development/construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Being Complied.
(xxxiii)	Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.	Complied.

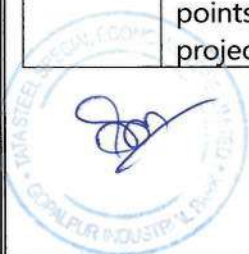


SI	Specific Condition	Compliance Status (October '2022 – March'2023)
(xxxiv)	Fixtures for showers, toilet flushing, and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor-based control.	Water conservation measures like shower-fixtures, use of tap-aerators, pressure reducing or sensor-based control devices for water flow controllers shall be used. Also, segregation of used water, practicing cascade use and recycling treated water.
(xxxv)	Regular supervision of the above and other measures for monitoring shall be in place all through the development/ construction phase, so as to avoid disturbance to the surroundings.	Being Complied.
(xxxvi)	The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.	The issues raised in the public hearing are being addressed in phased manner and being reported to the relevant statutory authorities in accordance with the conditions of the Environmental Clearance.
(xxxvii)	Fund Allocation for corporate Environment Responsibility (CER) shall be made as per ministry's O.M No. 22-65/2017 - IA.III dtd. 1st May 2018 for various activities therein. The detailed report shall be submitted to this Ministry and its concerned regional office within 3 months.	Corporate social responsibility (CSR) is being implemented by M/s. TSSEZL through its CSR and CER arm of Tata Steel Foundation (TSF), for benefit of surrounding localities and its living people in the field of Environment, Health, Education, Skill Development, Agriculture, Drinking Water, Special Commitments (Tata Medica Hospital, Gopalpur, COVID – 19, Entrepreneurship /Empowerment, Ethnicity, Infrastructure development etc. Details expenditure enclosed as annexure – II.
(xxxviii)	Corporate Environment Responsibility:	Corporate social responsibility (CSR) is being implemented by M/s. TSSEZL through its CSR arm TSF, for benefit of surrounding localities and its living people, for improvement of physical infrastructure like development of roads and street lighting, water supply distribution system, agriculture and allied interventions, skill development, entrepreneurship development etc. Detail's report enclosed as annexure - II
a)	The company shall have a well laid down Environment Policy approved by the Board of Directors.	Complied,
b)	The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.	Complied.
c)	The hierarchical system or administrative order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.	Complied.



Sl	Specific Condition	Compliance Status (October '2022 – March'2023)
d)	To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and or shareholders or stakeholders at large.	Complied.
	II- Operation Phase	
i	Periodic monitoring of coastal water shall be carried out at outfall location.	No outfall location has been constructed as on date. Will be complied in future once the desalination plant is constructed.
ii	No use of ground water for proposed multi - product SEZ/industrial park.	Noted, Compliance shall be ensured.
iii	Identify and enhance skill development activities for the local community which would cater to the future needs of the of Industrial Park and increase skill levels of local people.	NTTF training institute is already established for skill development of local community. Skill development programmes to local youth is being conducted as part of Corporate Social Responsibility (CSR).
iv	Preparation of scheme for implementation of habitat improvement and biodiversity conservation plan and implementation schedule with the help of Salim Ali Centre for Ornithology and Natural History, Coimbatore (SACON), and same to be submitted to MoEF&CC and its Regional Office within six months. Sufficient fund provision to be made to implement the same.	The suggested measures are under implementation. Biodiversity study was conducted, and report has already been submitted to MoEF&CC.
v	The tree plantation programme should be made in supervision of experts who can guide from nursery up to the minimum 5 years maintenance period. The species composition should be made with local and fruit species and planted suitably in strip or lonely as per the land availability with drip water/irrigation facility. The natural water body and creek should be protected and undisturbed except taking conservation activities.	Shall be complied as per the approved plan of the project in the designated areas. Waterbodies will be protected with adequate protective measures; plantation will be developed all along and/or surrounding waterbodies such as creek, wetlands.
vi	Implementation of Marine Environmental Management Plan in Toto.	Compliance shall be ensured.
vii	All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site.	Being Complied.
viii	Disposal of muck during development/construction phase should not create any adverse effect on the neighbouring communities and be disposed	Being Complied.

SI	Specific Condition	Compliance Status (October '2022 – March'2023)
	taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	
Ix	The solid waste generated shall be properly collected and segregated in accordance with the Solid Waste Management Rules, 2016. Wet garbage shall be composted, and dry/inert solid waste should be disposed of to the approved sites for land filling after recovering recyclable material.	Waste management plan is being and shall be implemented, their collection, handling and disposal, solid waste, municipal waste, construction and demolition waste, hazardous and toxic waste, their compliance with Municipal Solid Waste Management Rules-2016 will be implemented keeping pace with the progress of the project.
X	The height of stack of DG sets shall be equal to the height needed for the combined capacity of all proposed DG sets. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	Compliance will be ensured upon deployment of DG sets as per stipulation.
Xi	Noise shall be controlled to ensure that it does not exceed the prescribed standards. During nighttime, the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Ambient noise level monitoring is being conducted periodically (Monitoring Report Enclosed as annexure – I) necessary corrective and preventive measures including administrative and engineering solutions are being implemented to keep the generation and exposure of the noise within the stipulated limit as per the applicable standard.
xii	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	Noted, Compliance shall be ensured.
xiii	Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area during the monsoon period.	Complied.
xiv	Rainwater harvesting for roof run-off and surface run- off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging shall be kept at least 4 mts above the highest ground water table.	Noted Compliance shall be ensured.
Xv	The ground water level and its quality shall be monitored regularly in consultation with Central Ground Water Authority.	Noted, Compliance shall be ensured.
xvi	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading	Noted, Compliance shall be ensured.

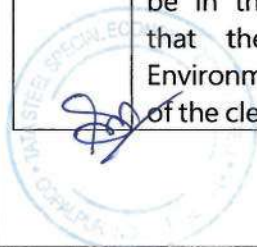


SI	Specific Condition	Compliance Status (October '2022 – March'2023)
	and unloading shall be fully internalized and no public space shall be utilized.	
xvii	Energy conservation measures like installation of LEDs for lighting the areas outside the building shall be integral part of the project design and shall be in place before project commissioning. Used LEDs shall be properly collected and disposed off /sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.	Noted, Compliance shall be ensured. Necessary energy conservation measures are being and will be continued to be undertaken for optimal energy conservation. Use of LED light, solar energy and construction of energy efficient building will be adopted for conservation of natural resources like energy, water, and forestry resource.
xviii	The buildings shall have adequate distance between them to allow movement of fresh air and passage of natural light, air, and ventilation.	Noted, Compliance shall be ensured. Buildings will be constructed and their spacing between shall be in accordance with ECBC guidelines .

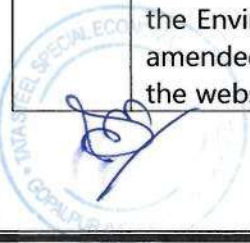
PART-B: GENERAL CONDITIONS

Sl.No.	Stipulated Condition	Compliance Status (October'2022– March'2023)
i	The responsibility to comply with the EC conditions mentioned in this letter is solely of the project proponent.	Noted, Compliance shall be ensured.
li	The environmental safeguards contained in the EIA report shall be implemented in letter and spirit.	Noted, Compliance shall be ensured.
lii	Provision shall be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.	Being Complied.
Iv	Six Monthly monitoring reports shall be submitted to the Ministry and concerned Regional Office of the Ministry.	Being Complied.
V	A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries Center and Collector's Office/Tehsildar's Office for 30 days.	Complied.
Vi	The project proponent shall set up a separate Environmental Management Cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	Environment Management cell is in place.
vii	The funds earmarked for Environment Management Plan shall be included in the budget and this shall not be diverted for any other purpose.	Noted, Compliance shall be ensured.

Sl.No.	Stipulated Condition	Compliance Status (October'2022– March'2023)
C	OTHER CONDITIONS	
5	The above stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment Protection Act 1986, the Public Liability (Insurance) Act 1991 and EIA Notification 2006.	Noted
6	Officials from the Regional Office of the Ministry who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities, and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC should be forwarded to the CCF, Regional Office of the Ministry.	Noted and Compliance shall be ensured.
7	In case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Noted
8	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provisions of the Environmental (Protection) Act 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted
9	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained as applicable by project proponents from the respective competent authorities.	Noted, Necessary approvals from concerned authorities are being obtained as applicable.
10	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental & CRZ Clearance and copies of the clearance letters are available with the	Complied.



Sl.No.	Stipulated Condition	Compliance Status (October'2022– March'2023)
	State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forests & Climate Change at http://www.envfor.nic.in . The advertisement shall be made within seven days from the date of receipt of the clearance letter and a copy of the same shall be forwarded to the concerned Regional Office of this Ministry.	
11	This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ petition (Civil) No. 460 of 2004 as may be applicable to this project.	Noted.
12	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.	Noted.
13	A copy of the Clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied. Copy of the clearance Letter has been submitted to all concerned.
14	The proponent shall upload the status of compliance of the stipulated EC conditions, including the results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry, the respective Zonal Offices of CPCB and the SPCB. The criteria pollutant levels namely; PM10, PM 2.5, SO2, NO2 (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Being Complied.
15	The environmental statement for each financial year ending 31st March in Form - V as is mandated to be submitted by the project proponent 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	Noted, Compliance shall be ensured.



Sl.No.	Stipulated Condition	Compliance Status (October'2022– March'2023)
	status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry/CPCB/SPCB by e-mail.	
16	The Ministry may revoke or suspend the clearance, if implementation of any of the above condition is not satisfactory. The Ministry reserves the right to stipulate additional conditions, if found necessary and project proponent in a time bound manner will implement the stipulated additional conditions.	Noted
17	This issues with the approval of the Hon'ble Minister of Environment, Forest and Climate Change, New Delhi	Noted



(Safety, Health & Environment)
Tata Steel Special Economic Zone Limited,

Date: 19th April' 2023



TATA STEEL SPECIAL ECONOMIC ZONE LIMITED

GOPALPUR
INDUSTRIAL PARK

Ambient Air Quality Analysis Report

Location: Near TSSEZL Project Office

	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	NH ₃	O ₃	Pb	Ni	As	Benzene	BaP
Months	(µg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(mg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(ng/m ³)
Oct-22	58.1	29.7	8.1	13.3	0.4	<15	<07	<0.09	<0.4	<0.42	<4.1	<0.08
Nov-22	66.3	33.8	9.3	18.3	0.4	<18	<08	<0.09	<0.4	<0.42	<4.1	<0.08
Dec-22	67.5	35.2	10	19.4	0.4	16.4	5.6	<0.09	<0.4	<0.42	<4.1	<0.08
Jan-23	69.4	36.2	10.4	20.4	0.5	22.3	7.8	<0.09	<0.4	<0.42	<4.1	<0.08
Feb-23	69.4	36	10.8	21.7	0.5	28.7	10.8	<0.09	<0.4	<0.42	<4.1	<0.08
Mar-23	64.5	33.3	10.6	19.5	0.5	35.2	13.8	<0.09	<0.4	<0.42	<4.1	<0.08
MAX	69.4	36.2	10.8	21.7	0.5	35.2	13.8	<0.09	<0.4	<0.42	<4.1	<0.08
MIN	58.1	29.7	8.1	13.3	0.4	<15	5.6	<0.09	<0.4	<0.42	<4.1	<0.08
AVG	65.8	34.0	9.8	18.7	0.5	17.1	6.3	<0.09	<0.4	<0.42	<4.1	<0.08

Location: Near Anadron Office

	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	NH ₃	O ₃	Pb	Ni	As	Benzene	BaP
Months	(µg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(mg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(ng/m ³)
Oct-22	59.8	30.7	8	13.7	0.4	<17	<08	<0.09	<0.5	<0.44	<4.1	<0.08
Nov-22	66.4	33.9	9.2	18.3	0.4	<19	<09	<0.09	<0.5	<0.44	<4.1	<0.08
Dec-22	71.1	36.8	10.6	20.8	0.4	<17.6	8.4	<0.09	<0.5	<0.44	<4.1	<0.08
Jan-23	72.1	37	11.6	22.7	0.4	26.8	9.2	<0.09	<0.5	<0.44	<4.1	<0.08
Feb-23	72	37.2	11.5	22.5	0.5	30.4	11.3	<0.09	<0.5	<0.44	<4.1	<0.08
Mar-23	66	33.8	11.4	21.1	0.5	37.5	14.2	<0.09	<0.5	<0.44	<4.1	<0.08
MAX	72.1	37.2	11.6	22.7	0.5	37.5	14.2	<0.09	<0.5	<0.44	<4.1	<0.08
MIN	59.8	30.7	8	13.7	0.4	<17	<08	<0.09	<0.5	<0.44	<4.1	<0.08
AVG	67.8	34.9	10.3	19.9	0.4	15.7	7.1	<0.09	<0.5	<0.44	<4.1	<0.08

Location: Near TSSEZL Main Gate (Chama Khandi)

	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	NH ₃	O ₃	Pb	Ni	As	Benzene	BaP
Months	(µg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(mg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(ng/m ³)	(ng/m ³)	(µg/m ³)	(ng/m ³)
Oct-22	60.5	31.3	8.6	13.8	0.4	<21	<09	<0.09	<0.5	<0.46	<4.6	<0.08
Nov-22	69.8	36	9.8	19	0.5	<23	<10	<0.09	<0.5	<0.46	<4.6	<0.08
Dec-22	74.5	38.5	11.6	22.1	0.5	19.4	9.7	<0.09	<0.5	<0.46	<4.6	<0.08
Jan-23	75.5	38.8	12.5	24.3	0.5	29.7	11.4	<0.09	<0.5	<0.46	<4.6	<0.08
Feb-23	74.8	38.3	12.1	23.5	0.5	33.8	12.6	<0.09	<0.5	<0.46	<4.6	<0.08
Mar-23	69.4	35.6	11.7	22	0.5	39.7	15.3	<0.09	<0.5	<0.44	<4.6	<0.08
MAX	75.5	38.8	12.5	24.3	0.5	39.7	15.3	<0.09	<0.5	<0.46	<4.6	<0.08
MIN	60.5	31.3	8.6	13.8	0.4	<19.4	<09	<0.09	<0.5	<0.44	<4.6	<0.08
AVG	70.8	36.4	11.1	20.7	0.4	20.4	8.1	<0.09	<0.5	<0.44	<4.6	<0.08





Surface Water Analysis Report

Upstream of Khari Nalla(SW1)		MONTH						Result		
Test Parameters	Unit	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	MAX	MIN	AVG
Colour, Max.	Hazen	<5	78	60	90	75	55	90	<5	59.6
pH Value @ 25°C	--	7.53	7.72	7.8	7.92	7.9	8.12	8.12	7.53	8.3
Chloride as Cl, Max.	mg/l	66.0	66.0	69	52.0	66	68.0	69	52	64.5
Dissolved Solids, Max.	mg/l	436	482	492	487	512	528	528	436	489.5
Dissolved Oxygen, Min.	mg/l	6.2	6	5.8	6.2	6.1	5.8	6.2	5.8	6
BOD for 3 days@ 27° C, Max.	mg/l	<2.0	<3.0	<2.0	2.2	3.2	3.1	3.2	<2.0	1.4
Sulphate as SO ₄ , Max.	mg/l	16.7	18.4	20.4	16.4	18.5	20.2	20.4	16.4	18.4
Nitrate as NO ₃ , Max.	mg/l	3.4	3.5	3.84	3.22	3.3	3.38	3.84	3.3	3.44
Fluoride as F, Max.	mg/l	0.14	0.16	0.22	0.2	0.22	0.21	0.22	0.14	0.19
Oil & Grease, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide as CN, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper as Cu, Max.	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Iron as Fe, Max.	mg/l	0.17	0.14	0.18	0.16	0.12	0.25	0.25	0.14	0.17
Lead as Pb, Max.	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc as Zn, Max.	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic as As, Max.	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium as Se, Max.	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium as Cd, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexavalent Chromium as Cr ⁺⁶ , Max.	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenolic compound as C ₆ H ₅ OH, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Coliform, Max.	MPN/100 ml	540	410	380	420	520	580	580	380	475



Surface Water Analysis Report

Down Stream of Khari Nalla, (SW2)		MONTH						RESULT		
Test Parameters	Unit	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	MAX	MIN	AVG
Colour, Max.	Hazen	<20	124	90	160	105	98	160	<20	96.1
pH Value @ 25°C	--	7.34	7.54	7.65	7.64	7.5	7.24	7.64	7.34	7.4
Chloride as Cl, Max.	mg/l	52.0	60.2	61.2	46.0	58	56.0	61.2	46	55.5
Dissolved Solids, Max.	mg/l	420	412	388	358	366	364	420	358	384.6
Dissolved Oxygen, Min.	mg/l	5.9	5.9	5.9	6.4	5.9	5.6	6.4	5.6	5.9
BOD for 3 days@ 27° C, Max.	mg/l	<2.0	<3.0	<2.0	2.4	3	2.8	<3.0	<2.0	1.3
Sulphate as SO ₄ , Max.	mg/l	13.4	16.2	16.6	12.6	15.2	16.8	16.8	12.6	15.1
Nitrate as NO ₃ , Max.	mg/l	3.2	3.2	3.26	2.84	3.18	3.02	3.26	2.84	3.1
Fluoride as F, Max.	mg/l	0.11	0.14	0.12	0.16	0.19	0.2	0.19	0.11	0.15
Oil & Grease, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide as CN, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper as Cu, Max.	mg/l	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Iron as Fe, Max.	mg/l	0.16	0.12	0.14	0.14	0.1	0.21	0.21	0.1	0.14
Lead as Pb, Max.	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc as Zn, Max.	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Arsenic as As, Max.	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium as Se, Max.	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium as Cd, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexavalent Chromium as Cr ⁺⁶ , Max.	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenolic compound as C ₆ H ₅ OH, Max.	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Coliform, Max.	MPN/100 ml	360	310	290	390	435	455	455	290	373



	TATA STEEL SPECIAL ECONOMIC ZONE LIMITED	GOPALPUR INDUSTRIAL PARK
Noise Monitoring Report		
Location: Near TSSEZL Project Office		
Months	DAY TIME dB(A)	NIGHT TIME dB(A)
Oct-22	59.5	38.6
Nov-22	58.8	39.4
Dec-22	59.7	39.8
Jan-23	58.7	40.9
Feb-23	59.3	42.1
Mar-23	59.7	43.5
MAX	59.7	43.5
MIN	58.7	38.6
AVG	59.2	40.7
Near TSSEZL Anadrone & Main Gate Office		
	DAY TIME LEQ	NIGHT TIME LEQ
Months		
Oct-22	48.9	40.2
Nov-22	63	54.4
Dec-22	63.5	54.5
Jan-23	64.2	55.5
Feb-23	64.9	54.5
Mar-23	64.8	56.1
MAX	64.9	56.1
MIN	48.9	40.2
AVG	61.5	52.5



AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/12/610
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near TS SEZL Project Office
Issued Date	03.01.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
01.12.2022	65.8	34.2	9.7	18.6	0.4
05.12.2022	63.6	33.4	9.5	17.7	0.4
08.12.2022	66.7	34.5	9.5	17.7	0.4
12.12.2022	64.7	34.1	9.7	19.5	0.5
15.12.2022	67.7	34.8	10.1	19.5	0.4
19.12.2022	70.4	36.1	10.3	19.9	0.5
22.12.2022	68.1	34.9	9.5	19.2	0.5
26.12.2022	71.5	37.8	10.5	20.1	0.5
29.12.2022	69.4	36.7	10.6	20.7	0.5
Avg	67.5	35.2	10.0	19.4	0.4
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

*N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.*


 Authorized Signatory



Seal of Laboratory

Notes:

- ☐ The result given above related to the tested sample, as received. The customer asked for the above test only.
- ☐ This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- ☐ The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- ☐ This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

Terms and conditions

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The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.

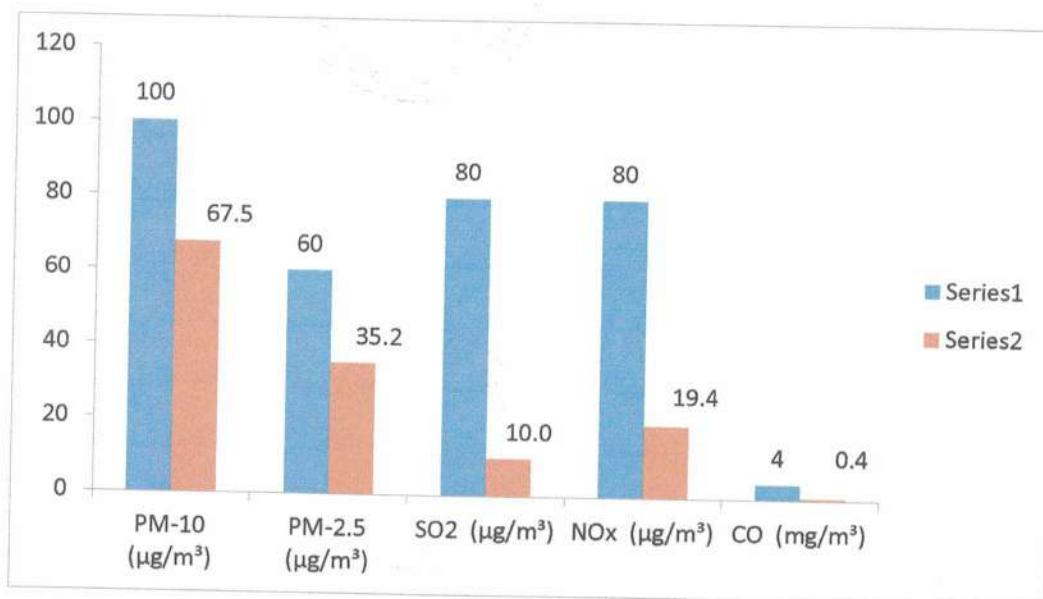
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Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer.

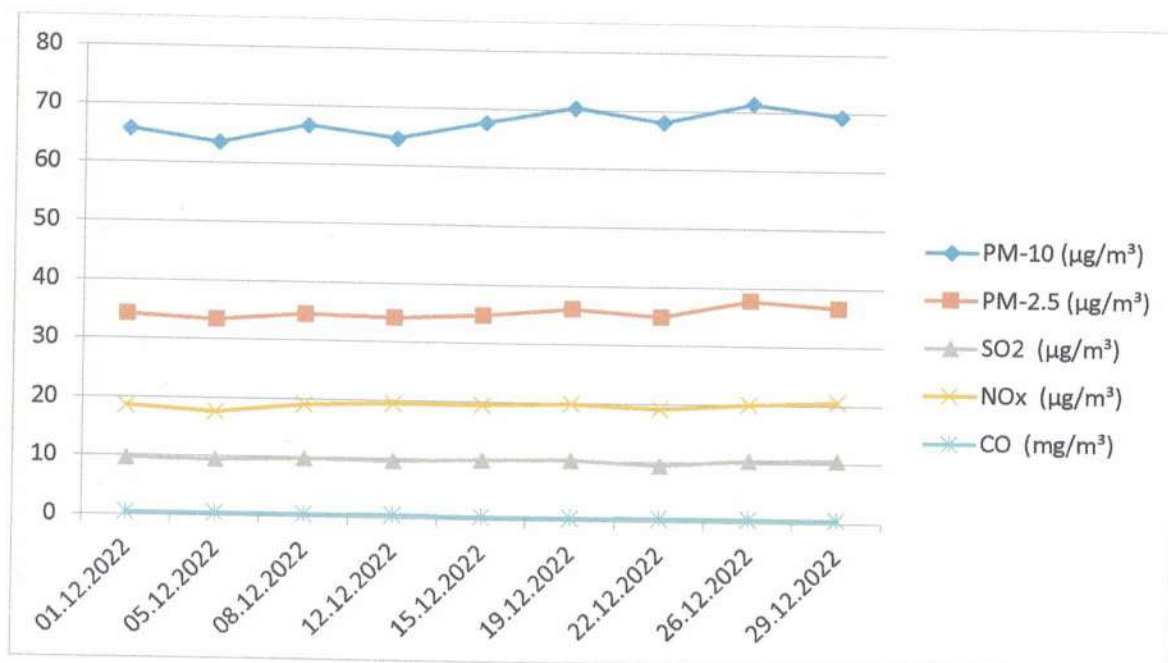
We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not reveal to third party unless required by the statutory or legal requirement.

MoEF approved Lab by Govt. of India. From date. 16/02/2024 to 29/02/2024.

Recognised by Ministry of Environment and Forests (MoEF) / Central Pollution Control Board Govt. of India (CPCB)
ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company



NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-01(Near TSSEZL Project Office) For the Month of December -22

Terms and conditions

The report is refer only to the sample tested and not applies to the bulk.
The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.
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MoEF approved Lab by Govt. of India. From date. 16/02/2024 to 29/02/2024.



AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/12/611
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Anadron Office
Issued Date	03.01.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
01.12.2022	68.8	34.4	9.6	19.4	0.5
05.12.2022	69.5	36.2	10.7	20.1	0.4
08.12.2022	70.6	35.6	9.9	18.9	0.5
12.12.2022	68.4	35.3	10.5	20.7	0.5
15.12.2022	73.7	38.5	11.2	20.7	0.5
19.12.2022	70.2	37.1	11.2	22.1	0.5
22.12.2022	72.7	38.6	10.5	21.3	0.5
26.12.2022	71.8	37.4	10.3	20.6	0.5
29.12.2022	74.1	38.4	11.6	23.1	0.5
Avg	71.1	36.8	10.6	20.8	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Authorized Signatory

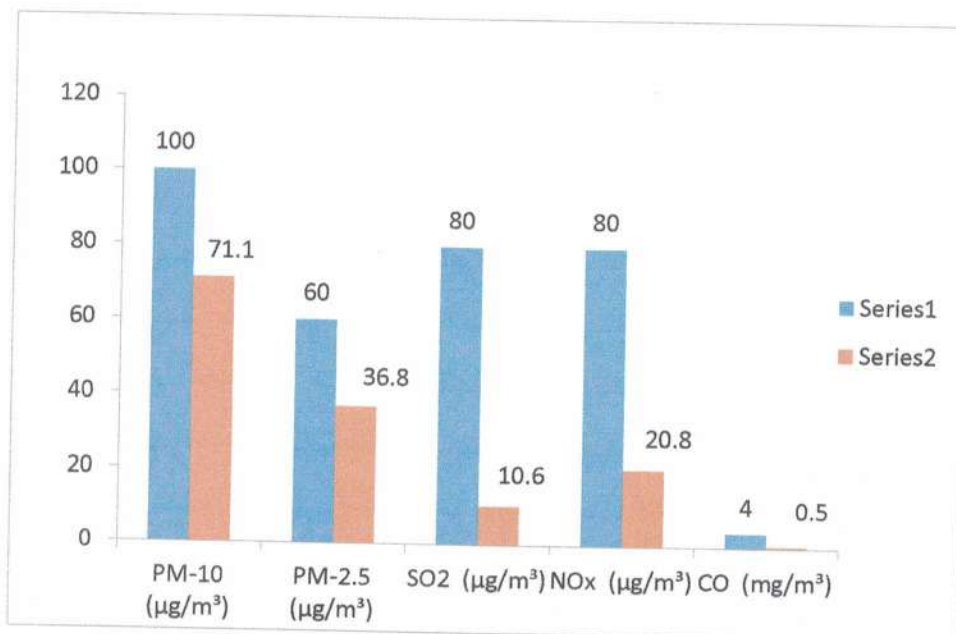
Notes:

- ☐ The result given above related to the tested sample, as received. The customer asked for the above test only.
- ☐ This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
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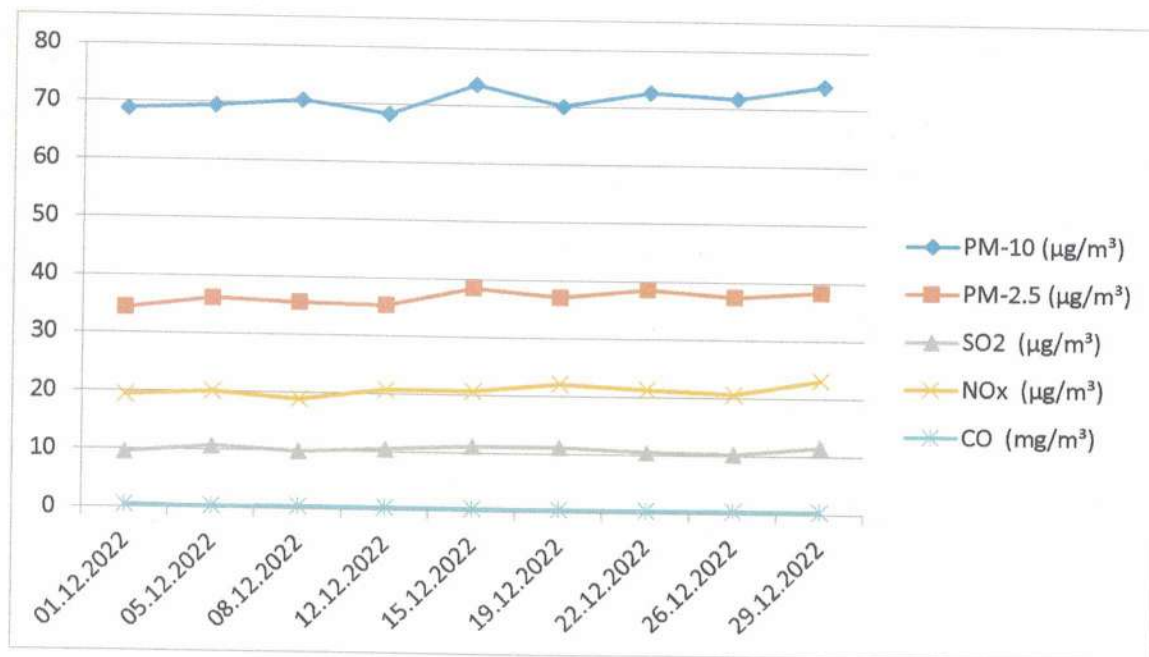
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Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer.
We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not reveal to third party unless required by the statutory or legal requirement.
MoEF approved Lab by Govt. of India. From date. 16/02/2024 to 29/02/2024.

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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-02 (Near Anadron Office) For the Month of December -22

Terms and conditions

The report is refer only to the sample tested and not applies to the bulk.

The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.

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MoEF approved Lab by Govt. of India. From date. 16/02/2024 to 29/02/2024.



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/12/612
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Main Gate (Chama Khandi)
Issued Date	03.01.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NOx (µg/m ³)	CO (µg/m ³)
01.12.2022	72.5	37.6	10.8	20.7	0.4
05.12.2022	70.8	36.8	10.6	21.4	0.4
08.12.2022	73.4	38.5	11.3	21.2	0.5
12.12.2022	75.7	39.5	12.3	23.9	0.5
15.12.2022	72.8	36.7	11.2	21.8	0.5
19.12.2022	76.4	38.7	11.4	21.5	0.5
22.12.2022	76.5	39.4	12.1	22.9	0.5
26.12.2022	74.6	38.7	11.8	21.6	0.5
29.12.2022	77.5	40.5	12.6	24.1	0.5
Avg	74.5	38.5	11.6	22.1	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.


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Seal of Laboratory

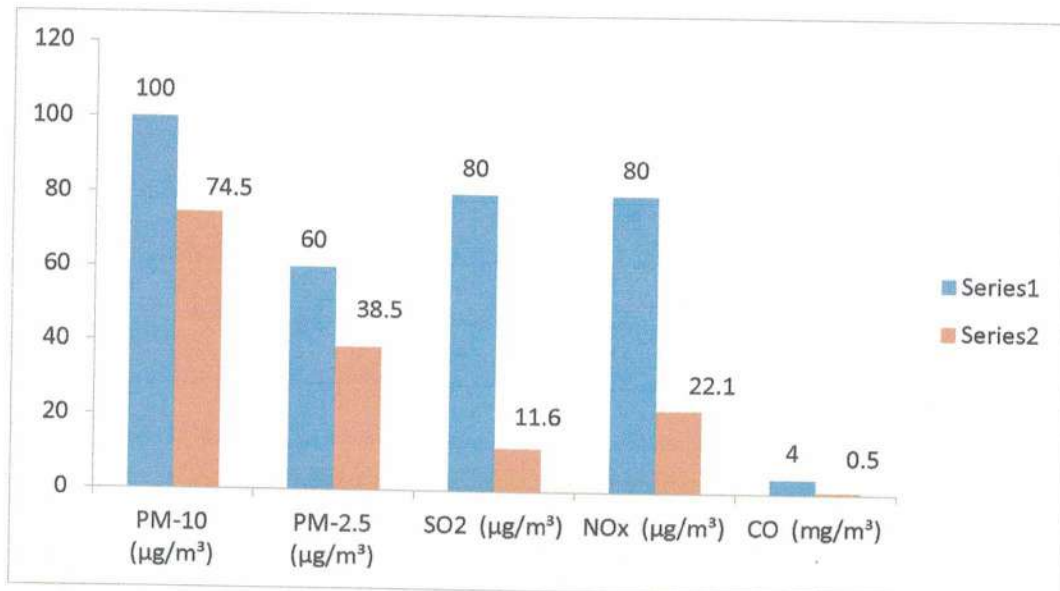
Notes:

- ☐ The result given above related to the tested sample, as received. The customer asked for the above test only.
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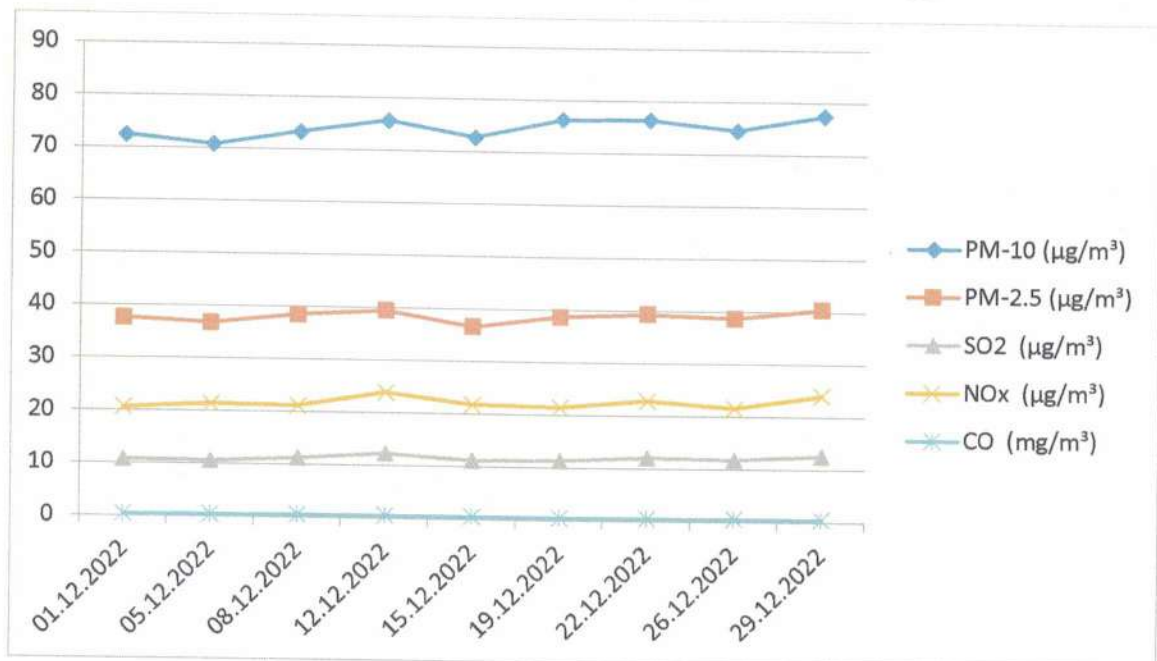
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We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not revel to third party unless required by the statutory or legal requirement.
MoEF approved Lab by Govt. of India. From date. 16/02/2024 to 29/02/2024.

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NB-Series 1-Stands for Standard, Series 2-Stands for Resu



This Graph is belongs to Station-03 (Near Main Gate, Chama Khandi) For the Month of December -22



Terms and conditions

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- The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.
- The test report cannot be reproduced wholly or in part and cannot be used for promotional or publicity purpose without the written consent of laboratory, GESEC.
- Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer.
- We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not revel to third party unless required by the statutory or legal requirement.
- MoEF approved Lab by Govt. of India. From date. 16/02/2024 to 29/02/2024.

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/12/613			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	22.12.2022			
Sample Drawn by	GESEC			
Sampling Location	Near TSSEZL Project Office			
Issued Date	03.01.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	25	°C	
2.	Relative Humidity	45	% RH	
3.	Sulphur Dioxide(SO ₂)	9.5	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	19.2	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	68.1	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	34.9	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	5.6	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	16.4	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.42	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.4	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY-   AUTHORIZED SIGNATORY 				

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-		GESEC/PRO/AAQM/2022-23/12/614		
Issued to		M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.		
Sample Description		Ambient Air Quality		
Sample Drawn Period/Time		Monthly (Special)		
Date of Sampling		22.12.2022		
Sample Drawn by		GESEC		
Sampling Location		Near Anadrone Office		
Issued Date		03.01.2023		
Instrument Used		Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment		
P.O NO		TSSEZL/2022/30002204232		
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	25	°C	
2.	Relative Humidity	45	% RH	
3.	Sulphur Dioxide(SO ₂)	10.5	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	21.3	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	72.7	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	38.6	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	8.4	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	17.6	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.44	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY-		AUTHORIZED SIGNATORY		
				
				

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-		GESEC/PRO/AAQM/2022-23/12/615		
Issued to		M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.		
Sample Description		Ambient Air Quality		
Sample Drawn Period/Time		Monthly (Special)		
Date of Sampling		22.12.2022		
Sample Drawn by		GESEC		
Sampling Location		Near Main Gate (Chama Khandi)		
Issued Date		03.01.2023		
Instrument Used		Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment		
P.O NO		TSSEZL/2022/30002204232		
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	28	°C	
2.	Relative Humidity	35	% RH	
3.	Sulphur Dioxide(SO ₂)	12.1	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	22.9	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	76.5	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	39.4	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	9.7	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	19.4	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.6	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.46	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY-		AUTHORIZED SIGNATORY		
				
				

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SURFACEWATER QUALITY TEST REPORT

TEST CERTIFICATE					
Report No:- GESEC/PRO/W/2022-23/12/616					
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		22.12.2022
			Start Date of Analysis		23.12.2022
			End Date of Analysis		28.12.2022
			Sample Details		Surface water (US)
			Nature of sample		Liquid
Sample Collected By			Green EnviroSafe Engineers & Consultant Pvt. Ltd.		
P.O NO			TSSEZL/2022/30002204232		
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	60	300	Hazen	IS 3025: (Part 4)- 1983; (RA-2017)
2	pH	7.80	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	69.0	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	492	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	5.8	4 (min)	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	<2.0	3	mg/l	IS 3025: Part 44- 1993; (RA-2014)
7	Sulphates as SO4	20.4	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.84	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.22	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.18	50	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 3111B.23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 4500 Cr B 23rd Ed. 2017 (AAS)
20	Phenolic Compounds	ND	0.005	mg/l	IS : 3025 (Part 23)
21	Total Coliform	380	5000	MPN/100ml	IS : 1622(rev.2014)
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
ANALYZED BY: 					
			AUTHORIZED SIGNATORY 		

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SURFACE WATER QUALITY TEST REPORT

TEST CERTIFICATE					
Report No:- GESEC/PRO/W/2022-23/12/617					
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		22.12.2022
			Start Date of Analysis		23.12.2022
			End Date of Analysis		28.12.2022
			Sample Details		Surface water (DS)
			Nature of sample		Liquid
Sample Collected By			Green EnviroSafe Engineers & Consultant Pvt. Ltd.		
P.O NO			TSSEZL/2022/30002204232		
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	90	300	Hazen	IS 3025: (Part 4)- 1983;(RA-2017)
2	pH	7.65	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	61.2	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	388	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	5.9	4	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	<2.0	3	mg/l	IS 3025: Part 44- 1993;(RA-2014)
7	Sulphates as SO ₄	16.6	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.26	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.12	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.14	50	mg/l	APHA 23rd ED 3500-Fe-B:20 17
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 I IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 23rd ED 3500-Cr-B: 20 17
20	Phenolic Compounds	ND	0.005	mg/l	APHA 23rd ED 3500
21	Total Coliform	290	5000	MPN/100ml	IS 1622:1981
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
ANALYZED BY-   AUTHORIZED SIGNATORY 					

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:- GESEC/PRO/NLM/2022-23/12/618							
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020				Date of Sampling		22.12.2022	
				Sample Details		Noise For 24 Hours	
				Sample location		Near TSSEZL Project Office	
Sample Collected By				Green EnviroSafe Engineers & Consultant Pvt. Ltd.			
P.O NO:				TSSEZL/2022/30002204232			
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
22.12.2022	06.00	46.8	22.12.2022	18.00	67.2	dB(A)	75/70
22.12.2022	07.00	53.4	22.12.2022	19.00	66.4	dB(A)	
22.12.2022	08.00	55.8	22.12.2022	20.00	56.2	dB(A)	
22.12.2022	09.00	64.2	22.12.2022	21.00	53.1	dB(A)	
22.12.2022	10.00	65.3	22.12.2022	22.00	45.2	dB(A)	
22.12.2022	11.00	66.4	22.12.2022	23.00	43.6	dB(A)	
22.12.2022	12.00	62.7	23.12.2022	24.00	40.5	dB(A)	
22.12.2022	13.00	63.2	23.12.2022	01.00	39.2	dB(A)	
22.12.2022	14.00	64.5	23.12.2022	02.00	37.6	dB(A)	
22.12.2022	15.00	55.9	23.12.2022	03.00	34.2	dB(A)	
22.12.2022	16.00	54.7	23.12.2022	04.00	32.5	dB(A)	
22.12.2022	17.00	58.5	23.12.2022	05.00	45.2	dB(A)	
Day Time Leq		59.7					
Night Time Leq		39.8					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB..(A)							
ANALYZED BY- 							
				AUTHORIZED SIGNATORY 			

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:- GESEC/PRO/NLM/2022-23/12/619							
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020				Date of Sampling		22.12.2022	
				Sample Details		Noise For 24 Hours	
				Sample location		Near Main Gate (Chama Khandi)	
Sample Collected By				Green EnviroSafe Engineers & Consultant Pvt. Ltd.			
P.O NO				TSSEZL/2022/30002204232			
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
22.12.2022	06.00	53.4	22.12.2022	18.00	63.5	dB(A)	75/70
22.12.2022	07.00	60.2	22.12.2022	19.00	66.7	dB(A)	
22.12.2022	08.00	64.2	22.12.2022	20.00	62.7	dB(A)	
22.12.2022	09.00	66.8	22.12.2022	21.00	65.8	dB(A)	
22.12.2022	10.00	67.4	22.12.2022	22.00	62.4	dB(A)	
22.12.2022	11.00	65.8	22.12.2022	23.00	59.7	dB(A)	
22.12.2022	12.00	61.5	23.12.2022	24.00	56.4	dB(A)	
22.12.2022	13.00	63.4	23.12.2022	01.00	53.8	dB(A)	
22.12.2022	14.00	66.7	23.12.2022	02.00	53.2	dB(A)	
22.12.2022	15.00	64.7	23.12.2022	03.00	51.7	dB(A)	
22.12.2022	16.00	62.4	23.12.2022	04.00	49.6	dB(A)	
22.12.2022	17.00	60.3	23.12.2022	05.00	48.9	dB(A)	
Day Time Leq		63.5					
Night Time Leq		54.5					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB.(A)							
ANALYZED BY- 							
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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/02/511
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near TS SEZL Project Office
Issued Date	03.03.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.02.2023	69.3	35.7	10.6	21.7	0.5
06.02.2023	68.4	35.7	10.7	22.1	0.5
09.02.2023	70.2	37.1	11.4	22.8	0.5
13.02.2023	66.5	33.2	10.2	19.7	0.4
16.02.2023	67.4	34.3	10.5	20.8	0.4
20.02.2023	71.2	37.3	11.3	22.4	0.5
23.02.2023	69.6	36.4	10.6	21.2	0.5
27.02.2023	72.4	38.4	11.4	22.7	0.5
Avg	69.4	36.0	10.8	21.7	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

H. Inde

ANALYZED BY

Notes:



H. Inde

AUTHORIZED SIGNATORY

- ☐ The result given above related to the tested sample, as received. The customer asked for the above test only.
- ☐ This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- ☐ The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- ☐ This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

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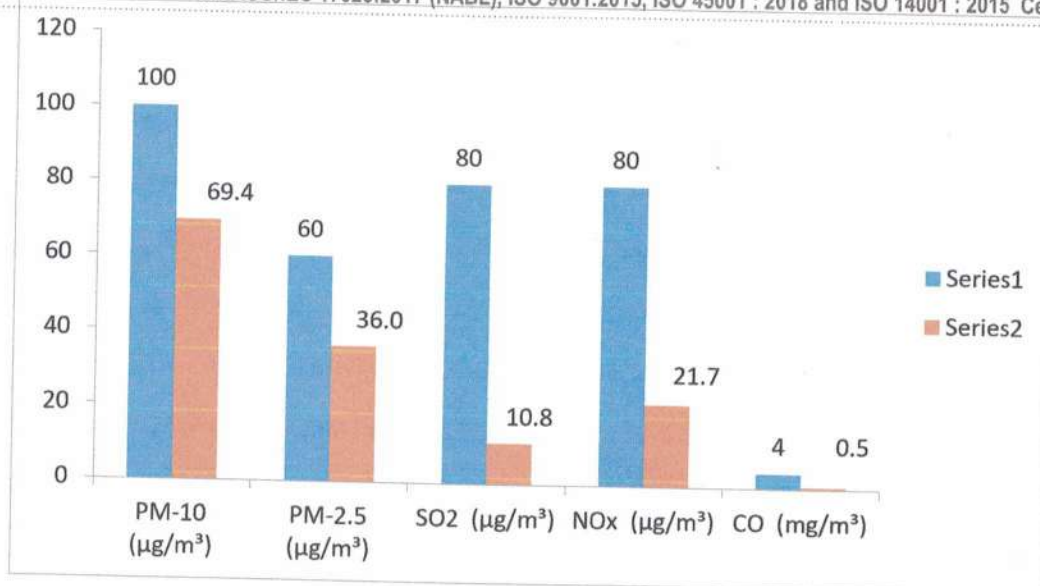
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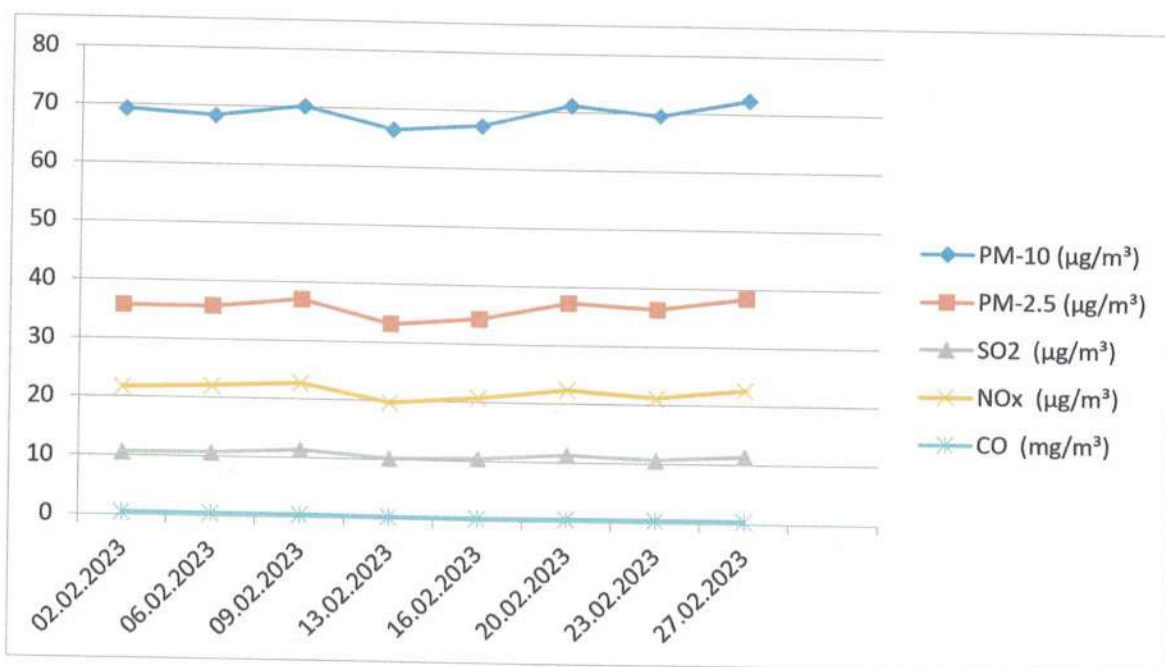
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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-01(Near TSSEZL Project Office) For the Month of February -23



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and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company
AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/02/512
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Anadrome Office
Issued Date	03.03.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.02.2023	74.2	37.2	12.2	23.8	0.5
06.02.2023	74.3	37.3	11.7	22.9	0.5
09.02.2023	70.4	35.8	11.2	21.2	0.5
13.02.2023	69.5	35.5	11.3	21.4	0.5
16.02.2023	71.5	36.5	11.2	22.5	0.5
20.02.2023	73.4	39.2	11.6	23.3	0.5
23.02.2023	71.9	36.5	11.1	21.9	0.5
27.02.2023	73.8	39.3	11.7	23.4	0.5
Avg	72.0	37.2	11.5	22.5	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

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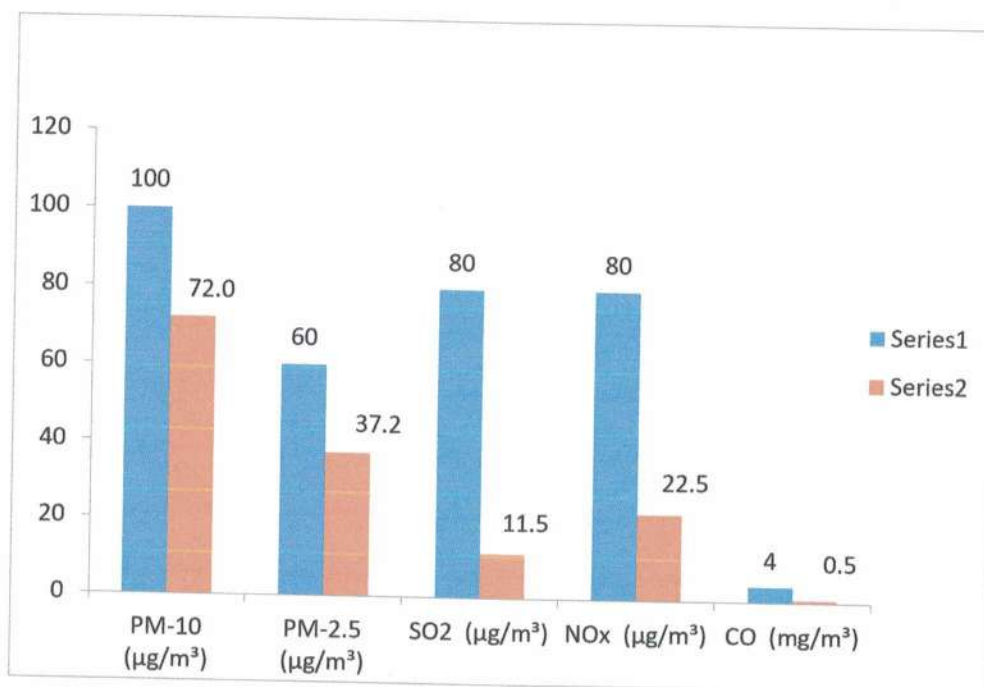
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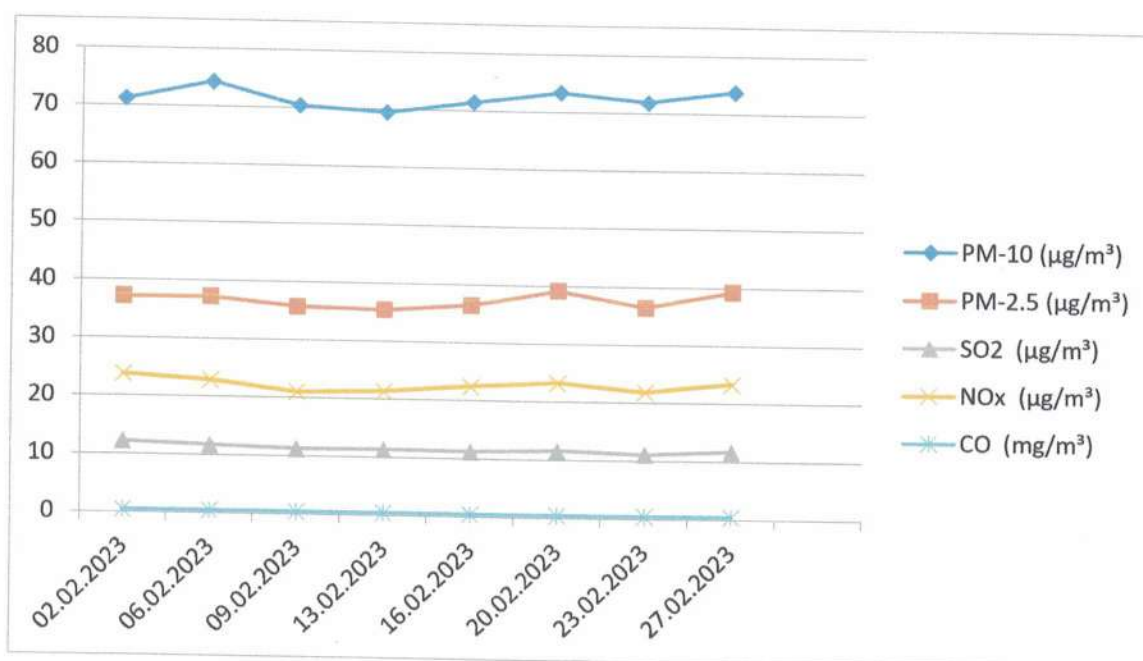
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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-02 (Near Anadron Office) For the Month of February -23

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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/02/513
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Main Gate (Chama Khandi)
Issued Date	03.03.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.02.2023	75.5	38.1	12.5	24.2	0.5
06.02.2023	78.2	39.8	12.2	24.6	0.5
09.02.2023	76.3	39.2	12.4	24.1	0.5
13.02.2023	72.1	37.3	11.7	22.5	0.5
16.02.2023	71.3	36.8	11.2	22.3	0.5
20.02.2023	73.6	37.9	11.8	22.5	0.5
23.02.2023	75.2	38.3	12.4	23.4	0.5
27.02.2023	76.4	39.2	12.6	24.3	0.5
Avg	74.8	38.3	12.1	23.5	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B- *NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

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Notes:

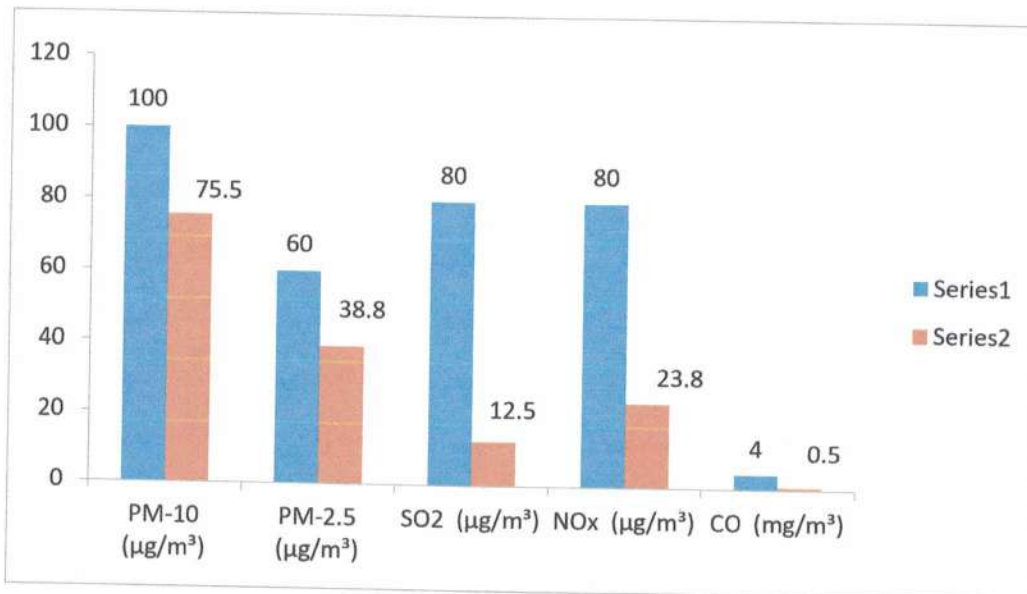
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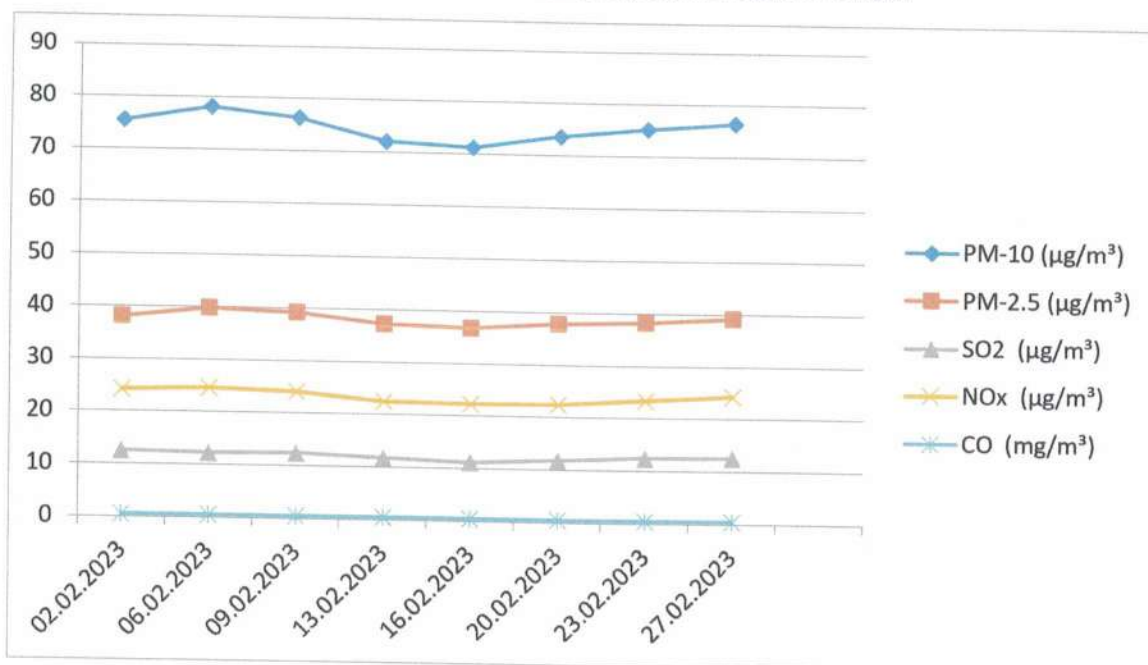
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NB-Series 1-Stands for Standard, Series 2-Stands for Resu



This Graph is belongs to Station-03 (Near Main Gate, Chama Khandi) For the Month of February -23



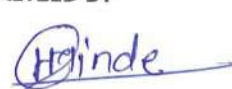
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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/02/514			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	23.02.2023			
Sample Drawn by	GESEC			
Sampling Location	Near TSSEZL Project Office			
Issued Date	03.03.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	28	°C	
2.	Relative Humidity	53	% RH	
3.	Sulphur Dioxide(SO ₂)	10.6	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	21.2	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	69.6	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	36.4	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	10.8	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	28.7	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.42	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.4	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY		AUTHORIZED SIGNATORY		
				
				

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/02/515			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	23.02.2023			
Sample Drawn by	GESEC			
Sampling Location	Near Anadron Office			
Issued Date	03.03.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	28	°C	
2.	Relative Humidity	53	% RH	
3.	Sulphur Dioxide(SO ₂)	11.1	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	21.9	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	71.9	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	36.5	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	11.3	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	30.4	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.44	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY		AUTHORIZED SIGNATORY		
				
				

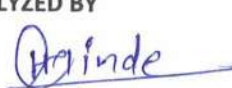
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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/02/516			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	23.02.2023			
Sample Drawn by	GESEC			
Sampling Location	Near Main Gate (Chama Khandi)			
Issued Date	03.03.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	30	°C	
2.	Relative Humidity	54	% RH	
3.	Sulphur Dioxide(SO ₂)	12.4	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	23.4	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	75.2	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	38.3	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	12.6	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	33.8	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.6	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.46	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY		AUTHORIZED SIGNATORY		
				
				

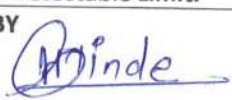
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SURFACEWATER QUALITY TEST REPORT

TEST CERTIFICATE					
Report No:- GESEC/PRO/W/2022-23/02/517					
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		24.02.2023
			Start Date of Analysis		25.02.2023
			End Date of Analysis		01.03.2023
			Sample Details		Surface water (US)
			Nature of sample		Liquid
Sample Collected By			GESEC		
P.O NO			TSSEZL/2022/30002204232		
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	75	300	Hazen	IS 3025: (Part 4)- 1983; (RA-2017)
2	pH	7.9	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	66	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	512	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	6.1	4 (min)	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	3.2	3	mg/l	IS 3025: Part 44- 1993; (RA-2014)
7	Sulphates as SO4	18.5	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.32	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.22	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.12	50	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 I IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 4500 Cr B 23rd Ed. 2017 (AAS)
20	Phenolic Compounds	ND	0.005	mg/l	IS : 3025 (Part 23)
21	Total Coliform	520	5000	MPN/100ml	IS : 1622(rev.2014)
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
ANALYZED BY			AUTHORIZED SIGNATORY		
					

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SURFACE WATER QUALITY TEST REPORT

TEST CERTIFICATE					
Report No:- GESEC/PRO/W/2022-23/02/518					
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		24.02.2023
			Start Date of Analysis		25.02.2023
			End Date of Analysis		01.03.2023
			Sample Details		Surface water (DS)
			Nature of sample		Liquid
Sample Collected By			GESEC		
P.O NO			TSSEZL/2022/30002204232		
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	105	300	Hazen	IS 3025: (Part 4)- 1983;(RA-2017)
2	pH	7.5	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	58	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	366	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	5.9	4	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	3.0	3	mg/l	IS 3025: Part 44- 1993;(RA-2014)
7	Sulphates as SO4	15.2	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.18	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.19	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.10	50	mg/l	APHA 23 rd ED 3500-Fe-B: 20 17
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 I IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 23 rd ED 3500-Cr-B: 20 17
20	Phenolic Compounds	ND	0.005	mg/l	APHA 23 rd ED 3500
21	Total Coliform	435	5000	MPN/100 ml	IS 1622:1981
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
ANALYZED BY			AUTHORIZED SIGNATORY		
					



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and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:- GESEC/PRO/W/2022-23/02/519							
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020				Date of Sampling		23.02.2023	
				Sample Details		Noise For 24 Hours	
				Sample location		Near Anadrone Office	
Sample Collected By				GESEC			
P.O NO:				TSSEZL/2022/30002204232			
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
23.02.2023	06.00	56.2	23.02.2023	18.00	67.1	dB(A)	75/70
23.02.2023	07.00	51.6	23.02.2023	19.00	65.2	dB(A)	
23.02.2023	08.00	56.4	23.02.2023	20.00	56.8	dB(A)	
23.02.2023	09.00	61.9	23.02.2023	21.00	62.3	dB(A)	
23.02.2023	10.00	59.5	23.02.2023	22.00	64.2	dB(A)	
23.02.2023	11.00	57.8	23.02.2023	23.00	58.1	dB(A)	
23.02.2023	12.00	56.1	24.02.2023	24.00	41.2	dB(A)	
23.02.2023	13.00	62.1	24.02.2023	01.00	38.6	dB(A)	
23.02.2023	14.00	66.2	24.02.2023	02.00	37.2	dB(A)	
23.02.2023	15.00	54.2	24.02.2023	03.00	35.2	dB(A)	
23.02.2023	16.00	52.9	24.02.2023	04.00	36.2	dB(A)	
23.02.2023	17.00	58.1	24.02.2023	05.00	48.2	dB(A)	
Day Time Leq		59.3					
Night Time Leq		42.1					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB..(A)							
ANALYZED BY				AUTHORIZED SIGNATORY			
							
							

Terms and conditions

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:- GESEC/PRO/ANLM/2022-23/02/520							
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020				Date of Sampling		23.02.2023	
				Sample Details		Noise For 24 Hours	
				Sample location		Near Main Gate (Chama Khandi)	
Sample Collected By				GESEC			
P.O NO				TSSEZL/2022/30002204232			
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
23.02.2023	06.00	57.2	23.02.2023	18.00	64.7	dB(A)	75/70
23.02.2023	07.00	62.1	23.02.2023	19.00	66.8	dB(A)	
23.02.2023	08.00	63.5	23.02.2023	20.00	65.2	dB(A)	
23.02.2023	09.00	66.7	23.02.2023	21.00	64.3	dB(A)	
23.02.2023	10.00	69.2	23.02.2023	22.00	66.2	dB(A)	
23.02.2023	11.00	65.1	23.02.2023	23.00	61.2	dB(A)	
23.02.2023	12.00	63.4	24.02.2023	24.00	57.8	dB(A)	
23.02.2023	13.00	66.4	24.02.2023	01.00	55.3	dB(A)	
23.02.2023	14.00	66.9	24.02.2023	02.00	50.4	dB(A)	
23.02.2023	15.00	65.2	24.02.2023	03.00	51.2	dB(A)	
23.02.2023	16.00	67.2	24.02.2023	04.00	51.8	dB(A)	
23.02.2023	17.00	62.8	24.02.2023	05.00	54.1	dB(A)	
Day Time Leq		64.9					
Night Time Leq		54.5					
Remark-							
➤ All above Noise level results are within Central Pollution Control Board Standards limit.							
➤ Day/Night -75/70 dB.(A)							
ANALYZED BY				AUTHORIZED SIGNATORY			

Terms and conditions

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ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

AMBIENTAIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/AAQM/PRO/2022-23/01/570
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,
Sampling Location	Near TS SEZL Project Office
Issued Date	03.02.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.01.2023	69.7	36.5	10.3	20.4	0.5
05.01.2023	71.4	37.4	10.6	20.2	0.5
09.01.2023	68.6	34.5	9.6	19.4	0.5
12.01.2023	70.2	36.3	10.1	19.8	0.5
16.01.2023	67.6	34.6	10.3	19.3	0.4
19.01.2023	66.9	34.9	9.9	18.8	0.4
23.01.2023	69.4	36.8	10.5	20.8	0.5
26.01.2023	72.4	38.7	11.1	22.6	0.5
30.01.2023	68.2	35.7	10.9	22.6	0.5
Avg	69.4	36.2	10.4	20.4	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.


Authorized Signatory



Seal of Laboratory

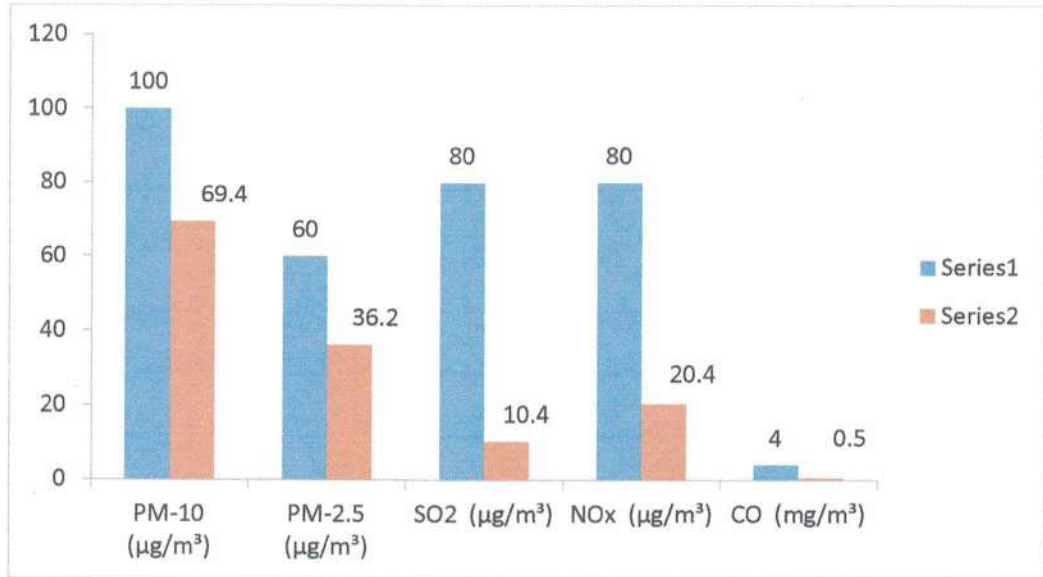
Notes:

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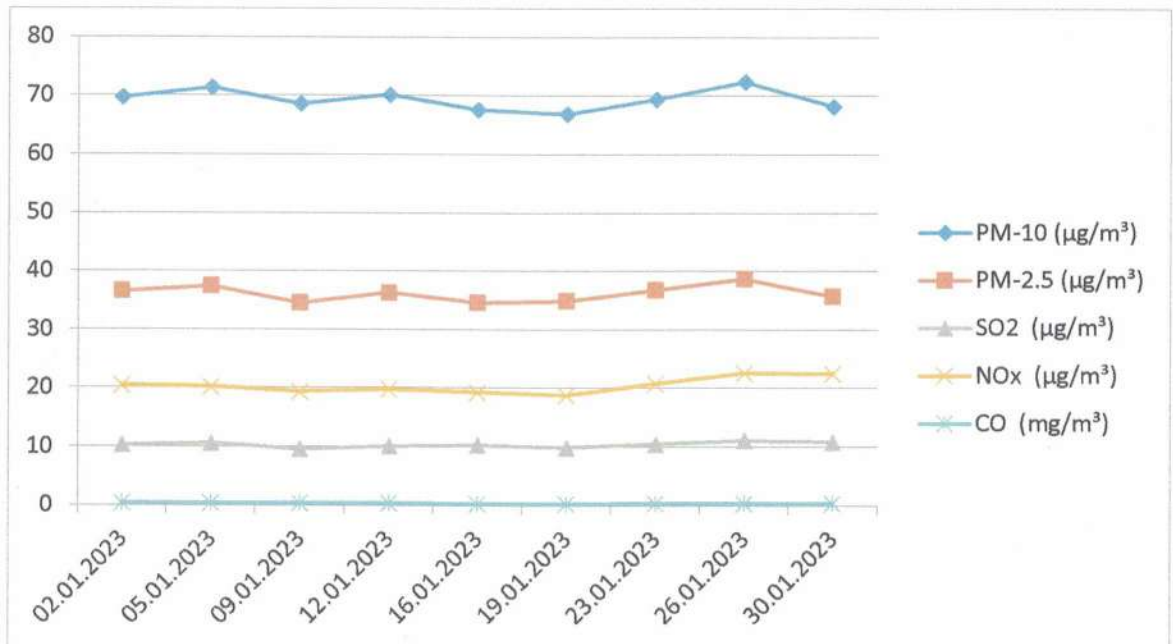
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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-01(Near TSSEZL Project Office) For the Month of January -23

Terms and conditions

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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/AAQM/PRO/2022-23/01/571
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,
Sampling Location	Near Anadron Office
Issued Date	03.02.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.01.2023	71.6	37.2	12.4	24.3	0.5
05.01.2023	72.7	36.4	11.8	22.7	0.5
09.01.2023	74.1	37.2	11.1	23.3	0.5
12.01.2023	71.2	36.5	11.4	22.2	0.5
16.01.2023	69.8	35.6	11.1	21.7	0.4
19.01.2023	70.4	35.9	10.8	21.2	0.5
23.01.2023	73.4	39.3	11.6	23.2	0.5
26.01.2023	71.9	36.8	11.3	22.3	0.5
30.01.2023	74.2	38.2	12.5	23.1	0.5
Avg	72.1	37.0	11.6	22.7	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Authorized Signatory

Notes:

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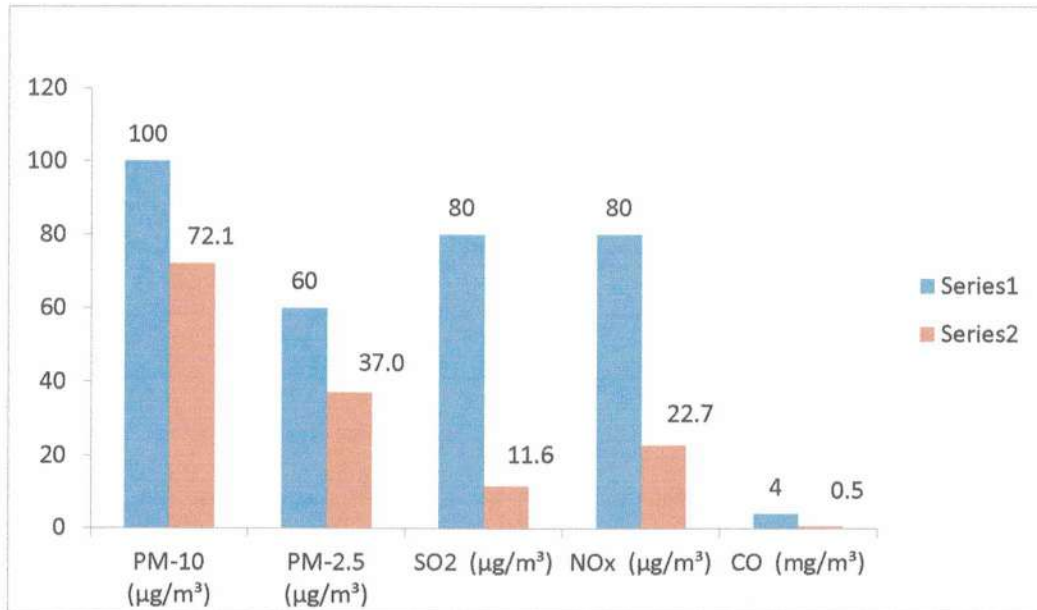
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MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024

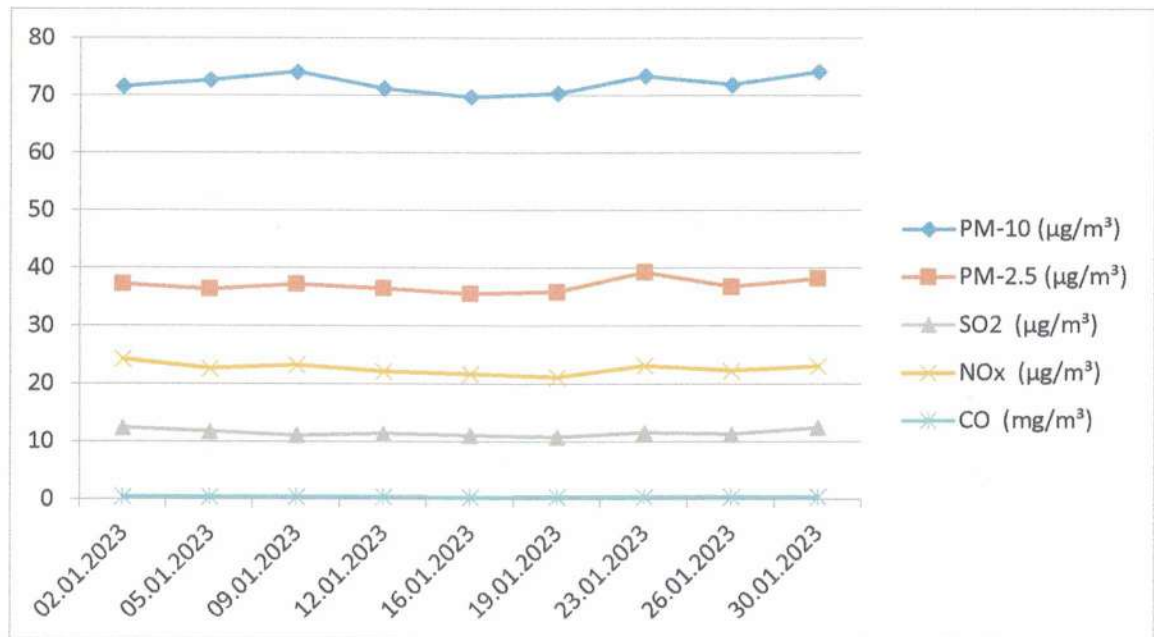


Seal of Laboratory

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NB-Series 1–Stands for Standard, Series 2–Stands for Result



This Graph is belongs to Station-02 (Near Anadron Office) For the Month of January -23

Terms and conditions

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MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/AAQM/PRO/2022-23/01/572
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,
Sampling Location	Near Main Gate (Chama Khandi)
Issued Date	03.02.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.01.2023	75.4	38.2	12.6	24.5	0.5
05.01.2023	76.2	39.1	12.7	24.8	0.5
09.01.2023	78.1	40.2	13.4	24.9	0.5
12.01.2023	74.5	38.4	12.7	23.2	0.5
16.01.2023	72.8	37.5	11.9	22.7	0.5
19.01.2023	77.4	40.3	12.7	24.1	0.5
23.01.2023	73.8	37.9	11.9	22.7	0.5
26.01.2023	75.1	38.2	12.5	23.4	0.5
30.01.2023	76.6	39.1	12.5	24.3	0.5
Avg	75.5	38.8	12.5	24.3	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.


Authorized Signatory



Seal of Laboratory

Notes:

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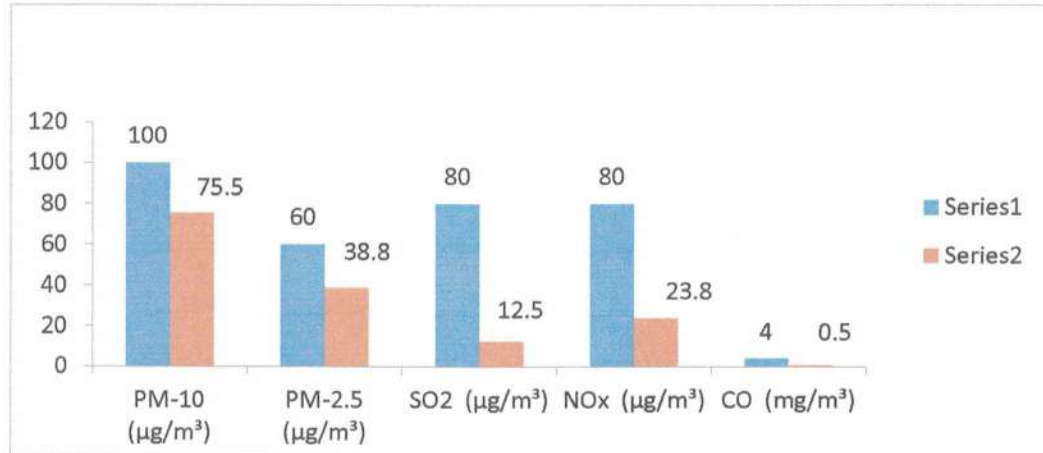
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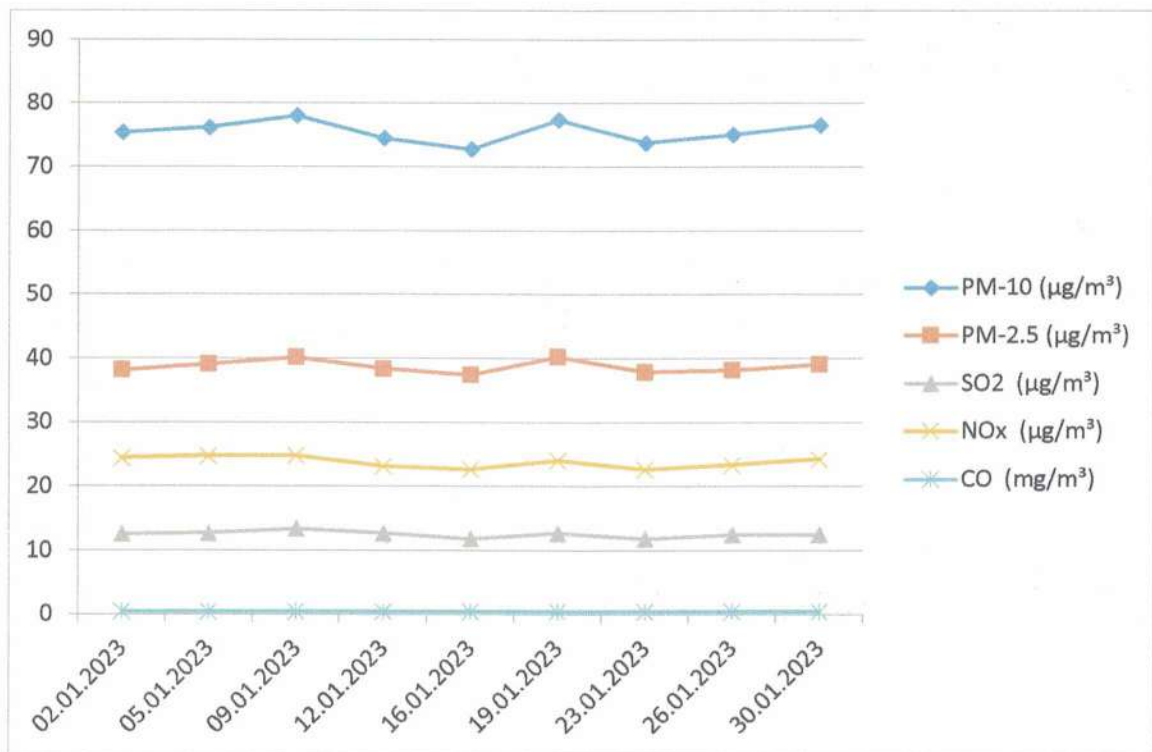
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MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024

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ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company



NB-Series 1—Stands for Standard, Series 2—Stands for Resu



This Graph is belongs to Station-03 (Near Main Gate, Chama Khandi) For the Month of January -23



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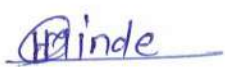
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MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/AAQM/PRO/2022-23/01/573			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	19.01.2023			
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,			
Sampling Location	Near TSSEZL Project Office			
Issued Date	03.02.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	25	°C	
2.	Relative Humidity	60	% RH	
3.	Sulphur Dioxide(SO ₂)	9.9	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	18.8	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	66.9	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	34.9	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.4	mg/M ³	≤ 04
8.	Ozone(O ₃)	7.8	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	22.4	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.42	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.4	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY-		AUTHORIZED SIGNATORY		
				
				

Terms and conditions

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/AAQM/PRO/2022-23/01/574
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly (Special)
Date of Sampling	19.01.2023
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,
Sampling Location	Near Anadron Office
Issued Date	03.02.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

Ambient Air Analysis Result

Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	24	°C	
2.	Relative Humidity	65	% RH	
3.	Sulphur Dioxide(SO ₂)	10.8	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	21.2	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	70.4	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	35.9	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	9.2	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	26.8	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.44	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20

Remark-

- All above results are within National Ambient Air Quality standards.
- BDL – Below Detectable Limit.

ANALYZED BY-




AUTHORIZED SIGNATORY



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 ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-		GESEC/AAQM/PRO/2022-23/01/575		
Issued to		M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.		
Sample Description		Ambient Air Quality		
Sample Drawn Period/Time		Monthly (Special)		
Date of Sampling		19.01.2023		
Sample Drawn by		Ardra Consulting Services Pvt, Ltd,		
Sampling Location		Near Main Gate (Chama Khandi)		
Issued Date		03.02.2023		
Instrument Used		Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment		
P.O NO		TSSEZL/2022/30002204232		
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	25	°C	
2.	Relative Humidity	65	% RH	
3.	Sulphur Dioxide(SO ₂)	12.7	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	24.1	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	77.4	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	40.3	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	11.4	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	29.7	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.6	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.46	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
ANALYZED BY-		AUTHORIZED SIGNATORY		
				
				

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SURFACEWATER QUALITY TEST REPORT

TEST CERTIFICATE					
Report No:-		GESEC/W/PRO/2022-23/01/576			
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020		Date of Sampling		20.01.2023	
		Start Date of Analysis		21.01.2023	
		End Date of Analysis		26.01.2023	
		Sample Details		Surface water (US)	
		Nature of sample		Liquid	
Sample Collected By		Ardra Consulting Services Pvt, Ltd, .			
P.O NO		TSSEZL/2022/30002204232			
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	90	300	Hazen	IS 3025: (Part 4)- 1983; (RA-2017)
2	pH	7.92	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	52	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	487	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	6.2	4 (min)	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	2.2	3	mg/l	IS 3025: Part 44- 1993; (RA-2014)
7	Sulphates as SO4	16.4	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.22	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.20	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.16	50	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 3111B.23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 4500 Cr B 23rd Ed. 2017 (AAS)
20	Phenolic Compounds	ND	0.005	mg/l	IS : 3025 (Part 23)
21	Total Coliform	420	5000	MPN/100 ml	IS : 1622(rev.2014)
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
ANALYZED BY-				AUTHORIZED SIGNATORY 	

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SURFACE WATER QUALITY TEST REPORT

TEST CERTIFICATE					
Report No:-		GESEC/W/PRO/2022-23/01/577			
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020		Date of Sampling		20.01.2023	
		Start Date of Analysis		21.01.2023	
		End Date of Analysis		26.01.2023	
		Sample Details		Surface water (DS)	
		Nature of sample		Liquid	
Sample Collected By		Ardra Consulting Services Pvt, Ltd, .			
P.O NO		TSSEZL/2022/30002204232			
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	160	300	Hazen	IS 3025: (Part 4)- 1983;(RA-2017)
2	pH	7.64	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	46	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	358	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	6.4	4	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	2.4	3	mg/l	IS 3025: Part 44- 1993;(RA-2014)
7	Sulphates as SO4	12.6	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	2.84	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.16	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.14	50	mg/l	APHA 23 rd ED 3500-Fe-B:.20 17
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 I IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 23 rd ED 3500-Cr-B: 20 17
20	Phenolic Compounds	ND	0.005	mg/l	APHA 23 rd ED 3500
21	Total Coliform	390	5000	MPN/10 0ml	IS 1622:1981
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
ANALYZED BY-			AUTHORIZED SIGNATORY		
					



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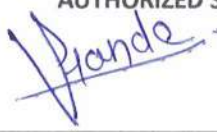
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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:-			GESEC/ANLM/PRO/2022-23/01/578				
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		19.01.2023		
			Sample Details		Noise For 24 Hours		
			Sample location		Near TSSEZL Project Office		
Sample Collected By			Ardra Consulting Services Pvt, Ltd,				
P.O NO:			TSSEZL/2022/30002204232				
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
19.01.2023	06.00	55.4	19.01.2023	18.00	66.7	dB(A)	75/70
19.01.2023	07.00	52.3	19.01.2023	19.00	64.3	dB(A)	
19.01.2023	08.00	56.7	19.01.2023	20.00	57.1	dB(A)	
19.01.2023	09.00	62.4	19.01.2023	21.00	59.4	dB(A)	
19.01.2023	10.00	59.4	19.01.2023	22.00	49.5	dB(A)	
19.01.2023	11.00	58.4	19.01.2023	23.00	44.1	dB(A)	
19.01.2023	12.00	55.7	20.01.2023	24.00	40.1	dB(A)	
19.01.2023	13.00	61.4	20.01.2023	01.00	38.9	dB(A)	
19.01.2023	14.00	65.1	20.01.2023	02.00	36.5	dB(A)	
19.01.2023	15.00	54.2	20.01.2023	03.00	34.3	dB(A)	
19.01.2023	16.00	53.4	20.01.2023	04.00	36.4	dB(A)	
19.01.2023	17.00	57.6	20.01.2023	05.00	46.7	dB(A)	
Day Time Leq		58.7					
Night Time Leq		40.9					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB..(A)							
ANALYZED BY-			AUTHORIZED SIGNATORY   				

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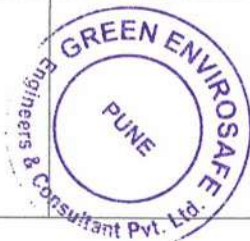
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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:-			GESEC/ANLM/PRO/2022-23/01/579				
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		19.01.2023		
			Sample Details		Noise For 24 Hours		
			Sample location		Near Main Gate (Chama Khandi)		
Sample Collected By			Ardra Consulting Services Pvt, Ltd,				
P.O NO			TSSEZL/2022/30002204232				
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
19.01.2023	06.00	55.7	19.01.2023	18.00	64.3	dB(A)	75/70
19.01.2023	07.00	61.2	19.01.2023	19.00	66.9	dB(A)	
19.01.2023	08.00	63.7	19.01.2023	20.00	64.5	dB(A)	
19.01.2023	09.00	66.4	19.01.2023	21.00	65.2	dB(A)	
19.01.2023	10.00	68.4	19.01.2023	22.00	63.4	dB(A)	
19.01.2023	11.00	64.7	19.01.2023	23.00	60.1	dB(A)	
19.01.2023	12.00	60.2	20.01.2023	24.00	58.4	dB(A)	
19.01.2023	13.00	64.3	20.01.2023	01.00	54.2	dB(A)	
19.01.2023	14.00	67.3	20.01.2023	02.00	51.6	dB(A)	
19.01.2023	15.00	66.2	20.01.2023	03.00	52.7	dB(A)	
19.01.2023	16.00	65.8	20.01.2023	04.00	50.2	dB(A)	
19.01.2023	17.00	62.4	20.01.2023	05.00	53.6	dB(A)	
Day Time Leq		64.2					
Night Time Leq		55.5					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB.(A)							
ANALYZED BY-			AUTHORIZED SIGNATORY				
							



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/03/677
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,
Sampling Location	Near TS SEZL Project Office
Issued Date	03.04.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.03.2023	69.5	35.9	11.2	22.4	0.5
06.03.2023	70.4	37.4	12.1	23.2	0.5
09.03.2023	68.6	35.2	11.9	21.8	0.5
13.03.2023	58.2	28.7	9.1	14.6	0.4
16.03.2023	55.7	28.1	8.6	13.7	0.4
20.03.2023	52.4	27.9	7.9	12.8	0.4
23.03.2023	65.8	33.7	10.6	20.7	0.5
27.03.2023	69.6	36.4	11.7	22.8	0.5
30.03.2023	70.2	36.2	12.4	23.6	0.5
Avg	64.5	33.3	10.6	19.5	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

[Signature]

Authorized Signatory

Notes:

- ☐ The result given above related to the tested sample, as received. The customer asked for the above test only.
- ☐ This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- ☐ The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- ☐ This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

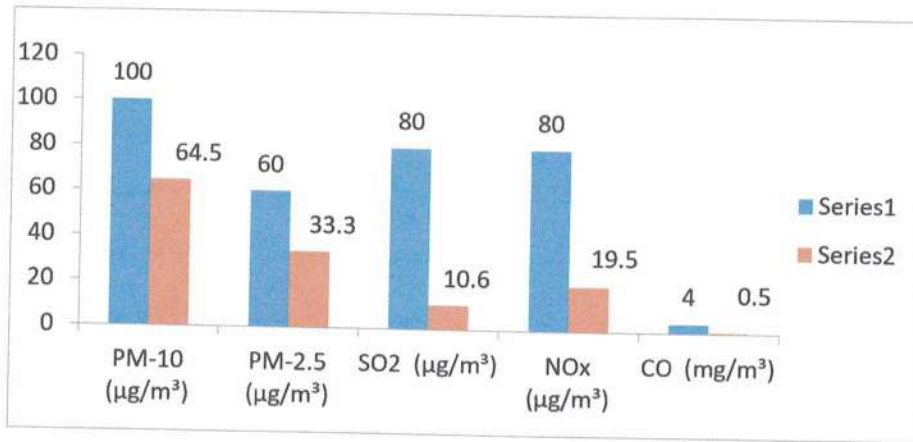
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MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024.

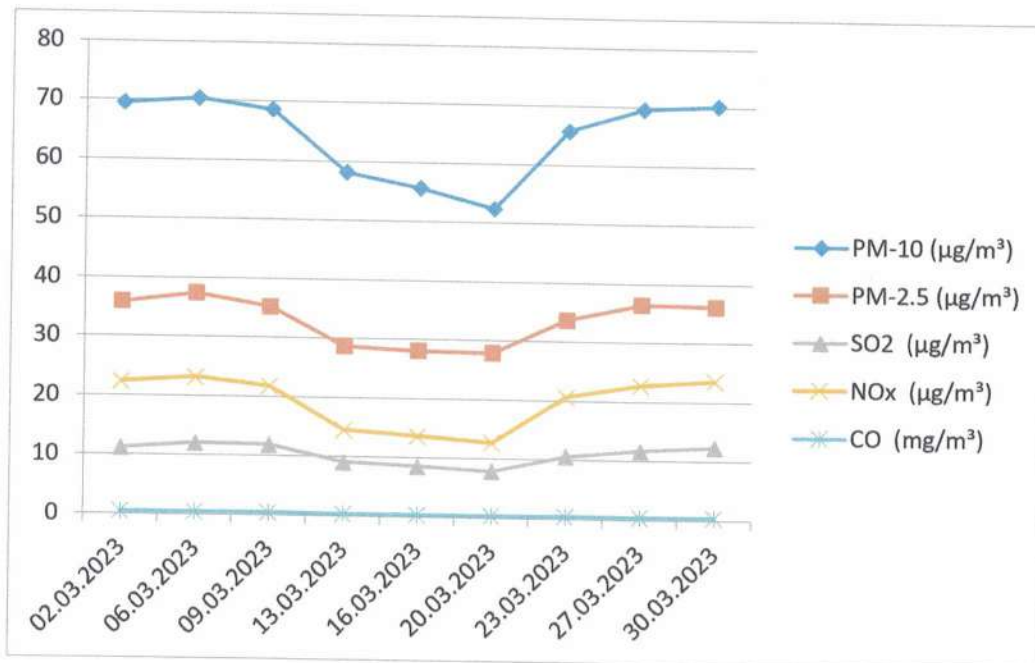


Seal of Laboratory

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NB-Series 1–Stands for Standard, Series 2–Stands for Result



This Graph is belongs to Station-01(Near TSSEZL Project Office) For the Month of March -23



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AMBIENT AIR QUALITY MONITORING TEST REPORT

ANALYSIS RESULT

Report No:-	GESEC/PRO/AAQM/2022-23/03/678				
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.				
Sample Description	Ambient Air Quality				
Sample Drawn Period/Time	Monthly				
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,				
Sampling Location	Near Anadron Office				
Issued Date	03.04.2023				
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment				
P.O NO	TSSEZL/2022/30002204232				
Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.03.2023	73.6	37.4	13.8	24.3	0.5
06.03.2023	71.8	37.5	12.7	24.6	0.5
09.03.2023	70.5	37.2	12.3	23.8	0.5
13.03.2023	60.9	30.4	10.5	19.8	0.4
16.03.2023	56.7	28.5	7.9	13.4	0.4
20.03.2023	52.5	27.4	7.6	12.2	0.4
23.03.2023	67.9	33.7	12.5	23.7	0.5
27.03.2023	68.8	35.1	12.6	24.1	0.5
30.03.2023	71.3	37.2	12.5	24.3	0.5
Avg	66.0	33.8	11.4	21.1	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Hande
Authorized Signatory



Seal of Laboratory

Notes:

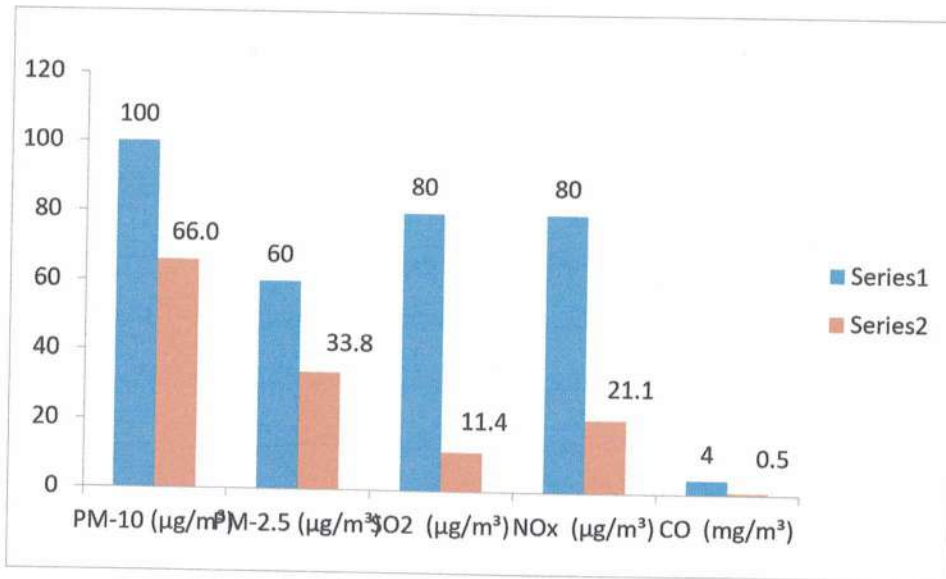
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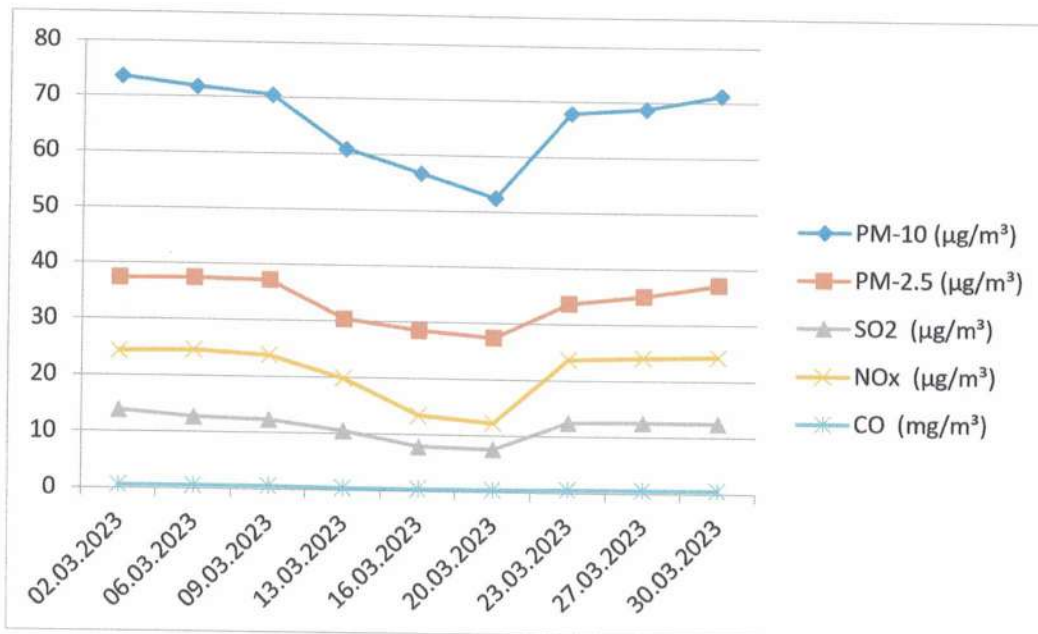
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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-02 (Near Anadron Office) For the Month of March -23



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/03/679
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,
Sampling Location	Near Main Gate (Chama Khandi)
Issued Date	03.04.2023
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
02.03.2023	77.4	40.1	14.3	25.4	0.5
06.03.2023	75.4	38.4	13.4	24.5	0.5
09.03.2023	78.6	40.6	14.5	25.9	0.5
13.03.2023	62.8	31.3	9.2	17.9	0.4
16.03.2023	60.3	31.1	8.6	16.7	0.4
20.03.2023	57.4	28.6	8.2	16.5	0.4
23.03.2023	68.7	35.1	11.5	21.6	0.5
27.03.2023	71.3	37.5	12.7	24.6	0.5
30.03.2023	72.6	38.1	12.9	24.8	0.5
Avg	69.4	35.6	11.7	22.0	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

[Signature]

Authorized Signatory



Seal of Laboratory

Notes:

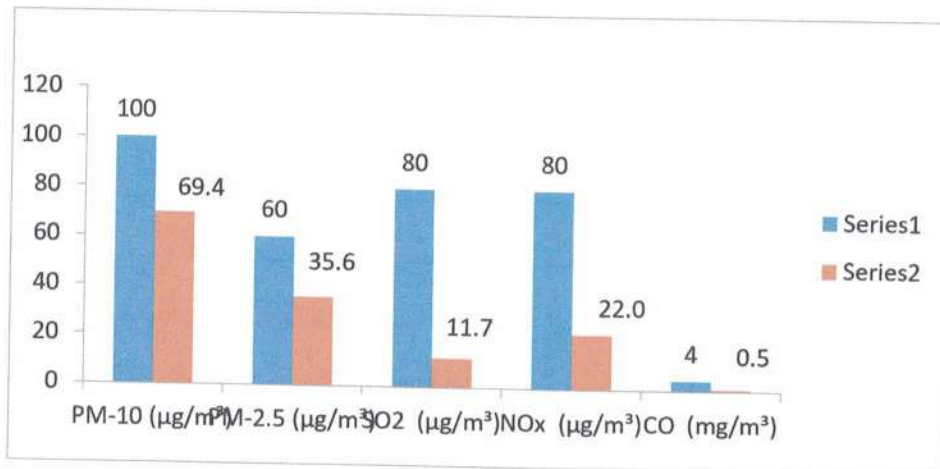
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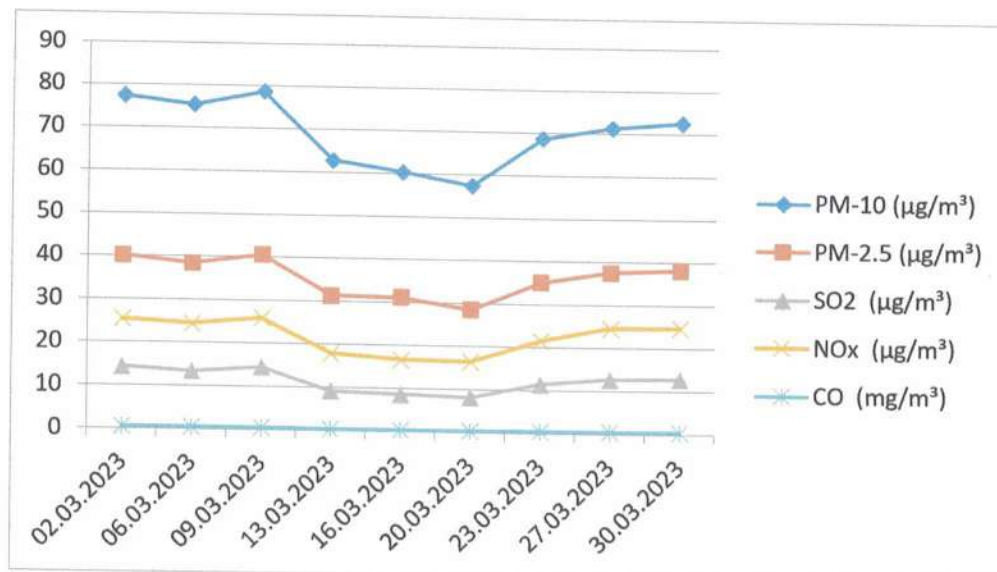
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NB-Series 1—Stands for Standard, Series 2—Stands for Resu



This Graph is belongs to Station-03 (Near Main Gate, Chama Khandi) For the Month of March -23



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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/03/680			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	23.03.2023			
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,			
Sampling Location	Near TSSEZL Project Office			
Issued Date	03.04.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	28	°C	
2.	Relative Humidity	56	% RH	
3.	Sulphur Dioxide(SO ₂)	10.6	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	20.7	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	65.8	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	33.7	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	13.8	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	35.2	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.42	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.4	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
  Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By				

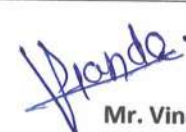
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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/03/681			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	23.03.2023			
Sample Drawn by	Ardra Consulting Services Pvt, Ltd.			
Sampling Location	Near Anadron Office			
Issued Date	03.04.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	28	°C	
2.	Relative Humidity	56	% RH	
3.	Sulphur Dioxide(SO ₂)	12.5	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	23.7	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	67.9	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	33.7	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	14.2	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	37.5	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.44	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
  Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By				

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/03/682			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	23.03.2023			
Sample Drawn by	Ardra Consulting Services Pvt, Ltd,			
Sampling Location	Near Main Gate (Chama Khandi)			
Issued Date	03.04.2023			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	32	°C	
2.	Relative Humidity	50	% RH	
3.	Sulphur Dioxide(SO ₂)	11.5	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	21.6	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	68.7	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	35.1	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.5	mg/M ³	≤ 04
8.	Ozone(O ₃)	15.3	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	39.7	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.6	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.46	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
  Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By				

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SURFACE WATER QUALITY TEST REPORT

TEST CERTIFICATE

Report No:- GESEC/PRO/W/2022-23/03/683

Client Name and Address:

TATA STEEL SPECIAL ECONOMIC ZONE LTD
Gopalpur Industrial Park-DTA
Chamakhandi, Chhatrapur, Dist-Ganjam
Odisha-761020

Date of Sampling

23.03.2023

Start Date of Analysis

24.03.2023

End Date of Analysis

29.03.2023

Sample Details

Surface water (US)

Nature of sample

Liquid

Sample Collected By

Ardra Consulting Services Pvt, Ltd,

P.O NO

TSSEZL/2022/30002204232

WATER ANALYSIS RESULT

Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	55	300	Hazen	IS 3025: (Part 4)- 1983; (RA-2017)
2	pH	8.12	6.5-8.5	--	APHA 23rd Ed 4500- H+B:2014
3	Chlorides as Cl	68	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	528	1500	mg/l	APHA 23rd Ed 2540-C: 2017
5	Dissolved Oxygen	5.8	4 (min)	mg/l	APHA 23rd Ed 4500-OC :2017
6	BOD 3 days 27 °C	3.1	3	mg/l	IS 3025: Part 44- 1993; (RA-2014)
7	Sulphates as SO ₄	20.2	400	mg/l	APHA 23rd Ed 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.38	50	mg/l	APHA 23rd Ed 4500-NO3-B: 2017
9	Fluoride as F	0.21	1.5	mg/l	APHA 23rd Ed 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd Ed 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.2	50	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 I IB,23rd Ed 2017 (AAS)
16	Arsenic as As	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr ⁶⁺	<0.05	0.05	mg/l	APHA 4500 Cr B 23rd Ed. 2017 (AAS)
20	Phenolic Compounds	ND	0.005	mg/l	IS : 3025 (Part 23)
21	Total Coliform	800	5000	MPN/100ml	IS : 1622(rev.2014)

Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters.
BDL – Below Detectable Limit.



Handwritten signature

Mr. Vinod Hande
(Technical Manager)
Reviewed & Authorized By

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SURFACE WATER QUALITY TEST REPORT

TEST CERTIFICATE

Report No:- GESEC/PRO/W/2022-23/03/684

Client Name and Address:
TATA STEEL SPECIAL ECONOMIC ZONE LTD
Gopalpur Industrial Park-DTA
Chamakhandi, Chhatrapur, Dist-Ganjam
Odisha-761020

Date of Sampling	23.03.2023
Start Date of Analysis	24.03.2023
End Date of Analysis	29.03.2023
Sample Details	Surface water (DS)
Nature of sample	Liquid

Sample Collected By	Ardra Consulting Services Pvt, Ltd,
P.O NO	TSSEZL/2022/30002204232

WATER ANALYSIS RESULT

Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	98	300	Hazen	IS 3025: (Part 4)- 1983;(RA-2017)
2	pH	7.24	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	56	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	364	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	5.6	4	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	2.8	3	mg/l	IS 3025: Part 44- 1993;(RA-2014)
7	Sulphates as SO4	16.8	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.02	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.2	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.21	50	mg/l	APHA 23 rd ED 3500-Fe-B: 20 17
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 1 IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 23 rd ED 3500-Cr-B: 20 17
20	Phenolic Compounds	ND	0.005	mg/l	APHA 23 rd ED 3500
21	Total Coliform	455	5000	MPN/100 ml	IS 1622:1981

Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters.
BDL – Below Detectable Limit.



V. Hande
Mr. Vinod Hande
 (Technical Manager)
 Reviewed & Authorized By

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE

Report No:- GESEC/PRO/ANLM/2022-23/03/685

Client Name and Address:

TATA STEEL SPECIAL ECONOMIC ZONE LTD
Gopalpur Industrial Park-DTA
Chamakhandi, Chhatrapur, Dist-Ganjam
Odisha-761020

Date of Sampling

23.03.2023

Sample Details

Noise For 24 Hours

Sample location

Near Anadrone Office

Sample Collected By

Ardra Consulting Services Pvt, Ltd,

P.O NO:

TSSEZL/2022/30002204232

Noise Monitoring Result

Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
23.03.2023	06.00	55.9	23.03.2023	18.00	66.8	dB(A)	75/70
23.03.2023	07.00	51.3	23.03.2023	19.00	66.3	dB(A)	
23.03.2023	08.00	55.4	23.03.2023	20.00	55.9	dB(A)	
23.03.2023	09.00	62.1	23.03.2023	21.00	61.7	dB(A)	
23.03.2023	10.00	60.3	23.03.2023	22.00	61.5	dB(A)	
23.03.2023	11.00	56.8	23.03.2023	23.00	55.3	dB(A)	
23.03.2023	12.00	55.6	24.03.2023	24.00	42.3	dB(A)	
23.03.2023	13.00	58.4	24.03.2023	01.00	37.3	dB(A)	
23.03.2023	14.00	60.5	24.03.2023	02.00	35.2	dB(A)	
23.03.2023	15.00	61.9	24.03.2023	03.00	33.8	dB(A)	
23.03.2023	16.00	63.4	24.03.2023	04.00	34.6	dB(A)	
23.03.2023	17.00	62.7	24.03.2023	05.00	48.1	dB(A)	
Day Time Leq		59.7					
Night Time Leq		43.5					

Remark-

- All above Noise level results are within Central Pollution Control Board Standards limit.
- Day/Night -75/70 dB..(A)



Hande

Mr. Vinod Hande
(Technical Manager)
Reviewed & Authorized By

Terms and conditions

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MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024.



Recognised by Ministry of Environment and Forests (MoEF) / Central Pollution Control Board Govt. of India (CPCB)
and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

NOISELEVEL MONITORING REPORT

TEST CERTIFICATE

Report No:- GESEC/PRO/ANLM/2022-23/03/686

Client Name and Address:
TATA STEEL SPECIAL ECONOMIC ZONE LTD
Gopalpur Industrial Park-DTA
Chamakhandi, Chhatrapur, Dist-Ganjam
Odisha-761020

Date of Sampling

23.03.2023

Sample Details

Noise For 24 Hours

Sample location

Near Main Gate
(Chama Khandi)

Sample Collected By

Ardra Consulting Services Pvt, Ltd,

P.O NO

TSSEZL/2022/30002204232

Noise Monitoring Result

Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
23.03.2023	06.00	62.3	23.03.2023	18.00	66.8	dB(A)	75/70
23.03.2023	07.00	63.5	23.03.2023	19.00	67.3	dB(A)	
23.03.2023	08.00	64.5	23.03.2023	20.00	64.1	dB(A)	
23.03.2023	09.00	68.2	23.03.2023	21.00	62.6	dB(A)	
23.03.2023	10.00	67.8	23.03.2023	22.00	66.6	dB(A)	
23.03.2023	11.00	59.9	23.03.2023	23.00	62.3	dB(A)	
23.03.2023	12.00	60.4	24.03.2023	24.00	55.1	dB(A)	
23.03.2023	13.00	63.2	24.03.2023	01.00	53.4	dB(A)	
23.03.2023	14.00	66.6	24.03.2023	02.00	51.2	dB(A)	
23.03.2023	15.00	64.8	24.03.2023	03.00	53.4	dB(A)	
23.03.2023	16.00	66.7	24.03.2023	04.00	52.3	dB(A)	
23.03.2023	17.00	67.3	24.03.2023	05.00	55.1	dB(A)	
Day Time Leq		64.8					
Night Time Leq		56.1					

Remark-

- All above Noise level results are within Central Pollution Control Board Standards limit.
- Day/Night -75/70 dB.(A)



Vinod Hande

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(Technical Manager)
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ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/11/411
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near TS SEZL Project Office
Issued Date	03.12.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
03.11.2022	67.9	34.3	9.5	19.2	0.4
07.11.2022	68.2	34.9	9.8	19.6	0.4
10.11.2022	66.4	33.7	9.4	18.7	0.4
14.11.2022	65.8	33.4	9.2	18.5	0.4
17.11.2022	63.4	32.6	7.8	15.6	0.4
21.11.2022	64.8	32.9	9.4	17.5	0.4
24.11.2022	65.3	33.5	9.4	18.6	0.4
28.11.2022	68.6	35.2	9.5	18.4	0.4
Avg	66.3	33.8	9.3	18.3	0.4
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Authorized Signatory



Seal of Laboratory

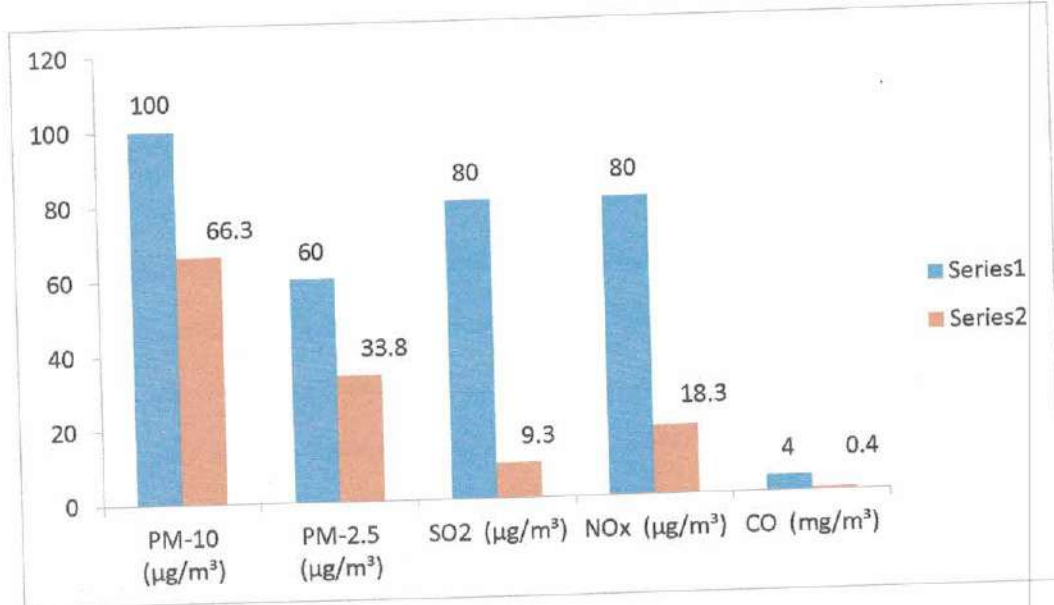
Notes:

1. The result given above related to the tested sample, as received. The customer asked for the above test only.
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4. This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

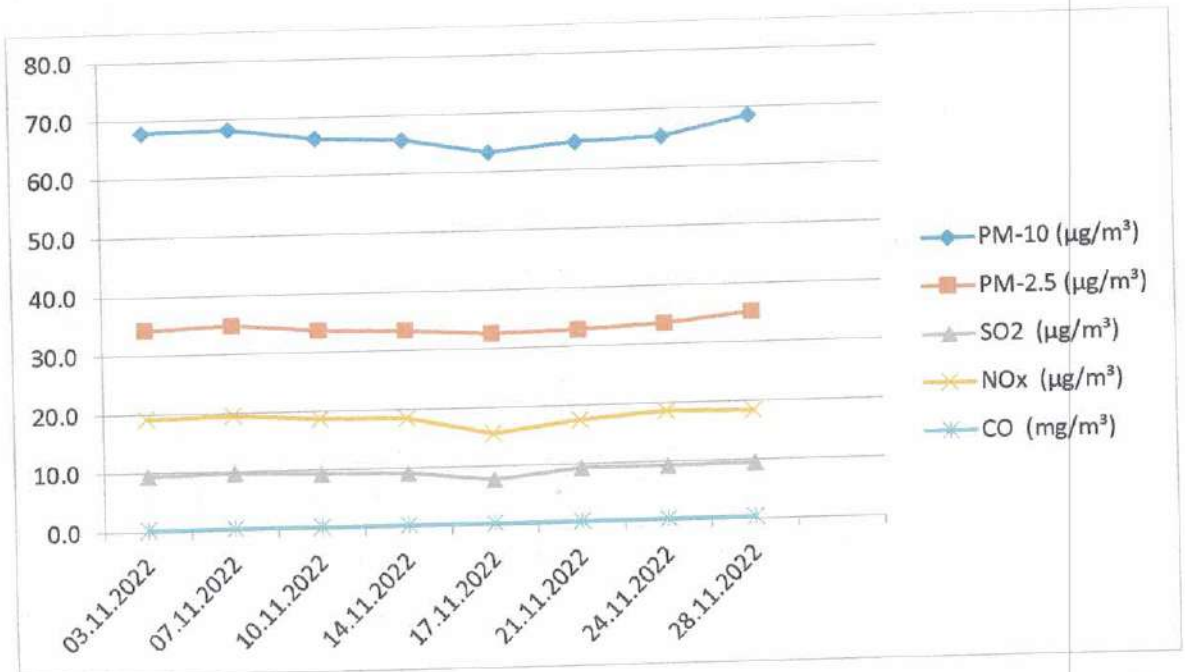
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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-01(Near TSSEZL Project Office) For the Month of November -22



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/11/412
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Anadron Office
Issued Date	03.12.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
03.11.2022	64.9	32.8	9.2	17.8	0.4
07.11.2022	65.8	33.5	9.4	18.3	0.4
10.11.2022	67.4	34.6	9.6	19.4	0.4
14.11.2022	68.5	34.8	9.7	19.5	0.4
17.11.2022	65.4	33.7	9.3	18.6	0.4
21.11.2022	66.7	33.8	9.5	18.6	0.4
24.11.2022	63.9	32.5	7.9	15.7	0.4
28.11.2022	98.4	35.1	9.2	18.5	0.4
Avg	66.4	33.9	9.2	18.3	0.4
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B- *NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Authorized Signatory

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Seal of Laboratory

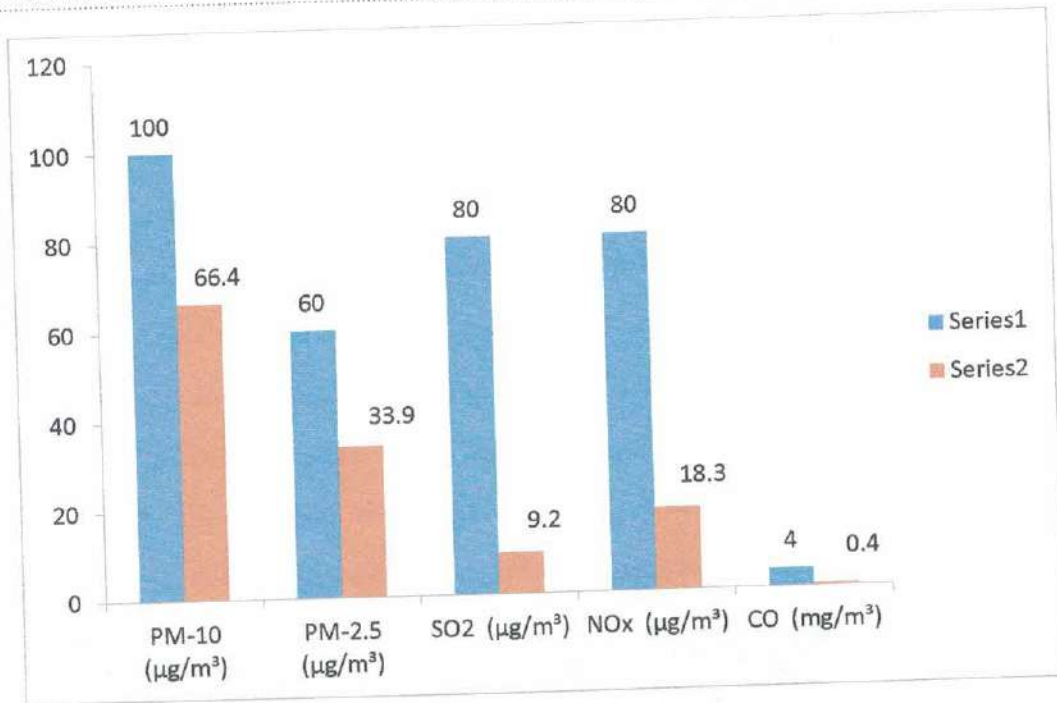
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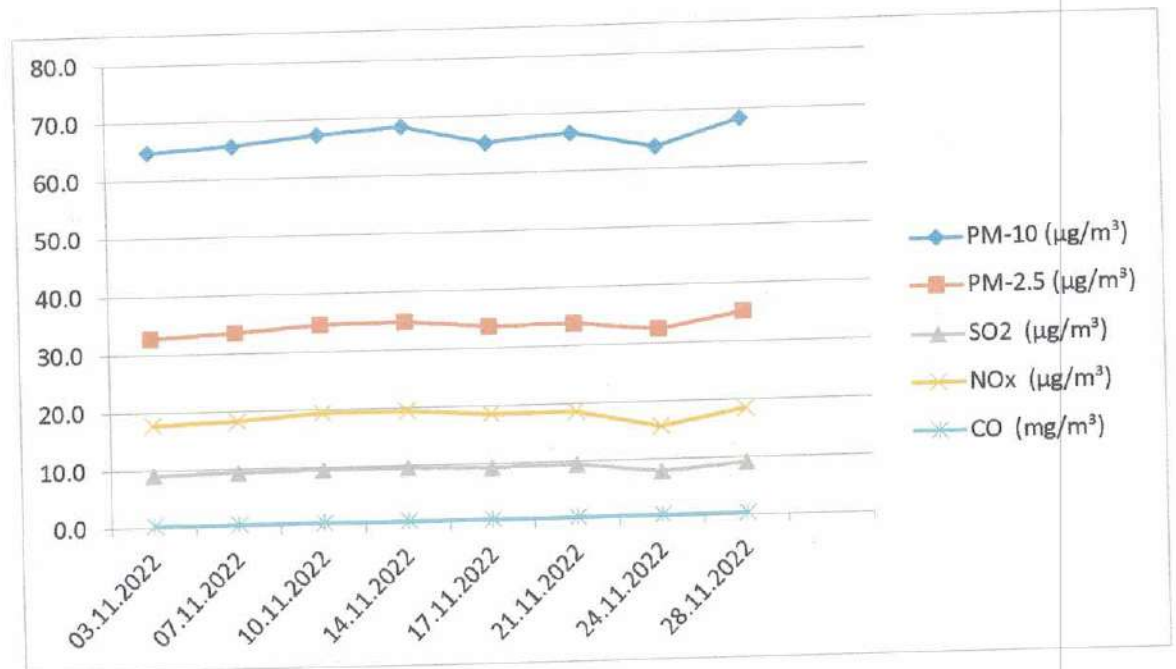
GREEN ENVIROSAFE
Engineers & Consultant Pvt Ltd.

A-7/2/C-11, Capital City, Talwade - Chakan Road, Chakan MIDC, PH-IV,
Village Nighoje, Tal. Khed, Dist. Pune-410 501, Maharashtra.
Mob+ 9545084620, 8421365421 CIN No. : U74900PN2013PTC149666
E-mail : envirosafetyeng@gmail.com, gesec12@gmail.com

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NB-Series 1-Stands for Standard, Series 2-Stands for Result



This Graph is belongs to Station-02 (Near Anadron Office) For the Month of November -22



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/11/413
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Main Gate (Chama Khandi)
Issued Date	03.12.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NOx (µg/m ³)	CO (µg/m ³)
03.11.2022	68.5	35.3	9.6	18.6	0.4
07.11.2022	67.4	34.5	9.1	18.2	0.4
10.11.2022	69.7	35.4	10.1	19.5	0.5
14.11.2022	72.4	37.8	10.2	19.9	0.5
17.11.2022	68.7	35.4	9.6	18.7	0.4
21.11.2022	70.2	36.4	9.9	18.8	0.5
24.11.2022	68.9	35.5	9.7	18.5	0.4
28.11.2022	72.5	37.9	10.3	19.8	0.5
Avg	69.8	36.0	9.8	19.0	0.5
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B- *NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Authorized Signatory

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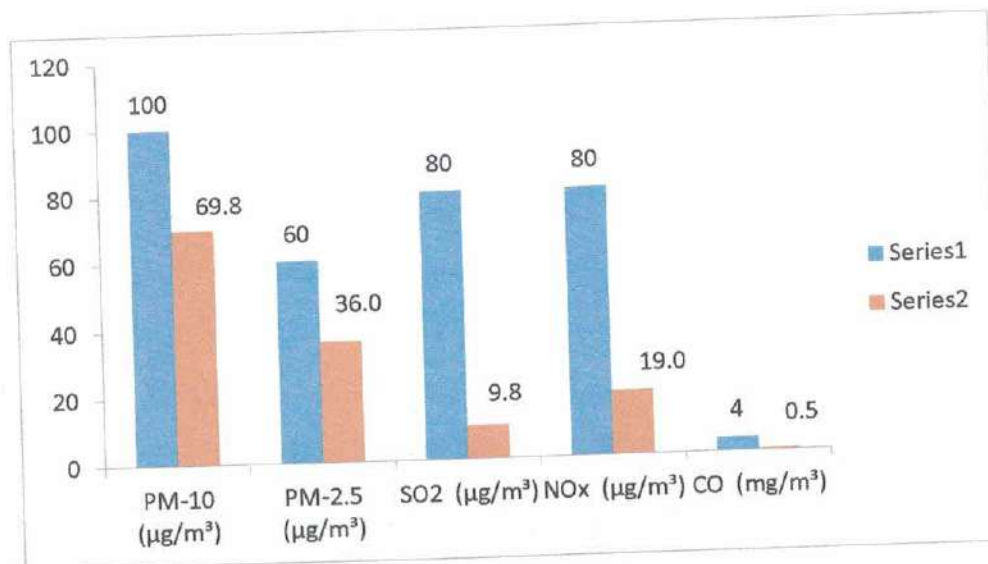
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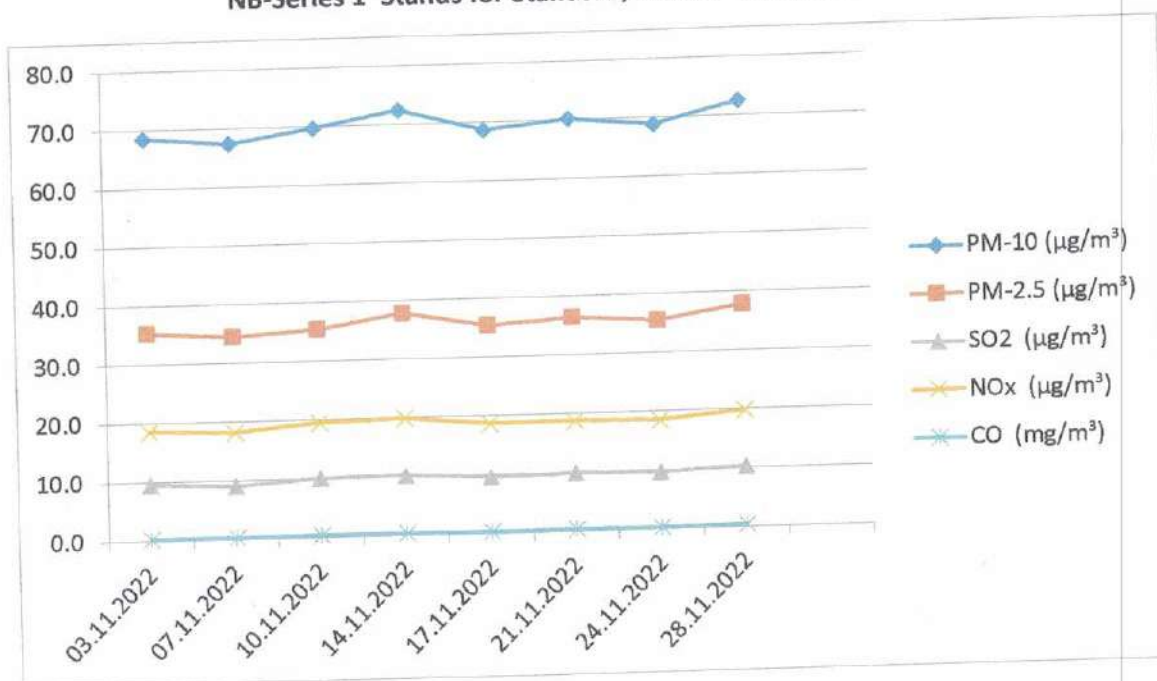


Seal of Laboratory

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NB-Series 1-Stands for Standard, Series 2-Stands for Resu



This Graph is belongs to Station-03 (Near Main Gate, Chama Khandi) For the Month of November -22

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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/11/414
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly (Special)
Date of Sampling	24.11.2022
Sample Drawn by	GESEC
Sampling Location	Near TSSEZL Project Office
Issued Date	03.12.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

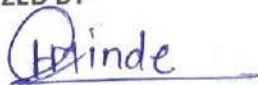
Ambient Air Analysis Result

Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	26	°C	
2.	Relative Humidity	60	% RH	
3.	Sulphur Dioxide(SO ₂)	9.4	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	18.6	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	65.3	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	33.5	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.4	mg/M ³	≤ 04
8.	Ozone(O ₃)	<08	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	<18	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.42	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.4	ng/M ³	≤ 20

Remark-

- All above results are within National Ambient Air Quality standards.
- BDL – Below Detectable Limit.

ANALYZED BY-




AUTHORIZED SIGNATORY



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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/AAQM/2022-23/11/415
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly (Special)
Date of Sampling	24.11.2022
Sample Drawn by	GESEC
Sampling Location	Near Anadrone Office
Issued Date	03.12.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

Ambient Air Analysis Result

Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	26	°C	
2.	Relative Humidity	70	% RH	
3.	Sulphur Dioxide(SO ₂)	7.9	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	15.7	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	63.9	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	32.5	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.4	mg/M ³	≤ 04
8.	Ozone(O ₃)	<09	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	<19	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.44	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20

Remark-

- All above results are within National Ambient Air Quality standards.
- BDL – Below Detectable Limit.

ANALYZED BY-

[Signature]



AUTHORIZED SIGNATORY

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 ISO 9001:2015, ISO 45001 : 2018 and ISO 14001 : 2015 Certified Company

SPECIAL AIR QUALITY MONITORING TEST REPORT

TEST CERTIFICATE		
Report No:- GESEC/PRO/W/2022-23/11/417		
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020	Date of Sampling	22.11.2022
	Start Date of Analysis	23.11.2022
	End Date of Analysis	28.11.2022
	Sample Details	Surface water (US)
	Nature of sample	Liquid
Sample Collected By	Green EnviroSafe Engineers & Consultant Pvt. Ltd.	
P.O NO	TSSEZL/2022/30002204232	

WATER ANALYSIS RESULT

Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	78	300	Hazen	IS 3025: (Part 4)- 1983; (RA-2017)
2	pH	7.72	6.5-8.5	--	APHA 23rd Ed 4500- H+B:2014
3	Chlorides as Cl	66.0	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	482	1500	mg/l	APHA 23rd Ed 2540-C: 2017
5	Dissolved Oxygen	6.0	4 (min)	mg/l	APHA 23rd Ed 4500-OC :2017
6	BOD 3 days 27 °C	<3.0	3	mg/l	IS 3025: Part 44- 1993; (RA-2014)
7	Sulphates as SO4	18.4	400	mg/l	APHA 23rd Ed 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.5	50	mg/l	APHA 23rd Ed 4500-NO3-B: 2017
9	Fluoride as F	0.16	1.5	mg/l	APHA 23rd Ed 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd Ed 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.14	50	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 3111B.23rd Ed 2017 (AAS)
16	Arsenic as As	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 4500 Cr B 23rd Ed. 2017 (AAS)
20	Phenolic Compounds	ND	0.005	mg/l	IS : 3025 (Part 23)
21	Total Coliform	410	5000	MPN/100ml	IS : 1622(rev.2014)

Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters.

BDL – Below Detectable Limit.

ANALYZED BY

W. Inde



AUTHORIZED SIGNATORY

W. Inde

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SURFACE WATER QUALITY TEST REPORT

TEST CERTIFICATE		
Report No:- GESEC/PRO/W/2022-23/11/418		
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020	Date of Sampling	22.11.2022
	Start Date of Analysis	23.11.2022
	End Date of Analysis	28.11.2022
	Sample Details	Surface water (DS)
	Nature of sample	Liquid
Sample Collected By	Green EnviroSafe Engineers & Consultant Pvt. Ltd.	
P.O NO	TSSEZL/2022/30002204232	

WATER ANALYSIS RESULT

Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	124	300	Hazen	IS 3025: (Part 4)- 1983;(RA-2017)
2	pH	7.54	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	60.2	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	412	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	5.9	4	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	<3.0	3	mg/l	IS 3025: Part 44- 1993;(RA-2014)
7	Sulphates as SO4	16.2	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.2	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.14	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.12	50	mg/l	APHA 23 rd ED 3500-Fe-B: 20 17
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 1 IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 23 rd ED 3500-Cr-B: 20 17
20	Phenolic Compounds	ND	0.005	mg/l	APHA 23 rd ED 3500
21	Total Coliform	310	5000	MPN/100ml	IS 1622:1981

Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters.

BDL – Below Detectable Limit.

ANALYZED BY-

Hinde



AUTHORIZED SIGNATORY

Hinde

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NOISE LEVEL MONITORING REPORT

TEST CERTIFICATE

Report No:- GESEC/PRO/ANLM/2022-23/11/419		
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020	Date of Sampling	10.11.2022
	Sample Details	Noise For 24 Hours
	Sample location	Near TSSEZL Project Office
Sample Collected By	Green EnviroSafe Engineers & Consultant Pvt. Ltd.	
P.O NO:	TSSEZL/2022/30002204232	

Noise Monitoring Result

Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
10.11.2022	06.00	45.3	10.11.2022	18.00	66.5	dB(A)	75/70
10.11.2022	07.00	52.4	10.11.2022	19.00	65.8	dB(A)	
10.11.2022	08.00	55.9	10.11.2022	20.00	55.4	dB(A)	
10.11.2022	09.00	63.8	10.11.2022	21.00	52.3	dB(A)	
10.11.2022	10.00	65.8	10.11.2022	22.00	44.6	dB(A)	
10.11.2022	11.00	64.2	10.11.2022	23.00	43.2	dB(A)	
10.11.2022	12.00	62.1	11.11.2022	24.00	41.3	dB(A)	
10.11.2022	13.00	61.8	11.11.2022	01.00	38.4	dB(A)	
10.11.2022	14.00	63.5	11.11.2022	02.00	35.6	dB(A)	
10.11.2022	15.00	55.2	11.11.2022	03.00	34.5	dB(A)	
10.11.2022	16.00	53.1	11.11.2022	04.00	33.6	dB(A)	
10.11.2022	17.00	57.3	11.11.2022	05.00	44.1	dB(A)	
Day Time Leq		58.8					
Night Time Leq		39.4					

Remark-

- All above Noise level results are within Central Pollution Control Board Standards limit.
- Day/Night -75/70 dB..(A)

ANALYZED BY-




AUTHORIZED SIGNATORY



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- MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 29/02/2024.



GREEN ENVIROSAFE
Engineers & Consultant Pvt Ltd.

A-7/2/C-11, Capital City, Talwade - Chakan Road, Chakan MIDC, PH-IV,
Village Nighoje, Tal. Khed, Dist. Pune-410 501, Maharashtra.
Mob+ 9545084620, 8421365421 CIN No. : U74900PN2013PTC149666
E-mail : environsafeyeng@gmail.com, gesec12@gmail.com

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE

Report No:- GESEC/PRO/AAQM/2022-23/11/420			Date of Sampling		10.11.2022
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Sample Details		Noise For 24 Hours
			Sample location		Near Main Gate (Chama Khandi)
			Sample Collected By		
P.O NO			Green EnviroSafe Engineers & Consultant Pvt. Ltd.		
			TSSEZL/2022/30002204232		

Noise Monitoring Result

Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
10.11.2022	06.00	52.3	10.11.2022	18.00	62.4	dB(A)	75/70
10.11.2022	07.00	59.8	10.11.2022	19.00	65.1	dB(A)	
10.11.2022	08.00	63.8	10.11.2022	20.00	64.7	dB(A)	
10.11.2022	09.00	66.5	10.11.2022	21.00	65.3	dB(A)	
10.11.2022	10.00	65.7	10.11.2022	22.00	61.2	dB(A)	
10.11.2022	11.00	66.2	10.11.2022	23.00	58.7	dB(A)	
10.11.2022	12.00	62.7	11.11.2022	24.00	57.4	dB(A)	
10.11.2022	13.00	61.5	11.11.2022	01.00	53.3	dB(A)	
10.11.2022	14.00	65.4	11.11.2022	02.00	52.7	dB(A)	
10.11.2022	15.00	63.8	11.11.2022	03.00	51.9	dB(A)	
10.11.2022	16.00	61.4	11.11.2022	04.00	50.7	dB(A)	
10.11.2022	17.00	60.6	11.11.2022	05.00	49.3	dB(A)	
Day Time Leq		63.0					
Night Time Leq		54.4					

Remark-

- All above Noise level results are within Central Pollution Control Board Standards limit.
- Day/Night -75/70 dB.(A)

ANALYZED BY-

H. Inde



AUTHORIZED SIGNATORY

V. Gander

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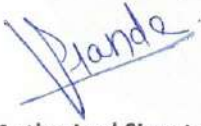
AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/2022-23/10/239
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near TS SEZL Project Office
Issued Date	03.11.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
03.10.2022	56.8	27.6	8.2	13.4	0.3
06.10.2022	54.9	26.9	7.9	12.8	0.3
10.10.2022	51.2	25.8	7.5	12.4	0.3
13.10.2022	48.6	26.3	6.9	11.4	0.3
17.10.2022	59.6	29.9	7.9	13.5	0.4
20.10.2022	60.5	30.5	8.1	13.8	0.4
24.10.2022	62.7	32.2	8.6	13.8	0.4
27.10.2022	64.1	34.5	9.1	14.6	0.4
31.10.2022	64.8	33.8	8.8	14.3	0.4
Avg	58.1	29.7	8.1	13.3	0.4
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.


Authorized Signatory



Seal of Laboratory

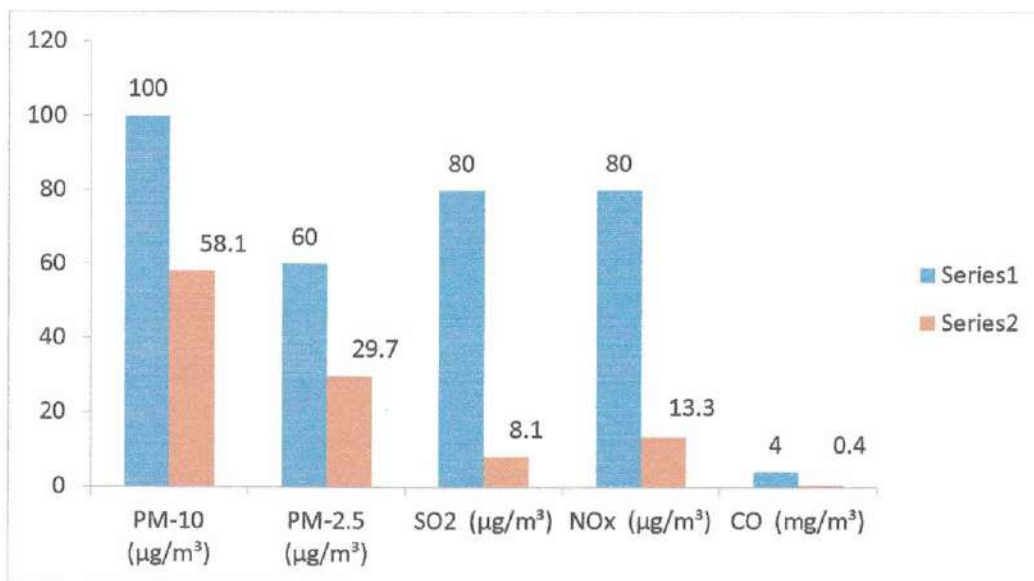
Notes:

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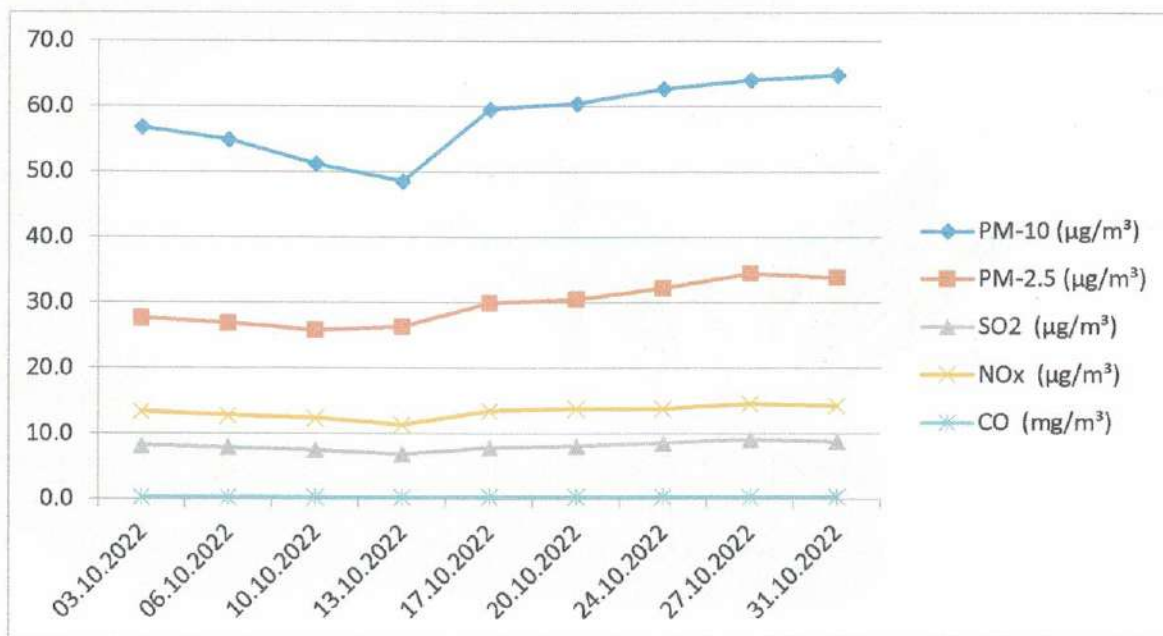
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NB-Series 1-Stands for Standard, Series 2-Stands for Result



This Graph is belongs to Station-01(Near TSSEZL Project Office) For the Month of October -22



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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/2022-23/10/240
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Anadron Office
Issued Date	03.11.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
03.10.2022	56.8	28.7	7.6	13.5	0.3
06.10.2022	54.5	27.9	7.1	12.8	0.3
10.10.2022	53.4	27.3	6.9	12.5	0.3
13.10.2022	51.2	26.9	6.5	11.8	0.3
17.10.2022	60.5	30.4	8.1	13.7	0.4
20.10.2022	62.9	32.2	8.7	14.2	0.4
24.10.2022	64.5	33.4	8.9	14.5	0.4
27.10.2022	66.4	34.3	9.2	15.2	0.4
31.10.2022	67.8	34.9	9.2	15.2	0.4
Avg	59.8	30.7	8.0	13.7	0.4
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B- *NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.


Authorized Signatory



Seal of Laboratory

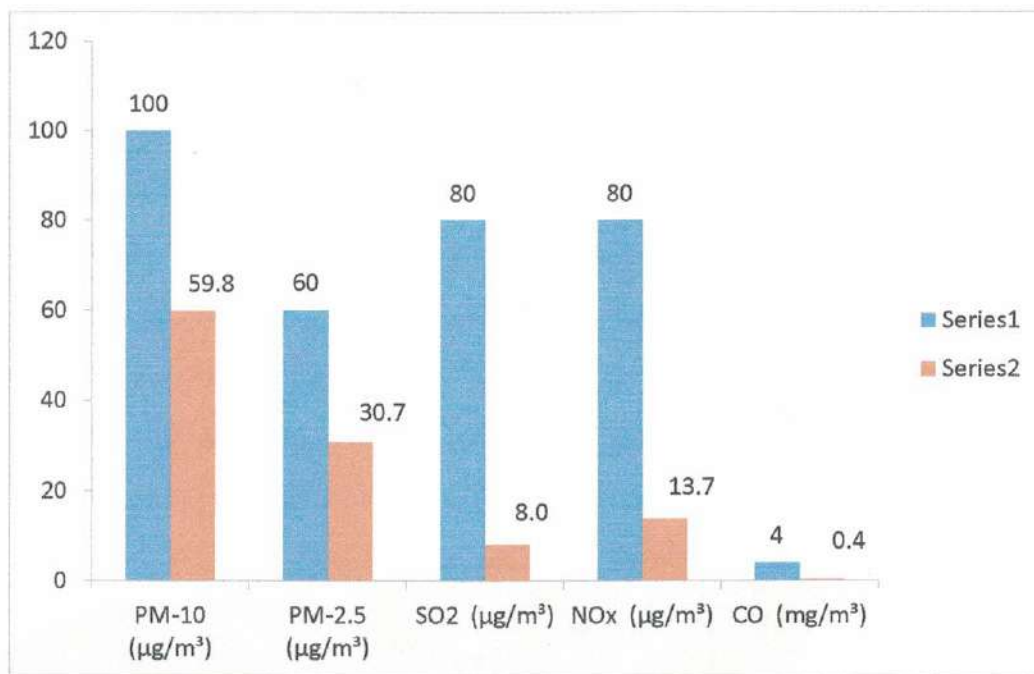
Notes:

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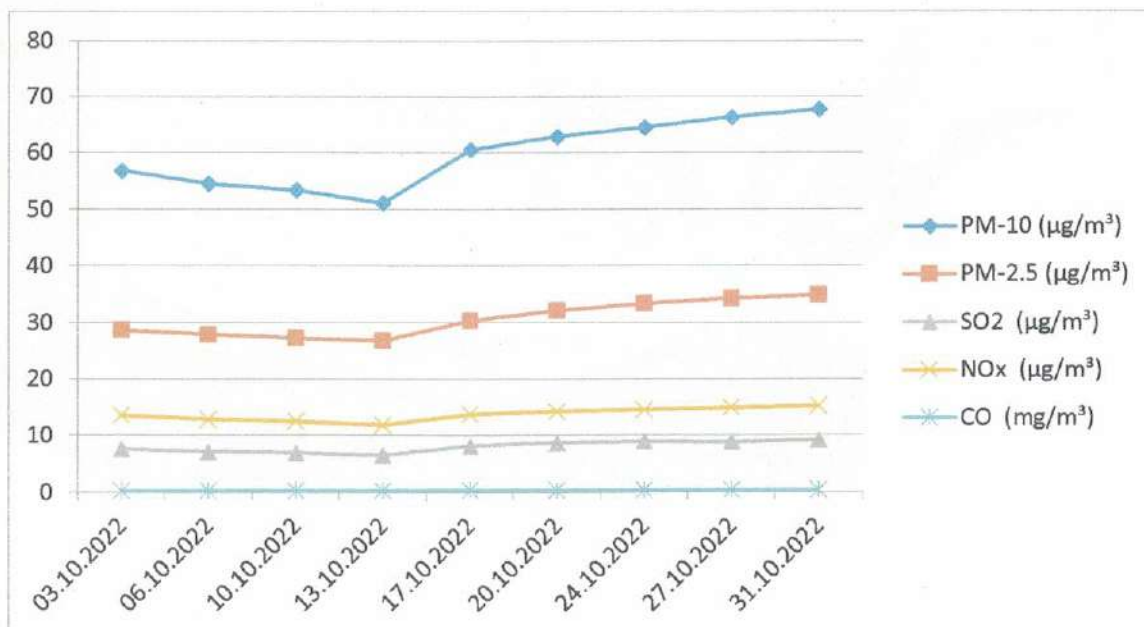
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NB-Series 1—Stands for Standard, Series 2—Stands for Result



This Graph is belongs to Station-02 (Near Anadron Office) For the Month of October -22

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AMBIENT AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/2022-23/10/241
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly
Sample Drawn by	GESEC
Sampling Location	Near Main Gate (Chama Khandi)
Issued Date	03.11.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

ANALYSIS RESULT

Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	CO (µg/m ³)
03.10.2022	59.8	30.1	8.7	13.6	0.3
06.10.2022	57.5	28.9	8.6	13.2	0.3
10.10.2022	54.2	26.8	7.9	12.5	0.3
13.10.2022	50.6	26.5	6.9	11.8	0.3
17.10.2022	60.2	31.5	8.6	13.9	0.4
20.10.2022	62.4	32.4	8.9	14.3	0.4
24.10.2022	65.3	34.8	9.1	14.6	0.4
27.10.2022	66.8	35.2	9.4	14.8	0.4
31.10.2022	67.3	35.8	9.6	15.2	0.4
Avg	60.5	31.3	8.6	13.8	0.4
NAAQ* Standard	100	60	80	80	4
Methods of Analysis	IS: 5182 (Part-23)	Gravimetric Method as per CPCB method	IS: 5182 (Part-2)	IS: 5182 (Part-6)	IS: 5182 (Part-10)

N.B.-*NAAQ-National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification.

Authorized Signatory

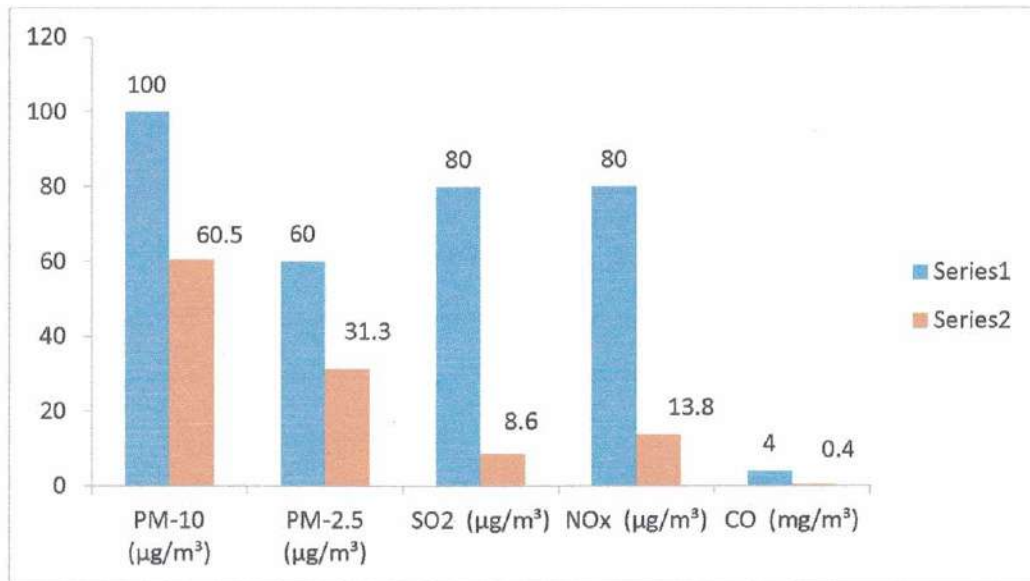
Notes:

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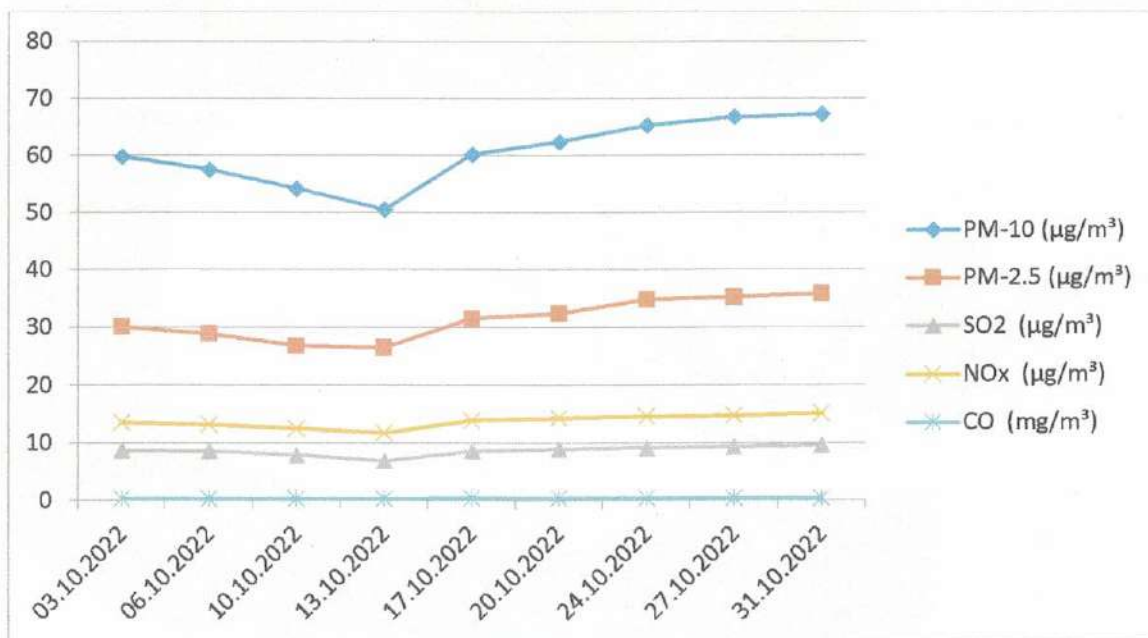
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NB-Series 1–Stands for Standard, Series 2–Stands for Resu



This Graph is belongs to Station-03 (Near Main Gate, Chama Khandi) For the Month of October -22



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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/2022-23/10/242
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.
Sample Description	Ambient Air Quality
Sample Drawn Period/Time	Monthly (Special)
Date of Sampling	24.10.2022
Sample Drawn by	GESEC
Sampling Location	Near TSSEZL Project Office
Issued Date	03.11.2022
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment
P.O NO	TSSEZL/2022/30002204232

Ambient Air Analysis Result

Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	26	°C	
2.	Relative Humidity	51	% RH	
3.	Sulphur Dioxide(SO ₂)	8.6	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	13.8	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	62.7	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	32.2	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.4	mg/M ³	≤ 04
8.	Ozone(O ₃)	<07	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	<15	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.42	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.4	ng/M ³	≤ 20

Remark-

- All above results are within National Ambient Air Quality standards.
- BDL – Below Detectable Limit.



Vinod Hande

Mr. Vinod Hande
(Technical Manager)
Reviewed & Authorized By

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Report No:-	GESEC/PRO/2022-23/10/243			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	24.10.2022			
Sample Drawn by	GESEC			
Sampling Location	Near Anadron Office			
Issued Date	03.10.2022			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	26	°C	
2.	Relative Humidity	51	% RH	
3.	Sulphur Dioxide(SO ₂)	8.9	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	14.5	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	66.5	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	33.4	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.4	mg/M ³	≤ 04
8.	Ozone(O ₃)	<08	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	<17	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.1	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.44	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
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SPECIAL AIR QUALITY MONITORING TEST REPORT

Report No:-	GESEC/PRO/2022-23/10/244			
Issued to	M/s. Tata Steel Special Economic Zone Ltd, Gopalpur.			
Sample Description	Ambient Air Quality			
Sample Drawn Period/Time	Monthly (Special)			
Date of Sampling	24.10.2022			
Sample Drawn by	GESEC			
Sampling Location	Near Main Gate (Chama Khandi)			
Issued Date	03.10.2022			
Instrument Used	Respirable Dust Sampler, Fine Dust Sampler, Gaseous Attachment			
P.O NO	TSSEZL/2022/30002204232			
Ambient Air Analysis Result				
Sr. No.	Parameter	Result	Unit(s)	NAAQ Standards
1.	Ambient Temperature	27	°C	
2.	Relative Humidity	52	% RH	
3.	Sulphur Dioxide(SO ₂)	9.1	µg/M ³	≤ 80
4.	Oxides of Nitrogen(NO ₂)	14.6	µg/M ³	≤ 80
5.	Particulate Matter PM ₁₀	65.3	µg/M ³	≤ 100
6.	Particulate Matter PM _{2.5}	34.8	µg/M ³	≤ 60
7.	Carbon Monoxide (CO)	0.4	mg/M ³	≤ 04
8.	Ozone(O ₃)	<09	µg/M ³	≤ 180
9.	Lead (Pb)	<0.09	µg/M ³	≤ 1.0
10.	Ammonia(NH ₃)	<21	µg/M ³	≤ 400
11.	Benzene(C ₆ H ₆)	<4.6	µg/M ³	≤ 05
12.	Benzo(a)Pyrene(BaP)	<0.08	ng/M ³	≤ 01
13.	Arsenic(As)	<0.46	ng/M ³	≤ 06
14.	Nickel(Ni)	<0.5	ng/M ³	≤ 20
Remark- ➤ All above results are within National Ambient Air Quality standards. ➤ BDL – Below Detectable Limit.				
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SURFACEWATER QUALITY TEST REPORT

TEST CERTIFICATE

Report No:-	GESEC/PRO/2022-23/10/245	
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020	Date of Sampling	26.10.2022
	Start Date of Analysis	27.10.2022
	End Date of Analysis	31.10.2022
	Sample Details	Surface water (US)
	Nature of sample	Liquid
Sample Collected By	GESEC	
P.O NO	TSSEZL/2022/30002204232	

WATER ANALYSIS RESULT

Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	<5	300	Hazen	IS 3025: (Part 4)- 1983; (RA-2017)
2	pH	7.53	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	66	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	436	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	6.2	4 (min)	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	<2.0	3	mg/l	IS 3025: Part 44- 1993; (RA-2014)
7	Sulphates as SO4	16.7	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.4	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.14	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.17	50	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 IB,23rd Ed 2017 (AAS)
16	Arsenic as As	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 4500 Cr B 23rd Ed. 2017 (AAS)
20	Phenolic Compounds	ND	0.005	mg/l	IS : 3025 (Part 23)
21	Total Coliform	540	5000	MPN/100ml	IS : 1622(rev.2014)

Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters.
 BDL – Below Detectable Limit.



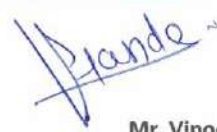

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SURFACEWATER QUALITY TEST REPORT

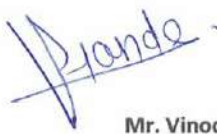
TEST CERTIFICATE					
Report No:-		GESEC/PRO/2022-23/10/246			
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020		Date of Sampling		26.10.2022	
		Start Date of Analysis		27.10.2022	
		End Date of Analysis		31.10.2022	
		Sample Details		Surface water (DS)	
		Nature of sample		Liquid	
Sample Collected By		GESEC			
P.O NO		TSSEZL/2022/30002204232			
WATER ANALYSIS RESULT					
Sr. No.	Parameter	Result	Limits as per Is 2296:2012	Unit(s)	Standard Method
Physical Parameter					
1	Colour	<5	300	Hazen	IS 3025: (Part 4)- 1983;(RA-2017)
2	pH	7.34	6.5-8.5	--	APHA 23rd ED 4500- H+B:2014
3	Chlorides as Cl	52	600	mg/l	APHA 23rd Ed 4500- Cl-B:2017
4	Total Dissolved Solids	420	1500	mg/l	APHA 23rd ED 2540-C: 2017
5	Dissolved Oxygen	5.9	4	mg/l	APHA 23rd ED 4500-OC :2017
6	BOD 3 days 27 °C	<2.0	3	mg/l	IS 3025: Part 44- 1993;(RA-2014)
7	Sulphates as SO ₄	13.4	400	mg/l	APHA 23rd ED 4500-SO42-E: 2017
8	Nitrates as NO ₃	3.2	50	mg/l	APHA 23rd ED 4500-NO3-B: 2017
9	Fluoride as F	0.11	1.5	mg/l	APHA 23rd ED 4500-F-D: 2017
10	Total Oil & Grease	ND	0.1	mg/l	APHA 23rd ED 5520-B: 2017
11	Cyanide as CN	ND	0.05	mg/l	IS 3025 (Part 27); 1986
12	Copper as Cu	<0.03	1.5	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
13	Iron as Fe	0.16	50	mg/l	APHA 23 rd ED 3500-Fe-B: 20 17
14	Lead as Pb	<0.01	0.1	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
15	Zinc as Zn	<0.05	15	mg/l	APBA 31 I IB,23rd Ed 2017 (AAS)
16	Arsenic asAs	<0.001	0.2	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
17	Selenium as Se	<0.001	0.05	mg/l	APHA 3111B,23rd Ed 2017 (AAS)
18	Cadmium as Cd	ND	0.01	mg/l	APHA 3111B.23rd Ed 2017 (AAS)
19	Chromium as Cr6+	<0.05	0.05	mg/l	APHA 23 rd ED 3500-Cr-B: 20 17
20	Phenolic Compounds	ND	0.005	mg/l	APHA 23 rd ED 3500
21	Total Coliform	360	5000	MPN/100ml	IS 1622:1981
Remark(s): All above results of Water Sample is chemically potable and bacteriologically with respect to above parameters. BDL – Below Detectable Limit.					
  Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By					

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:-			GESEC/PRO/2022-23/10/247				
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		25.10.2022		
			Sample Details		Noise For 24 Hours		
			Sample location		Near TSSEZL Project Office		
Sample Collected By			GESEC				
P.O NO:			TSSEZL/2022/30002204232				
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
25.08.2022	06.00	47.8	25.08.2022	18.00	66.5	dB(A)	75/70
25.08.2022	07.00	51.4	25.08.2022	19.00	63.6	dB(A)	
25.08.2022	08.00	56.3	25.08.2022	20.00	59.5	dB(A)	
25.08.2022	09.00	64.8	25.08.2022	21.00	53.4	dB(A)	
25.08.2022	10.00	66.2	25.08.2022	22.00	45.6	dB(A)	
25.08.2022	11.00	63.1	25.08.2022	23.00	42.1	dB(A)	
25.08.2022	12.00	61.8	26.08.2022	24.00	38.9	dB(A)	
25.08.2022	13.00	62.5	26.08.2022	01.00	33.5	dB(A)	
25.08.2022	14.00	63.4	26.08.2022	02.00	32.8	dB(A)	
25.08.2022	15.00	54.3	26.08.2022	03.00	34.8	dB(A)	
25.08.2022	16.00	52.7	26.08.2022	04.00	37.9	dB(A)	
25.08.2022	17.00	64.8	26.08.2022	05.00	43.2	dB(A)	
Day Time Leq		59.5					
Night Time Leq		38.6					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB..(A)							
 GREEN ENVIROSAFE PUNE Engineers & Consultant Pvt Ltd.  Mr. Vinod Hande (Technical Manager) Reviewed & Authorized By							

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NOISELEVEL MONITORING REPORT

TEST CERTIFICATE							
Report No:-			GESEC/PRO/2022-23/10/248				
Client Name and Address: TATA STEEL SPECIAL ECONOMIC ZONE LTD Gopalpur Industrial Park-DTA Chamakhandi, Chhatrapur, Dist-Ganjam Odisha-761020			Date of Sampling		25.10.2022		
			Sample Details		Noise For 24 Hours		
			Sample location		Near Anadrone Office		
Sample Collected By			GESEC				
P.O NO			TSSEZL/2022/30002204232				
Noise Monitoring Result							
Date	Timing	Result dB(A)	Date	Timing	Result dB(A)	Unit	CPCB Standards dB(A)
25.08.2022	06.00	49.8	25.08.2022	18.00	45.8	dB(A)	75/70
25.08.2022	07.00	51.3	25.08.2022	19.00	42.6	dB(A)	
25.08.2022	08.00	53.4	25.08.2022	20.00	41.2	dB(A)	
25.08.2022	09.00	55.6	25.08.2022	21.00	40.5	dB(A)	
25.08.2022	10.00	54.7	25.08.2022	22.00	43.6	dB(A)	
25.08.2022	11.00	52.6	25.08.2022	23.00	39.4	dB(A)	
25.08.2022	12.00	49.5	26.08.2022	24.00	38.2	dB(A)	
25.08.2022	13.00	52.8	26.08.2022	01.00	37.6	dB(A)	
25.08.2022	14.00	54.5	26.08.2022	02.00	35.4	dB(A)	
25.08.2022	15.00	48.6	26.08.2022	03.00	39.6	dB(A)	
25.08.2022	16.00	45.2	26.08.2022	04.00	41.1	dB(A)	
25.08.2022	17.00	43.8	26.08.2022	05.00	46.7	dB(A)	
Day Time Leq		48.9					
Night Time Leq		40.2					
Remark- ➤ All above Noise level results are within Central Pollution Control Board Standards limit. ➤ Day/Night -75/70 dB.(A)							



Hande
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(Technical Manager)

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TATA STEEL FOUNDATION, GOPALPUR
FY'23 Budget V37

					BUDGET			UPTO 15th March'2023		
Vertical	GL internal fund	Cost Description (Programmes)	Delivery Arm	TYPE	Budget A	Budget B	Budget C	Budget A	Budget B	TOTAL
Public Health	5020502	RISHTA	TSF	Ongoing	5.80			3.936		3.936
Public Health	5020003	Healthcare infrastructure	TSF	One-time	20.10			6.304		6.304
Public Health	5020006	Cataract	TSF	One-time	2.50			0.176		0.176
Public Health	5020010	Mobile Medical Units and ambulances	TSF	One-time	2.78			0.400		0.400
Public Health	5020021	Kitchen Garden	TSF	One-time	6.74			3.867		3.867
Public Health	5020024	BCC and Health Promotion (Public Health)	TSF	Ongoing	2.10			1.674		1.674
Public Health	5020025	Support in response to Govt./External request	TSF	Ongoing	35.90					0.000
Public Health	5020026	Public Health Interventions in Proximate areas (Previous	TSF	Ongoing	107.20			3.886		3.886
Public Health		Sub Total			183.13	0.00	0.00	20.243	0.000	20.243
EDUCATION	5050002	Fellowship programme	TSF	Ongoing	16.77			15.671		15.671
EDUCATION	5050005	Support for Schools/Institutions (educational infrastru	TSF	Ongoing	19.07			19.073		19.073
EDUCATION	5050008	Learning Support Program	TSF	Ongoing	12.00			8.658		8.658
EDUCATION		Sub Total			47.84	0.00	0.00	43.402	0.000	43.402
ETHNICITY	5080002	Preserve & Promote Art and Culture	TSF	One-time	1.56			1.034		1.034
ETHNICITY		Sub Total			1.56	0.00	0.00	1.034	0.000	1.034
LIVELIHOODS (AGRICU	5030001	Water Harvesting structures (ponds)	TSF	One-time	60.98			12.238		12.238
LIVELIHOODS (AGRICU	5030002	Agriculture Activities (SRI and dryland farming)	TSF	Ongoing	30.00			22.948		22.948
LIVELIHOODS (AGRICU	5030003	Promote second crops	TSF	Ongoing	25.00			6.046		6.046
LIVELIHOODS (AGRICU	5030004	Livelihood Agri allied, Livo, Diary, Poult	TSF	Ongoing	25.00			10.936		10.936
LIVELIHOODS (AGRICU	5030005	Capacity Building of Farmers Institutions	TSF	One-time	15.08			10.270		10.270
LIVELIHOODS (AGRICU	5030006	Agri resource centres, training and info. centres.	TSF	Ongoing	6.00					0.000
LIVELIHOODS (AGRICU	5030007	Enterprise Development Programmes	TSF	Ongoing	44.46			13.406		13.406
LIVELIHOODS (AGRICU	5030021	Livelihood Infrastructure	TSF	One-time	20.00					0.000
LIVELIHOODS (AGRICULTURE)		Sub Total			226.52	0.00	0.00	75.846	0.000	75.846
LIVELIHOODS (Empow	5060001	Women Empowerment Programmes	TSF	Ongoing	19.01			8.475		8.475
LIVELIHOODS (Empow	5060002	Business Development of SHGs	TSF	Ongoing	7.48	11.11		7.158		7.158
LIVELIHOODS (Empowerment)		Sub Total			26.49	11.11	0.00	15.633	0.000	15.633
LIVELIHOODS (SKILL D	5040001	Sponsorship to Trainees for various vocational courses	TSF	One-time	15.00					0.000
LIVELIHOODS (SKILL D	5040002	Skill Development Programmes (short term courses linke	TSF	One-time	24.20			1.251		1.251
LIVELIHOODS (SKILL D	5040008	Support girls in Nursing training TCS	TSF	Ongoing	0.00					0.000
LIVELIHOODS (SKILL D	5040014	JN Tata Technical Education Center Gopalpur	TSF	Ongoing	300.00					0.000
LIVELIHOODS (SKILL DEVELOPM		Sub Total			339.20	0.00	0.00	1.251	0.000	1.251
SPORTS	5100002	Support to Sportsmen	TSF	One-time	0.10					0.000
SPORTS	5100005	Organising sports tournaments and coaching camps	TSF	One-time	3.58			2.248		2.248
SPORTS	5100007	Running Sports Centres	TSF	Ongoing	8.90					0.000
SPORTS	5100009	Organising outdoor and leadership camps	TSF	One-time	15.00					0.000
SPORTS		Sub Total			27.58	0.00	0.00	2.248	0.000	2.248
ENVIRONMENT	5070001	Plantation	TSF	One-time	2.50			1.984		1.984
ENVIRONMENT	5070003	Renewable Energy (Solar Light)	TSF	One-time	18.00			0.018		0.018
ENVIRONMENT	5070004	Protection of flora and fauna	TSF	One-time	0.00	71.30		1.514	2.421	3.934
ENVIRONMENT		Sub Total			20.50	71.30	0.00	3.516	2.421	5.937
RURAL INFRASTRUCTU	5130001	Infrastructural support for Rural Development	TSF	One-time	44.80			21.757		21.757
RURAL INFRASTRUCTURE & URB		Sub Total			44.80	0.00	0.00	21.757	0.000	21.757
DRINKING WATER	5010003	Installation of piped drinking water supply system	TSF	Ongoing	39.83			19.770		19.770
DRINKING WATER	5010004	Installation and repair of deep bores	TSF	Ongoing	16.07			8.215		8.215
DRINKING WATER	5010005	Installation and repair of hand tube wells	TSF	Ongoing	2.38			1.286		1.286
DRINKING WATER		Sub Total			58.29	0.00	0.00	29.271	0.000	29.271
Volunteerism	5140022	Employee Volunteerism	TSF	Ongoing	1.00			0.068		0.068
Volunteerism		Sub Total			1.00	0.00	0.00	0.068	0.000	0.068
SPECIAL COMMITTME	5020020	Gopalpur hospital (Medica) – Odisha	TSF	One-time	118.65			91.151		91.151
SPECIAL COMMITTMENTS		Sub Total			118.65	0.00	0.00	91.151	0.000	91.151
HR PROJECT COST	Separate li	HR cost (Salary)	TSRDS	Over Head	0.00					0.000
HR PROJECT COST	Separate li	HR cost (Salary)	TCS	Over Head	0.00					0.000
HR PROJECT COST	Separate li	HR cost (Salary)	TSF	Over Head	150.25			120.404		120.404
HR PROJECT COST	Separate li	Administrative expenses	TSRDS	Over Head	0.05					0.000
HR PROJECT COST	Separate li	Administrative expenses	TSF	Over Head	29.85			22.057		22.057
HR PROJECT COST	Separate li	HR Overheads Cost	TSF	Over Head	1.98			0.098		0.098
HR PROJECT COST	Separate li	Capital Items	TSF	Over Head	3.10					0.000
HR PROJECT COST	Separate li	Impact Assesment	TSF	Over Head	0.00					0.000
HR PROJECT COST	5140021	IT expenses	TSF	Over Head	2.00					0.000
HR PROJECT COST	5140204	Safety	TSF	Over Head	3.00			0.159		0.159

HR PROJECT COST		Sub Total			190.23	0.00	0.00	142.717	0.000	142.717
Combat COVID-19 init	5020019.1	Others	TSF	One-time	3.26			3.255		3.255
COMBAR COVID INITIATIVES		Sub Total			3.26	0.00	0.00	3.255	0.000	3.255
		GRAND TOTAL			1289.04	82.41	0.00	451.393	2.421	453.814



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DEPARTMENTAL Half Yearly UPDATES (CSR DIVISION) **MONTHLY STAFF MEETING**

Dept. Head Name : Mr. Rockey Martin	Month / Year: December 2022 to March 2023
Department : TSF	Date : 18/04/2023

The following are the updates of key initiatives undertaken by our department in this month & future plans/initiatives in the upcoming month (additional space/pages may be used as per required):

Key initiatives/activities of this month

Observation of World Aids Day: (1st December 2022)

TSF Gopalpur has organized an awareness program on observation of World AIDS Day on 1.12.2022 at Jagannathpur junction (near FCI godown) Gp ;Narandrapur of Chatrapur block with the theme of this year is “Equalize “.The targeted peoples truck driver’s, labors, public were aware .Red ribbons, leaflets, Condoms were distributed among people by employee of TSF, adolescents, Plc teachers. About 2000 nos of red ribbon, 1200 no of condoms distributed. The Ganjam district is more positive case of HIV patient due to migrated labor this type of program essential to society.



Community Awareness Program on Project Flora Fauna: (2nd December 2022)

The Blackbucks of Bhetnoi area are protected religiously by the local society. The belief that the presence of Blackbuck in the fields brings prosperity to the local villager has contributed greatly to the conservation of this species. TATA STEEL FOUNDATION organized a community Awareness Session to provide an integrated conservation approach of important wildlife species of Ganjam district with special reference to Blackbuck, in this event Forest Range Officer Bhetanai, Forest Range Officer Polosara, Chairman Black buck Protection Committee, Sarpanch Bhetanai, Veterinary Officer, Chairman Maitri Club, Community members Bhetanai, Officials TATA Steel Foundation were present.





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Youth Mobilization Programme : (12 December 2022)

On the Behalf of TATA STEEL Foundation, a community interaction and Youth mobilization meeting was held at Kalipalli Village. The major stakeholder of the meeting was TATA STEEL Foundation officials, VDC Members and Members of Youth Club. In the year of 2009 Sairam Educational Charitable Trust was established for the moto of community development approach. Head TATA STEEL Foundation addressed all VDC members and youth groups for collaboration with TSF with the objective of identifying community need and sustainable development approaches.



Promotion of Folk Art in Ganjam District: (17 Dec-18 Dec 2022)

TATA STEEL FOUNDATION Goaplpur unit supported “Ganjam Loko Kala Manch” for the promotion of folk artists of Ganjam its main moto was the rejuvenate their traditional folk culture and ensure livelihood of the folk artist through the programme. In this festival eminent folk culture researcher Dr. Byamnu Charchi lightning the lamp as the in this inaugural ceremony. MP Berhampur, MLA Berhampur, Officials TATA STEEL Foundation were present there.



Disha Module-3 Training (19th December- 24th December 2022)

Under Gender & Community Enterprise , Disha Module 3 training on social and Economic Security through Government support services_ was accomplished at Gopalpur. Following chapter covered during training - Government schemes accessibility with special reference of Ministry of Women & Child Development, Rural Development and other line Departments, Importance of Gram Sabha with special reference of 73rd amendment act. Introduction to GPDP (Gram Panchayat Development plan), Mission Antodaya, People's plan campaign, SECC, Role play on various sessions of





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GPDP. This module of training will help the rural communities specially women to participate in GPDP exercise of Gram Sabha and be part of People's plan campaign to uplifting their situation through accessibility of Government schemes. 80 SHG members participated these 6 days training in 2 Batches.

Manthan Yatra:

Tata Steel Foundation Gopalpur has organized 1st day Manthan yatra program at PNB training centre Karapalli. We witnessed graceful presence of Head TSF Gopalpur, Head account, manager Rishta, and our village stakeholders. From stakeholders side join sarpanchs of there panchayats, samiti sabhya, community leaders, school teachers, Aww, participated in group discussion and focussed their views on improvement of education with abolish of School dropout and child marriage. The main issue was discussed with youth. The mind without fear and role of youth to supportive for access and quality education. An interaction with selected youth was done to get their understanding, views, suggestions were deeply understood. Total 37 nos of adolescents joined from 8 GPs and 15 stakeholders from Chatrapur and Rangeilunda block.



Promotion of Ni-kshay Mitra

TATA STEEL Foundation Gopalpur has joined the Pradhan Mantri TB Mukta Bharat Abhiyaan in collaboration with District Health Administration, Ganjam. The Programme named Ni-kshay Mitra was launched by Health officials. TATASTEEL Foundation has registered on the NATIONAL TUBERCULOSIS ELIMINATION PROGRAMME portal for identifying cases of TB in various blocks. Under this initiative TATASTEEL Foundation will provide nutritional support through a nutritional kit to identified TB patients in every month. In this programme 660 nutritional kits were distributed to 330 beneficiaries for two months by the dignitaries for two months by the dignitaries covering three blocks Chatrapur, Rangeilunda and Sheragada.





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Livelihood Activities:

In this session Harvesting of Paddy was started, this paddy was cultivated in SRI (System of Rice Intensification) techniques. These techniques help to increase the productivity of crop which ensuring doubling Farmers Income. In Gopalpur unit this year 8570-acre land used for paddy cultivation where 11340 farmers engaged and approx. 25000 metric ton produced this year. This Rabi session 2755 acre land used for vegetable cultivation where 4780 farmers engaged.



Sell Outlet of Srujunika (Stitching and Painting Unit) at Beach Festival Gopalpur: (24th December to 28th December 2022)

Under Community Enterprise Srujukina Stitching unit promoted a selling and Exhibition outlet at Gopalpur Beach Festival. In this exhibition TATA STEEL Foundation is providing the logistic support to Srujunika. In this exhibition promoted local arts and crafts like Sworai Painting, Fibre Sculpture, Canvas painting, Bamboo crafts etc.



Infrastructure:

In NTTF Gopalpur, renovation work has started where following activities are going on as follows, Repairing, Cleaning, replaster, repairing of external wall, repairing of road, waterproofing, repairing of electrification. This renovation work will complete with in FY 2022. Rather than it a renovation work also going on in Bhanjabihar Public health Centre. Over head water tank Construction work also going on in B Parikpada. In those construction side hand over will be done in next month.





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UDAAN (23rd and 24th February 2023)

Udaan is a community-based engagement in Odisha that lays emphasis on co-creating meaningful and sustainable growth opportunities for the youth, women and farmers. Instituted in 2016, Udaan brings together the communities proximate to Tata Steel's Gopalpur operations each year, where their efforts are recognized and the community in general is enlightened on the growth journey that the region has ventured upon.

As part of its Affirmative Action policy, Tata Steel Foundation offers support to the needy and deserving students of SC/ST communities who are pursuing higher education. Under Jyoti Fellowship, financial assistance is offered to meritorious students from economically backward Scheduled Caste and Scheduled Tribe families to enable them to accomplish educational and career aspirations.

In FY, 2022-23, 298 students were awarded with Rs. 1433500 (**Fourteen Lakh Thirty-Three Thousand Five Hundred Only**) through auto renewal process.

About 200 women, SHG members and adolescents' girls from periphery villages will attend workshops on Enterprise Development, Women Rights and Domestic violence.

Entrepreneurs & social activists will facilitate the group on their issues and a roadmap will be developed for the development of women in the area.



During the farmer-scientist interface, the focus was mainly on promoting climate-smart agriculture.



Professors from OUAT (Odisha University of Agriculture and Technology), CHES (Central Horticulture Extension Station), and Directorate of Agriculture, Bhubaneswar, and district heads from different line department of Berhampur will address the farmers on new innovations, practices and schemes. About 12500 farmers practicing SRI, vegetable cultivation, dairy and commercial fish farming from seven blocks and one NAC will be participating in

the agriculture meet. The farmers will be benefitted from the training and interactive sessions with various scientists on the occasion. The training / interaction will cover Climate Resilience Agriculture



Multi-Speciality Health Camp:

Pediatrics, Dental, Gynecologist. Cardiac, departments. Dr. E P Rao, Dr. NC Mahanta, Dr. Ispita Mishra, Dr. Kedarnath Mishra, Dr. & M. Pathak were treated patients & advised how to maintain a healthy & medicine free life style. Also blood sugar measured with free medication & display of audio visual on health & hygiene awareness. Total no of cases registered @ 301. The health camp has been supported by Sankara Eye hospital, Samrjhola. The fallowing types of cases were attended and treated with

distribution of medicine as the Prescription of doctor.

EYE CURE CAMP PODAMPETA

Tata Steel Foundation Gopalpur has organized Eye camp at Podampetta of Ganjam block on 17.3.23

ମାଗଣା ଗୁଳ୍ମୋମା ଓ ପରଳ ଚକ୍ଷୁ ପରୀକ୍ଷା ଶିବିର

[illegible]

ନିଜେ ନାଗରାଣୀ ଓ ଆଦି ୧୫ ଲକ୍ଷ ଲୁଅଣ୍ଡ ପରାଜୟ
 ଉନ୍ମୁଣ୍ଡି ନାଗରାଣୀ ଦେବୀ ଉଦ୍‌ଦୀନଲୁ ଗଲେ । ମୋଦ
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 ୧୨ଟି ଅପ ବରଗଲେ । ॥

ଶକଟ ଚଣ୍ଡ ବିଦ୍ୟାବଲ୍ଲଭ ଷ୍ଟାଏ ଶ୍ରୀ ଗୁଣିନୀ
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 ଉନ୍ନେଷିଣୀ) ଓ ଶ୍ରୀ ଗୁରୁନାଥ ପାଠି ଜିବିତ ବୁ
 ପରିବାରଣା କରିଦେବେ ।

support
Sankara
hospital



cure
with
of
Eye

Samarajhola. This camp was graced by vdc members ,volunters. Total nos of beneficiaries @ 85,& Cataract dectected @ 15,tesed for Glucoma 26, Ratina checkup 9.



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Key Initiatives under Project Flora & Fauna



Formation of
Protection Committee



Development of
Signanges



Installation of Garbage
Bin



Expouser Visit of
Community



Beach Cleaning
Programme



Monitoring Work
during Nesting of Olive
Riddley Turtle



Development of IEC
materials (Calender,
Posters, leaflet)



Partners (Kotak
Mahindra) Visit



Preparation of Wall
Painting for awareness



Awareness in School



Multi specialised Eye
Camp



Training & Capacity
building of Samudra
mitra



Distribution of Seed to
Farmers



Community
Sensitization
Programme



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Community Sensitization Programme:

Venue: Community Hall, New Podampeta, Ganjam (Olive Ridley)

Date: 17th February 2023

About 45 members including local stakeholders, villagers, heads from Podampeta, Gokharkuda, and Purunabandha, PRI members, forest staff, fishermen, and SHG group members were participated. The meeting was conducted by Tata steel Foundation team. The main objective of this program was to aware the importance of the conservation of Olive Ridley and their roles in marine ecosystem. After discussion with all the members of different communities and villagers, we have found out some observations are:

- Primary source of income gets infected for 6 months lean period.
- Dry fishing becomes the alternate source of



income during the turtle nesting season

- Secondary income sources like wage labour.
- Water scarcity and lack of good education facilities
- Conflict between turtle and human



Sensitization program at Glance:

Venue: Cyclone Shelter Centre, Kantiagad (Olive Ridley)

Date: 04/03/2023

The village level protection committee meeting was organised at Cyclone Shelter, Kantiagad on 04th March 2023. The meeting was conducted by Tata Steel Foundation in presence of K. Pallavi Raj, Kotak Mahindra Bank, Mr. Rockey Martin, Unit Head, Gopalpur, Other staff of Tata Steel Foundation, Gopalpur unit, Local Villagers, Stakeholders, PRI members, SHG women, Youth and Forest Staffs, etc. About 150 numbers of local people of different communities and 15 SHG group members were present during the meeting. The main objective of the meeting was to highlight the importance of the conservation of Olive Ridley Sea Turtle and to make the local communities aware of this and the sustainable livelihood development of the local people. After discussion with the fisherman, SHG Women's following aspects came out:





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- Conservation of Olive Ridley with a community conservation approach
- Identification of threats and conflict issues raised due to species
- Sustainable livelihood development, Employment, women empowerment, health, and education were the main focused topic discussed with communities.
- Strengthening of SHGs and drinking water facilities were basic needs of local community members

The initiative was welcomed by the community members of all these areas, and they acknowledged regarding the protection of the species along with the environment in a sustainable manner.

Venue: Ambuabadi, Pakidi, Ganjam (Pea Fowl)

Date: **05/03/2023**

There was total of 70 people including the Odisha CSR Head & unit head (Gopalpur) of the tata steel foundation along with other staffs TSF was present there, kotak Mahindra representative also present on that sensitization programme. Following agenda came out through Focused Group discussion:

- Through the project initiatives advertisement and campaign will be enhance the scope of ecotourism & discussion held on how to cater tourists through SHGs
- Conversations with villagers regarding livelihood generation through youths, as tourist guides, improvement of agriculture



en for developing themselves as “Mayur Mitra”

Venue: Forest range office, Bhetanoi, Ganjam

Date: **05/03/2023**



practices, and importance of seed balls for forest regeneration

- In this sensitization program convergence measure may be taken to improve the socio-economic condition of the community through TATA STEEL Foundation’s programme related to Women Empowerment, Farm & Non-Farm based livelihood activities, Education etc.
- Training programme for the youth and SHG



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In this community awareness Program is basically related to improve agriculture practices explained about the generation of sustainable development & observations are:

- Watershed management, digging of Borewells for irrigation purpose renovation of Ponds & new ponds for domestic and pisciculture. Solar based irrigation system to reduce water scarcity.
- Promotion of farm-based livelihood .

Samudra mitra program at Glance:

Venue: Cyclone Centre , Kantiagad

Date: 13/03/2023

Under the Project Flora and Fauna have provision of Samudra Mitra this concept is one kind of volunteerism and main responsibility is to protect Olive Ridley turtles and their nesting through



collective effort.
Unit head
TSF
Gopal



ur addressed stake holders like Forest Ranger, PRI Leaders, SHG Members and youth for the protection of olive riddle turtle in collective efforts. In this program survey Kit also distributed among Samudra Mitras to motivate themselves to do more effectively the conservation work with the collaboration of Forest and

Coast Guard of that Area.

Multi-Speciality Eye Camp:

Venue: Community Hall, New Podampeta, Ganjam

Date: 17th March 2023

The camp was conducted by TSF It was coordinated by Sankar eye Hospital, There was total 85 villagers who came for an eye check-up. 15 out of 85 villagers, were diagnosed with cataracts. These 15 patients were taken for free eye surgery at Sankar Eye Hospital, Samarjhol, Samarjhol, Samarjhol,





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Hinjilicut, Ganjam, who had only visual problems and were provided free medicine by the Officials.

Venue: Patrapur, Ganjam, Ganjam

Date: 22nd March 2023

The camp was conducted by TATA STEEL Foundation with coordination of Sankar eye Hospital staffs. There was a total of 108 villagers who came for an eye check-up. 15 out of 85 villagers, were diagnosed with cataracts. These 15 patients were taken for free eye surgery at Sankar Eye Hospital, Samarjhola, Hinjilicut, Ganjam, who had only visual problems and were provided free medicine.



Awareness program at School

Venue: upper primary school, palibandha, Ganjam

Date: 20 March 2023

An awareness program was held at School Paliabandha to create awareness among the students



n, headmistress Basatilata Swain, headmaster Bijay Kumar Biswal.

regarding the importance of conservation of turtles

and different species through drawing and debate competition. The winners were awarded by the Chief guest, Dr Anil Kumar Mohapatra (senior scintist) from the zoological survey of India (ZSI), DFO Berhampur Forest Division, Sanjukta Pradhan, Krushna Chandra Pradha

Former



Mayura mitra program at Glance:

Venue: Ambuabdi Ganjam, Ganjam

Date: 25/03/2023

The Mayura Mitra program at Ambuabdi on national peacock day was observed by Tata steel

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foundation on 25th March 2023. The program was coordinated by Active participation of Village Mayura Mitra members. There were total of 40 people including members of Pakhi surkhya samiti. The main observations are

- The program was done by creating awareness about peacocks and how their presence brings prosperity to their habitat.
- How flora and fauna play major roles to balance our ecosystem.
- Their prime concern for the conservation of peafowl by plantation & making source for availability of food and water.

Exposer Visit of the Community:

Under the project Flora and Fauna has planned to conduct Exposer visit for the local youths, SHG members and Farmers of the area where the species found. In this exposer visit mainly focused on the Farm and Non-Farm based livelihood activities developed by TATA STEEL Foundation, Gopalpur. First, they visited Karapalli Integrated Farming Cluster where farmers elaborate how they develop this integrated farming Cluster through Solar based irrigation system. After that as per the plan Team visited Cooperative Milk society of Tata Colony, where they learn how can they develop milk cluster. During the exposure Srujunika Stitching and Art &



Craft unit run by TSF visited also showed to them. As per the scheduled plan they visited green house Rose Cultivation on protected farm practicessides developed by TSF, Gopalpur. In the last they visited the field of Agri entrepreneur. On feedback session also conducted where Exposer team shared their views and plan to implement the same on their area with the main objective of conservation of Flora and Fauna.



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Remarks (if any):

Signature of Dept. Head