



TSJ/EMD/C-10/17/24

29 May 2024

Deputy Director General of Forests (C)

Ministry of Environment, Forest and Climate Change

Integrated Regional Office, 2nd Floor, Headquarter- Jharkhand State Housing Board

Harmu Chowk, Ranchi, Jharkhand – 834002, Ranchi

Subject: Submission of Half Yearly (October'2023 to March'2024) Environment Clearances Compliance Reports (ECCR) for Integrated Municipal Solid Waste Management Facility of Tata Steel Limited at Begunadih, Potka, Jamshedpur, District- East Singhbhum, Jharkhand.

Reference:

1. Environment Clearance of IMSWMF vide MoEF EC Identification no: EC23A037JH170166 dated 13.02.2023

Dear Sir,

This has reference to the captioned subject and cited references. We wish to inform you that we have uploaded the Half Yearly ECCR for the period from October'2023 to March'2024 on MoEF&CC portal <http://environmentclearance.nic.in/>. Confirmation of the same is attached.

We are herewith submitting the softcopy of the same for your ready reference. You are requested to kindly acknowledge the same and place in your records. Thanking you

Yours faithfully,

For Tata Steel Limited

Utsav Kashyap

Head Environment Clearance & Compliance (TSL)

Enclosures as above

Copy to:

1. Zonal Officer, Central Pollution Control Board, Southern Conclave, Block 502, 5th and 6th Floors, 1582 Rajdanga Main Road, Kolkata - 700 107
2. Member Secretary, Jharkhand State Pollution Control Board, T.A. Division Building, HEC Campus, Dhurwa, Ranchi – 834004
3. Regional Officer, Jharkhand State Pollution Control Board, Jamshedpur

TATA STEEL LIMITED

Environment Management Jamshedpur 831 001 India

Ph: 8092087043 (M) e-mail: utsav.kashyap@tatasteel.com

Registered Office: Bombay House, 24 Homi Mody Street, Mumbai 400001

Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH 1907PLC000260 Website www.tatasteel.com

Your (Environment Clearance) application has been Submitted with following details	
Proposal No	IA/JH/INFRA2/410593/2022
Compliance ID	27890737
Compliance Number(For Tracking)	EC/COMPLIANCE/27890737/2024
Reporting Year	2024
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	29-05-2024
IRO Name	ARTATRANA MISHRA
IRO Email	jhk109@ifs.nic.in
State	JHARKHAND
IRO Office Address	Integrated Regional Offices, Ranchi
Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, JHARKHAND with Notification to Project Proponent.	

Compliance Report of Environmental Clearance of Integrated Municipal Solid Waste Management Facility at Village Begunadih, Tehsil Potka, District East Singhbhum, Jharkhand vide MoEF&CC letter no: IA/JH/INFRA2/410593/2022 Dated 13/02/2023

S NO	Compliance Condition	Compliance Status
A.	Specific Condition	
i.	Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as Required under the Air (Prevention and Control of pollution) Act,1981 and Water (Prevention and Control of Pollution) Act,1974	Consent to Establish received from Jharkhand State Pollution Control Board (JSPCB) vide No.: JSPCB/HO/RNC/CTE-15672282/2023/397 dated 30.06.2023
ii.	Air pollution control Viz., gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bag-filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gases; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO ₂ , NO _x and CO from the incinerator stack. The Periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.	This is not applicable because it is a landfill site for inert materials generated from municipal solid waste management and no machinery will be involved which may emit the said emissions.
iii.	No tree Can be felled/transplanted unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concern Authority. Old trees should be retained based on girth and age regulations as may be prescribed by the forest Department. Where the tree needs to be cut/transplanted with prior permission from the concerned local Authority, compensatory plantation in the ration of 1:10 (i.e., planting of 10 trees for every one tree that is cut/non survival of any transplanted tree) shall be done and maintained. While raising compensatory plantation it may be ensured that all the native species felled are replaced by the same native species to the extend possible while the non-native species may be replaced by any native species of choice.	No tree felling required. If necessary, prior permission will be taken from the concerned authority.
iv.	Project Proponent shall develop greenbelt in 5 ha of area as committed.	Greenbelt will be developed as per Condition.
v.	Project Proponent shall implement rain rainwater harvesting from rooftop paved area and landscaping areas as committed.	Proposed, the same will developed during construction period.
vi.	Project Proponent shall use LED Lamps and Solar panel as energy saving conservation in the project area.	Proposed, the same will be implemented as per condition after commissioning of the project
vii.	The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive should not be used for landscaping.	Proposed, the same will develop as per condition after commissioning of the project
viii.	Analysis of Dioxins and Furans shall be done through CSIR-NIIST Thiruvananthapuram or equivalent NABL Accredited laboratory.	This is not applicable because it is a landfill site for inert materials generated from municipal solid waste management and no machinery will be involved which may emit the said emissions.

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S NO	Compliance Condition	Compliance Status
A.	Specific Condition	
ix.	Leachates to be collected and utilized within project after proper treatment. Proponent should submit the details regarding the Leachate collection and treatment system to be installed to concerned Integrated Regional Office of the Ministry. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.	Treated Leachate water will be used for floor cleaning, maintaining Green belt, vehicle washing, industrial operations etc. after commissioning of the project.
x.	Fresh water requirement shall not exceed 50KLD during Operational phase. Extraction of ground water shall be subject to the permission of CGWA.	Fresh water requirement will be ensured within 50KLD after commissioning of the project. GW NOC Received from CGWA: CGWA/NOC/IND/ORIG/2024/19917 Dated:16.02.2024.
xi.	Treated wastewater of 20KLD shall be recycle within the premises as committed.	We will abide by the condition.
xii.	No Fresh water to be used except for potable use.	We will abide by the condition.
xiii.	Six number of Piezometer wells shall be installed in and around the project site to monitor the GW quality in consultation with SPCB or State Pollution Control Committee/CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the regional Office of MoEF & CC.	Piezometer procurement process is in progress along with construction activities. Monitoring proposed as per plan.
xiv.	GW monitoring for Physio-Chemical parameters to be carried out and record maintained by providing piezometric wells along the flow channel (Up and Down)	Ground water quality and water table level analysed. Report attached as Annexure-1 . Piezometer procurement process is in progress. Monitoring proposed as per plan.
xv.	Ambient air quality monitoring shall be carried out in and around the landfill site at up wind and downwind locations.	Base line data available for air analysis. Report attached as Annexure-1 .
xvi.	The depth of the landfill site shall be decided based on the ground water table at the site to avoid contamination of the ground water	Hydro Geological studies done. Depth of landfill site will be designed as per guidelines. Report attached as Annexure-1 .
xvii.	Environmental Monitoring Programme shall be implemented as per EIA report and guidelines prescribed by CPCB for hazardous waste facilities. Periodical ground water/soil monitoring to check the contamination in and around the site shall be carried out.	EIA Report Prepared and same submitted to MoEF&CC. Groundwater and soil monitoring to check the contamination will be done after commissioning of project.
xviii.	The Company shall ensure proper handling of spillages by introducing spill control procedures for various chemicals.	Spillage control measures will be taken at every stage.
xix.	Online real time continuous monitoring facilities shall be provided as per CPCB or State Board Directions.	We will abide by the condition. Online continuous Ambient Air quality monitoring station will be installed with operation of the project.
xx.	Scrubber water, Leachate water or wheel wash shall be treated properly and recycled to achieve zero liquid discharge.	We will abide by the condition.
xxi.	Gas generated in the Landfill should be properly collected, monitored and flared.	As inert materials are being disposed in landfill, gas generation is not expected.

Compliance Report of Environmental Clearance of Integrated Municipal Solid Waste Management Facility at Village Begunadih, Tehsil Potka, District East Singhbhum, Jharkhand vide MoEF&CC letter no: IA/JH/INFRA2/410593/2022 Dated 13/02/2023

S NO	Compliance Condition	Compliance Status
A.	Specific Condition	
xxii.	Pre-medical check up to be carried out on workers at the time of employment and regular medical record to be maintained.	Pre-medical check will be carried out on workers at the time of employment and regular medical records will be maintained.
xxiii.	Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil or surface water.	Draft Emergency plan prepared, as the said facility is under project stage. Final plan will be prepared and submitted when facility comes into operation.
xxiv.	Rainwater runoff from the landfill area shall be collected and treated in the LTP.	We will abide by the condition after commissioning of the project.
xxv.	Adequate covering arrangement in site should be done to prevent the runoff of rainwater in the project premises.	Rainwater run-offs drain network & storage shall be developed to prevent run-off.

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S N	Compliance Condition	Compliance Status
B	Standard Condition	
I.	Statutory compliance	
i.	The project proponent shall obtain forest clearance under the provision of Forest (Conservation) Act 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	Not applicable.
ii.	The project proponent shall obtain clearance from National Board for Wildlife, If applicable.	Not applicable. Not applicable because there is no presence of schedule 1 species as per EIA report. Hence this is not applicable.
iii.	The Project proponent shall prepare a site-specific Conservation plan & Wildlife management plan and approved by the chief wildlife Warden. The recommendations of the approved site-specific conservation Plan /Wildlife management plan shall be implemented in consultation with the state forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-1 species in the study area)	Not applicable because there is no presence of schedule 1 species as per EIA report. Hence this is not applicable.
iv.	The project proponent shall obtain CTE/Operate under the provisions of under the Air Act, 1981 and Water Act, 1974 from the concern SPCB.	CTE obtained via JSPCB/HO/RNC/CTE-15672282/2023/397, dated 30-06-2023
v.	The project proponent shall obtain the necessary permission from the CGWA, in case of drawl of ground water / from the competent authority concern in case of drawn of surface water required for the project	GW NOC Received from CGWA vide letter no.: CGWA/NOC/ IND/ORIG/2024/19917 Dated: 16/02/2024. NOC Copy Attached as Annexure - II.
vi.	A Certificate of Adequacy of available power from agency supplying power to the project along with the load allowed for the project should be obtained.	Demand to JBVNL against application no: NC999565378 dated: 24-07-2023. Power resumed at site. (Demand noted attached as Annexure - III).
vii.	All other statutory clearances such as the approvals for storage of diesel from chief controller of Explosives, Fire department, civil aviation Department shall be Obtained, as applicable by project proponent from the respective competent authorities.	Factory Map approval taken from Department of Labour, Employment & Training Office Of The Dy. Chief Inspector Of Factories, Jamshedpur vide letter no: DCIF-J/2022-104/P dated 19.10.2023.
II	Air Quality Monitoring and Preservation	
i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect standards prescribed in environment (protection) rules 1986 and connected to SPCB AND CPCB online Servers and calibrate this system from time to time according to equipment supplier specification through labs recognised under environment (PROTECTION) act, 1986 or NABL accredited laboratories. (For projects involving incineration) to equipment supplier specification through labs recognised under environment (PROTECTION) act, 1986 or NABL accredited laboratories. (For projects involving incineration)	Not applicable because it is a landfill site for inert materials generated from municipal solid waste management and no machinery/ process stack will be involved which may emit the said emissions.

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B	Standard Condition	
ii	As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder adsorption of partial acidity and VOCs (if any); bag filter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO ₂ , NO _x and CO from the incinerator stack. the periodical monitoring of dioxins and furans in the stack emission shall be carried out.	This is not applicable because it is a landfill site for inert materials generated from municipal solid waste management and no machinery/process stack will be involved which may emit the said emissions.
iii	Analysis of dioxins and furans shall be done through CSIR-NATIONAL institute for interdisciplinary Science and technology (NIIST) Thiruvananthapuram or equivalent NABL Accredited laboratory.	This is not applicable because it is a landfill site for inert materials generated from municipal solid waste management and no machinery/process stack will be involved which may emit the said emissions.
iv	Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator	This is not applicable Because it is a landfill site for inert materials generated from municipal solid waste management and no machinery/process stack will be involved which may emit the said emissions. There is no incinerator.
v	Gas generated in the landfill should be properly collected, monitored and flared.	This is not applicable as only inert materials are being disposed in landfill, so gas generation is not expected.
vi	The project proponent shall install system to carry out ambient air quality monitoring for common /criterion parameters relevant to the main pollutants released (e.g., PM ₁₀ and PM _{2.5} in reference to SO ₂ and NO _x emissions) within and outside the plant area at least at four location (One within and three outside the plant area at the angle of 120 degree each), covering upwind and downward wind.	Ambient air quality monitoring for common /criterion parameters relevant to the main pollutants released will be done as per plan after commissioning of the project.
III.	Water Quality Monitoring and Preservation	
i.	The project proponent shall install continues effluent monitoring system with respect to standard prescribed in environment (protection) rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under environment (protection) act,1986 or NABL accredited laboratories.	Not applicable as there is no effluent treatment plant proposed in this project.
ii	Sufficient number of piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with state pollution control board /CPCB.TREND analysis of ground water quality shall be carried out each season and information shall be submitted to SPCB and the regional office of MoEF&CC	Piezometer procurement is in progress. Monitoring proposed as per plan and trend analysis will be carried out.

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B	Standard Condition	
iii	The depth of the land fill site shall be decided based on the ground water table at the site.	Hydro Geological studies done. Depth of landfill site will be designed as per guidelines.
iv	Rainwater runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.	We will abide by the condition.
v	Total freshwater use shall not exceed the proposed requirement as provided in the project details. prior permission from competent authority shall be obtained for use of fresh water.	As per proposal requirement GW NOC Received from CGWA: CGWA/NOC/IND/ORIG/2024/19917 Dated: 16.02.2024
vi	The company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.	Spillage control measures will be taken at every stage after commissioning of the project.
vii	all leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. toxicity characteristics leaching procedure (TCLP) test to performed on leachates.	We will abide by the condition after commissioning of the project. LTP is proposed at site.
viii	Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.	We will abide by the condition after commissioning of the project.
ix	Sewage treatment plant shall be provided to the wastewater generated from the project. Treated water shall be reuse within the project.	We will abide by the condition after commissioning of the project.
x	A certificate from the component authority for discharging treated effluent/untreated effluent into the public sewer/disposal/drainage systems along with the final disposal point should be obtained.	Zero Effluent Discharge is Proposed.
IV	Waste management	
i	No non-Hazardous waste, as defined under hazardous and other waste (Management and Transboundary Movement) Rules 2016, shall be handled in the premises	We will abide by the condition.
ii	The Solid wastes shall be segregated, managed and disposed as per the norms of SWM Rules,2016.	We will abide by the condition.
iii	Any wastes from C&D activates related thereto shall be managed so as to strictly conform to the C&D waste management rules, 2016	Will Implement the same
iv	A Certificate from the competent authority handling MSW should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the MSW generated from project.	TS-UISL is handling the MSW of command area and we certify that the existing civic capacities of handling and their adequacy to cater to the MSW generated from project.
V	Transportation	
i	Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the authorization under the hazardous and other waste (management and transboundary movement) rules,2016 to prevent unwanted access	Proposed boundary wall, necessary Entry, Exit, internal roads sign boards, illumination, and deployment of required Security.

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S N	Compliance Condition	Compliance Status
B	Standard Condition	
ii	Traffic congestion near the entry and exit point from the roads adjoining the project site shall be avoided. parking should be fully internalized, and no public space should be utilized.	We will abide by the condition
iii	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02kms radius of the project is maintained and improved upon after the implementation of the project .This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02kms radius of the site in different scenarios of the space and time and the traffic management plan shall be duly validate and certified by the state urban development department and the P.W.D/ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments .	Route map proposed and will Implement the same. Will be operated by authorized person only after the implementation of the project
VI	Green Belt	
i	Green belt shall be developed an area as provided in project details, with native tree species in accordance with forest department. the greenbelt shall inter alia cover the periphery of the project site.	Proposed, the same will be developed as per condition
ii	Topsoil shall be separately stored and used in the development of green belt.	Proposed, the same will be developed as per condition
VII	Public Hearing and Human health/safety issues	
i	Emergency Preparation plan based on the Hazard Identification & Risk Assessment HIRA and Disaster management plan shall ne implement.	Emergency Preparation Plan & Standard Working Procedure proposed.
ii	Provision shall be made for the housing of construction labour within the site all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form temporary structures to be removed after the completion of the project.	We will abide by the condition.
iii	Occupational health surveillance of the workers shall be done on regular basis.	We will abide by the condition.
IX	Miscellaneous	
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent website permanently. (For projects involving incineration)	The Notice has been advertised in two local newspapers viz. Dainik Jagran (Hindi) and The Avenue Mail (English) on February 17, 2023, and communication to this effect was also sent to the MoEF&CC. Details attached as Annexure-IV

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S N	Compliance Condition	Compliance Status
B	Standard Condition	
ii	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MOEFCC/SELAA website where it is displayed (for projects involving only landfill without incineration)	The Notice has been advertised in two local newspapers viz. Dainik Jagran (Hindi) and The Avenue Mail (English) on February 17, 2023, and communication to this effect was also sent to the MoEF&CC. Details attached as Annexure-IV
iii	The copies of the environmental clearance shall be submitted by the project proponents to the Head of local bodies, Panchayats and Municipal Bodies in addition to the relevant of the Government who in turn has to display the same for 30 days from the date of receipt.	Submitted and acknowledgment attached as Annexure-V .
iv	The project proponent shall upload the status of compliance of the stipulated environment clearance condition, including results of monitored data on their website and update the same on half-yearly basis.	Half yearly EC Compliance report submitted for FY24 H1 via letter no: TSJ/EMD/C-10/214/23 dated 29 November 2023. The same is being displayed on our website. https://www.tatasteel.com/corporate/our-organisation/environment/environment-compliance-reports/
V	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balance and to bring into focus any infringements/deviation / violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements /deviation / violation of the environmental / forest / wildlife norms / conditions and/or shareholder, s /stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	Tata steel has approved Environmental Policy.
vi	A separate environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up Under the control of senior Executive, who will directly report to the head of the organization.	Already mentioned in EMP/EIA report.
vii	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the six-monthly compliance Report.	EMP studies conducted. Separate budgets for Rs. 5 Lakhs per Year has been provided for environmental Monitoring. EIA/EMP report showing environmental commitment budget is attached as Annexure - VI

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S N	Compliance Condition	Compliance Status
B	Standard Condition	
viii	Self- environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	We will abide by the condition
ix	The project proponent shall submit six - monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest, and climate change at environment clearance portal.	Half yearly EC Compliance report submitted for FY24 H1 via letter no: TSJ/EMD/C-10/214/23 dated 29 November 2023.
x	The project proponent shall submit the environmental statement for each financial year in Form -V to the concerned State Pollution Control Board as prescribed under the environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Facility is still under project stage. After completion of project and grant of CTO, yearly environmental statement will be submitted.
xi	The criteria pollutant levels namely, PM2.5, PM10, SO2, NOx (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 (in case incineration involved).	This is not applicable, as there is no stack proposed.
xii	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	We will abide by the condition
xiii	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Agreed and noted
xiv	The project proponent shall abide by all the commitment and recommendations made in the EIA/EMP report, commitment made during public Hearing and also that during their presentation to the Expert Appraisal committee.	Agreed and noted
xv	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and climate change (MoEF&CC).	We will abide by the condition
xvi	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed and noted
xvii	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed and noted
xviii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Agreed and noted
xix	The Regional office of this Ministry shall monitor compliance of the stipulated condition. The project authorities should extend full corporation to officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Agreed and noted
xx	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & control of pollution) Act, 1974, the Air (Prevention & Control of	Agreed and noted

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S N	Compliance Condition	Compliance Status
B	Standard Condition	
	pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 and the public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India /High Courts and any other Court of Law relating to the subject matter.	
xxi	Any appeal against this EC 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.	Not Required

TEST REPORT

ANNEXURE-I

ULR No.: TC11163240000000042F	Test Report No.	: SRL/R/DW/MAY/24/42
Issued to:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste Management Facility (Sanitary Land Fill).	Sample Receipt Date	: 30/04/2024
At.: Begunadih, Tehsil: Potka,	Analysis Date	: 01/05/2024 – 07/05/2024
District: East Singhbhum, Jharkhand.	Sample Collected by	: Laboratory Personnel
	Sample Quantity	: 1 Litre
	Sample Condition	: Preserved
	Weather Condition	: Clear
	Lab. Sample No.	: DW – 11

Type of Sample	: Ground Water	Sampling Method	: APHA 1060 B
Location of Sample	: Hand Pump (Core Zone)	Date of Sampling	: 30/04/2024

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 rd Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 rd Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 rd Edn. 2160 B
4.	Turbidity, NTU, Max.	94	1	5	APHA 23 rd Edn. 2130 B
5.	Conductivity, μ mhos/cm	328	-	-	APHA 23 rd Edn. 2510 B
6.	pH Value	6.6	6.5 to 8.5	No relaxation	APHA 23 rd Edn. 4500H B
7.	Total Hardness (as CaCO ₃), mg/l	114	200	600	APHA 23 rd Edn. 2340 C
8.	Iron (as Fe), mg/l	0.12	0.3	No relaxation	APHA 23 rd Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	10	250	1000	APHA 23 rd Edn. 4500 Cl ⁻ B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 rd Edn. 4500 Cl ⁻ B
11.	Fluoride (as F) mg/L	0.60	1.0	1.5	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l	196	500	2000	APHA 23 rd Edn. 4500 O C
13.	Calcium (as Ca), mg/l	33	75	200	APHA 23 rd Edn. 3500 Ca B
14.	Magnesium (as Mg), mg/l	8	30	100	APHA 23 rd Edn. 3500 Mg B
15.	Copper (Cu), mg/l	<0.01	0.05	1.5	APHA 23 rd Edn. 3500 Cu B
16.	Manganese (as Mn), mg/l	0.06	0.1	0.3	APHA 23 rd Edn. 3500 Mn B
17.	Sulphate (as SO ₄), mg/l	7	200	400	APHA 23 rd Edn. 4500 SO ₄ ⁻² E
18.	Nitrate (as NO ₃), mg/l	1.6	45	No relaxation	APHA 23 rd Edn. 4500 NO ₃ B
19.	Arsenic (as As), mg/l.	<0.01	0.01	0.05	APHA 23 rd Edn. 3500 As B
20.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 rd Edn. 3500 Pb B
21.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 rd Edn. 3500 Ni B
22.	Zinc (as Zn), mg/l	0.40	5	15	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l	146	200	600	APHA 23 rd Edn. 2320 B

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Sample shall be discarded after 15 days from the date of issue of the test reports.

Niraj

Dr. Niraj Kumar Singh
(Authorized Signatory)

-- End of the Report --

TEST REPORT

ULR No.: TC11163240000000043F	Test Report No.	: SRL/R/DW/MAY/24/43
Issued to:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste Management Facility (Sanitary Land Fill). At.: Begunadih, Tehsil: Potka, District: East Singhbhum, Jharkhand.	Sample Receipt Date	: 30/04/2024
	Analysis Date	: 01/05/2024 – 07/05/2024
	Sample Collected by	: Laboratory Personnel
	Sample Quantity	: 1 Litre
	Sample Condition	: Preserved
	Weather Condition	: Clear
	Lab. Sample No.	: DW – 12

Type of Sample	: Ground Water (Hand Pump)	Sampling Method	: APHA 1060 B
Location of Sample	: Hand Pump (Utkramit Primary School, Upardiha Village,)	Date of Sampling	: 30/04/2024

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 rd Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 rd Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 rd Edn. 2160 B
4.	Turbidity, NTU, Max.	42	1	5	APHA 23 rd Edn. 2130 B
5.	Conductivity, μ mhos/cm	1547	-	-	APHA 23 rd Edn. 2510 B
6.	pH Value	6.4	6.5 to 8.5	No relaxation	APHA 23 rd Edn. 4500H B
7.	Total Hardness (as CaCO ₃), mg/l	590	200	600	APHA 23 rd Edn. 2340 C
8.	Iron (as Fe), mg/l	0.18	0.3	No relaxation	APHA 23 rd Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	190	250	1000	APHA 23 rd Edn. 4500 Cl ⁻ B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 rd Edn. 4500 Cl B
11.	Fluoride (as F) mg/L	0.72	1.0	1.5	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l	984	500	2000	APHA 23 rd Edn. 4500 O C
13.	Calcium (as Ca), mg/l	124	75	200	APHA 23 rd Edn. 3500 Ca B
14.	Magnesium (as Mg), mg/l	68	30	100	APHA 23 rd Edn. 3500 Mg B
15.	Copper (Cu), mg/l	<0.01	0.05	1.5	APHA 23 rd Edn. 3500 Cu B
16.	Manganese (as Mn), mg/l	0.08	0.1	0.3	APHA 23 rd Edn. 3500 Mn B
17.	Sulphate (as SO ₄), mg/l	31	200	400	APHA 23 rd Edn. 4500 SO ₄ ⁻² E
18.	Nitrate (as NO ₃), mg/l	3.5	45	No relaxation	APHA 23 rd Edn. 4500 NO ₃ B
19.	Arsenic (as As), mg/l.	<0.01	0.01	0.05	APHA 23 rd Edn. 3500 As B
20.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 rd Edn. 3500 Pb B
21.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 rd Edn. 3500 Ni B
22.	Zinc (as Zn), mg/l	0.60	5	15	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l	350	200	600	APHA 23 rd Edn. 2320 B

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full, without written approval of the laboratory.
3. Sample shall be discarded after 15 days from the date of issue of the test reports.

Niraj

Dr. Niraj Kumar Singh
(Authorized Signatory)

-- End of the Report --

TEST REPORT

ULR No.: TC11163240000000044F	Test Report No.	: SRL/R/DW/MAY/24/44
Issued to:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste Management Facility (Sanitary Land Fill).	Sample Receipt Date	: 30/04/2024
At.: Begunadih, Tehsil: Potka,	Analysis Date	: 01/05/2024 – 07/05/2024
District: East Singhbhum, Jharkhand.	Sample Collected by	: Laboratory Personnel
	Sample Quantity	: 1 Litre
	Sample Condition	: Preserved
	Weather Condition	: Clear
	Lab. Sample No.	: DW – 13

Type of Sample	: Ground Water (Hand Pump)	Sampling Method	: APHA 1060 B
Location of Sample	: Hand Pump (Utkramit Primary School, Kual Village,)	Date of Sampling	: 30/04/2024

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 rd Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 rd Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 rd Edn. 2160 B
4.	Turbidity, NTU, Max.	<1	1	5	APHA 23 rd Edn. 2130 B
5.	Conductivity, μ mhos/cm	1287	-	-	APHA 23 rd Edn. 2510 B
6.	pH Value	6.7	6.5 to 8.5	No relaxation	APHA 23 rd Edn. 4500H B
7.	Total Hardness (as CaCO ₃), mg/l	440	200	600	APHA 23 rd Edn. 2340 C
8.	Iron (as Fe), mg/l	0.15	0.3	No relaxation	APHA 23 rd Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	120	250	1000	APHA 23 rd Edn. 4500 Cl ⁻ B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 rd Edn. 4500 Cl B
11.	Fluoride (as F) mg/L	0.62	1.0	1.5	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l	782	500	2000	APHA 23 rd Edn. 4500 O C
13.	Calcium (as Ca), mg/l	116	75	200	APHA 23 rd Edn. 3500 Ca B
14.	Magnesium (as Mg), mg/l	37	30	100	APHA 23 rd Edn. 3500 Mg B
15.	Copper (Cu), mg/l	<0.01	0.05	1.5	APHA 23 rd Edn. 3500 Cu B
16.	Manganese (as Mn), mg/l	0.06	0.1	0.3	APHA 23 rd Edn. 3500 Mn B
17.	Sulphate (as SO ₄), mg/l	39	200	400	APHA 23 rd Edn. 4500 SO ₄ ⁻² E
18.	Nitrate (as NO ₃), mg/l	10	45	No relaxation	APHA 23 rd Edn. 4500 NO ₃ B
19.	Arsenic (as As), mg/l.	<0.01	0.01	0.05	APHA 23 rd Edn. 3500 As B
20.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 rd Edn. 3500 Pb B
21.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 rd Edn. 3500 Ni B
22.	Zinc (as Zn), mg/l	0.42	5	15	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l	260	200	600	APHA 23 rd Edn. 2320 B

Note:

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3. Sample shall be discarded after 15 days from the date of issue of the test reports.

Niraj

Dr. Niraj Kumar Singh
(Authorized Signatory)

-- End of the Report --

TEST REPORT

ULR No.: TC11163240000000045F	Test Report No.	: SRL/R/DW/MAY/24/45
Issued to:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste- Management Facility (Sanitary Land Fill).	Sample Receipt Date	: 30/04/2024
At.: Begunadih, Tehsil: Potka,	Analysis Date	: 01/05/2024 – 07/05/2024
District: East Singhbhum, Jharkhand.	Sample Collected by	: Laboratory Personnel
	Sample Quantity	: 1 Litre
	Sample Condition	: Preserved
	Weather Condition	: Clear
	Lab. Sample No.	: DW – 14

Type of Sample	: Ground Water (Hand Pump)	Sampling Method	: APHA 1060 B
Location of Sample	: Hand Pump (Utkramit Primary School, Nishchintpur Village,)	Date of Sampling	: 30/04/2024

TEST RESULTS

Sl. No.	Parameters	Results	Regulatory Standards As per IS: 10500 (2012) (Drinking Water Specification)		Test Method (s)
			Desirable Limits	Permissible Limits	
1.	Colour, Hazen units, Max.	<5	5	15	APHA 23 rd Edn. 2120 B
2.	Odour	Unobjectionable	Agreeable	Agreeable	APHA 23 rd Edn. 2150 B
3.	Taste	Agreeable	Agreeable	Agreeable	APHA 23 rd Edn. 2160 B
4.	Turbidity, NTU, Max.	45	1	5	APHA 23 rd Edn. 2130 B
5.	Conductivity, μ mhos/cm	532	-	-	APHA 23 rd Edn. 2510 B
6.	pH Value	6.3	6.5 to 8.5	No relaxation	APHA 23 rd Edn. 4500H B
7.	Total Hardness (as CaCO ₃), mg/l	114	200	600	APHA 23 rd Edn. 2340 C
8.	Iron (as Fe), mg/l	0.10	0.3	No relaxation	APHA 23 rd Edn. 3500Fe B
9.	Chloride (as Cl), mg/l	48	250	1000	APHA 23 rd Edn. 4500 Cl ⁻ B
10.	Residual Free Chlorine, mg/l	Nil	0.2	1.0	APHA 23 rd Edn. 4500 Cl B
11.	Fluoride (as F) mg/L	0.64	1.0	1.5	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l	316	500	2000	APHA 23 rd Edn. 4500 O C
13.	Calcium (as Ca), mg/l	32	75	200	APHA 23 rd Edn. 3500 Ca B
14.	Magnesium (as Mg), mg/l	8	30	100	APHA 23 rd Edn. 3500 Mg B
15.	Copper (Cu), mg/l	<0.01	0.05	1.5	APHA 23 rd Edn. 3500 Cu B
16.	Manganese (as Mn), mg/l	0.05	0.1	0.3	APHA 23 rd Edn. 3500 Mn B
17.	Sulphate (as SO ₄), mg/l	20	200	400	APHA 23 rd Edn. 4500 SO ₄ ⁻² E
18.	Nitrate (as NO ₃), mg/l	0.6	45	No relaxation	APHA 23 rd Edn. 4500 NO ₃ B
19.	Arsenic (as As), mg/l.	<0.01	0.01	0.05	APHA 23 rd Edn. 3500 As B
20.	Lead (as Pb), mg/l	<0.005	0.01	No relaxation	APHA 23 rd Edn. 3500 Pb B
21.	Nickel (as Ni), mg/l	<0.01	0.02	No relaxation	APHA 23 rd Edn. 3500 Ni B
22.	Zinc (as Zn), mg/l	0.56	5	15	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l	168	200	600	APHA 23 rd Edn. 2320 B

Note:

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Niraj

Dr. Niraj Kumar Singh
(Authorized Signatory)

-- End of the Report --

TEST REPORT

ULR No.: TC1116324000000046F	Test Report No.	: SRL/R/SW/MAY/24/46
Customer's Name & Address:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste Management-Facility (Sanitary Land Fill).	Sample Receipt Date	: 30/04/2024
At.: Begunadih, Tehsil: Potka,	Analysis Date	: 01/05/2024 – 07/05/2024
District: East Singhbhum, Jharkhand.	Lab. Sample No.	: SW – 04

Type of Sample	: Surface Water	Sample Quantity	: 1 Litre
Location of Sample	: Nala Water (Below Bridge), Upardiha Village	Sample Condition	: Properly Sealed
Date of Sampling	: 30/04/2024	Sampling Method	: APHA 1060 B
Weather Condition	: Clear	Sample Collected by	: Laboratory Personnel

TEST RESULTS

Sl. No.	Parameters	Results	Test Method (s)
1.	Colour, Hazen units, Max.	<5	APHA 23 rd Edn. 2120 B
2.	Turbidity, NTU, Max.	6.3	APHA 23 rd Edn. 2130 B
3.	pH Value	8.0	APHA 23 rd Edn. 4500H ⁺ B
4.	Electrical Conductivity, μ mhos/cm	450	APHA 23 rd Edn. 2510 B
5.	Dissolved Oxygen (as O ₂), mg/l	6.1	APHA 23 rd Edn. 4500 O C
6.	BOD, 3 days at 27° C, mg/l	6	IS 3025 (Part 44): 1993
7.	COD (as O ₂), mg/l	61	IS: 3025 (Part 58) 2006
8.	Total Hardness (as CaCO ₃), mg/l, Max.	168	APHA 23 rd Edn. 2340 C
9.	Iron (as Fe), mg/l, Max.	<0.1	APHA 23 rd Edn. 3500Fe B
10.	Chloride (as Cl), mg/l, Max.	12	APHA 23 rd Edn. 4500 Cl ⁻ B
11.	Fluoride (as F) mg/L, Max.	0.76	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l, Max.	206	APHA 23 rd Edn. 2540 C
13.	Total Suspended Solids, mg/l, Max	08	APHA 23 rd Edn. 2540 D
14.	Calcium (as Ca), mg/l, Max.	16	APHA 23 rd Edn. 3500 Ca B
15.	Magnesium (as Mg), mg/L, Max.	31	APHA 23 rd Edn. 3500 Mg B
16.	Sodium (as Na), mg/L, Max.	28	APHA 23 rd Edn. 3500 Na B
17.	Potassium (as K), mg/L, Max.	12	APHA 23 rd Edn. 3500 K B
18.	Copper (Cu), mg/l, Max.	<0.01	APHA 23 rd Edn. 3500 Cu B
19.	Manganese (as Mn), mg/l, Max.	0.04	APHA 23 rd Edn. 3500 Mn B
20.	Sulphate (as SO ₄), mg/l, Max.	17	APHA 23 rd Edn. 4500 SO ₄ ²⁻ E
21.	Nitrate (as NO ₃), mg/l, Max.	8.4	APHA 23 rd Edn. 4500 NO ₃ B
22.	Zinc (as Zn), mg/l, Max.	<0.01	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l, Max.	194	APHA 23 rd Edn. 2320 B

Water Quality Criteria as per Central Pollution Control Board is as follows:

Parameters	Class A	Class B	Class C	Class D	Class E
1. pH	6.5 – 8.5	6.5-8.5	6.5-8.5	6.5 8.5	6.5-8.5
2. Dissolved Oxygen (as O ₂), mg/l	6	5	4	4	-
3. BOD, 5 days at 20° C, mg/l	2	3	3	-	-
4. Electrical Conductivity μ mhos/cm Max	-	-	-	1000	2250

Class A: Drinking water source without conventional treatment but after dis-infection.

Class B: Outdoor bathing (organized).

Class C: Drinking water source after conventional treatment and after dis-infection.

Class D: Fish culture and Wildlife propagation.

Class E: Irrigation, Industrial Cooling, and Controlled Waste Disposal.

Below E: Not meeting A, B, C, D & E Criteria.

Note:

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- Test report shall not be reproduced except in full, without written approval of the laboratory.
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Niraj

(Dr. Niraj Kumar Singh)
Authorized Signatory

-- End of the Report --

TEST REPORT

ULR No.: TC1116324000000047F	Test Report No.	: SRL/R/SW/MAY/24/47
Customer's Name & Address:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste Management-Facility (Sanitary Land Fill).	Sample Receipt Date	: 30/04/2024
At.: Begunadih, Tehsil: Potka,	Analysis Date	: 01/05/2024 – 07/05/2024
District: East Singhbhum, Jharkhand.	Lab. Sample No.	: SW – 05

Type of Sample	: Surface Water	Sample Quantity	: 1 Litre
Location of Sample	: Nala Water (Below Bridge), Kuali Village	Sample Condition	: Properly Sealed
Date of Sampling	: 30/04/2024	Sampling Method	: APHA 1060 B
Weather Condition	: Clear	Sample Collected by	: Laboratory Personnel

TEST RESULTS

Sl. No.	Parameters	Results	Test Method (s)
1.	Colour, Hazen units, Max.	<5	APHA 23 rd Edn. 2120 B
2.	Turbidity, NTU, Max.	13	APHA 23 rd Edn. 2130 B
3.	pH Value	7.4	APHA 23 rd Edn. 4500H ⁺ B
4.	Electrical Conductivity, μ mhos/cm	755	APHA 23 rd Edn. 2510 B
5.	Dissolved Oxygen (as O ₂), mg/l	4.6	APHA 23 rd Edn. 4500 O C
6.	BOD, 3 days at 27° C, mg/l	8	IS 3025 (Part 44): 1993
7.	COD (as O ₂), mg/l	36	IS: 3025 (Part 58) 2006
8.	Total Hardness (as CaCO ₃), mg/l, Max.	270	APHA 23 rd Edn. 2340 C
9.	Iron (as Fe), mg/l, Max.	<0.1	APHA 23 rd Edn. 3500Fe B
10.	Chloride (as Cl), mg/l, Max.	40	APHA 23 rd Edn. 4500 Cl ⁻ B
11.	Fluoride (as F) mg/L, Max.	0.80	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l, Max.	370	APHA 23 rd Edn. 2540 C
13.	Total Suspended Solids, mg/l, Max	12	APHA 23 rd Edn. 2540 D
14.	Calcium (as Ca), mg/l, Max.	60	APHA 23 rd Edn. 3500 Ca B
15.	Magnesium (as Mg), mg/L, Max.	29	APHA 23 rd Edn. 3500 Mg B
16.	Sodium (as Na), mg/L, Max.	24	APHA 23 rd Edn. 3500 Na B
17.	Potassium (as K), mg/L, Max.	11	APHA 23 rd Edn. 3500 K B
18.	Copper (Cu), mg/l, Max.	<0.01	APHA 23 rd Edn. 3500 Cu B
19.	Manganese (as Mn), mg/l, Max.	0.54	APHA 23 rd Edn. 3500 Mn B
20.	Sulphate (as SO ₄), mg/l, Max.	2.4	APHA 23 rd Edn. 4500 SO ₄ ²⁻ E
21.	Nitrate (as NO ₃), mg/l, Max.	1.6	APHA 23 rd Edn. 4500 NO ₃ B
22.	Zinc (as Zn), mg/l, Max.	<0.01	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l, Max.	350	APHA 23 rd Edn. 2320 B

Water Quality Criteria as per Central Pollution Control Board is as follows:

Parameters	Class A	Class B	Class C	Class D	Class E
1. pH	6.5 – 8.5	6.5-8.5	6.5-8.5	6.5 8.5	6.5-8.5
2. Dissolved Oxygen (as O ₂), mg/l	6	5	4	4	-
3. BOD, 5 days at 20° C, mg/l	2	3	3	-	-
4. Electrical Conductivity μ mhos/cm Max	-	-	-	1000	2250

Class A: Drinking water source without conventional treatment but after dis-infection.

Class B: Outdoor bathing (organized).

Class C: Drinking water source after conventional treatment and after dis-infection.

Class D: Fish culture and Wildlife propagation.

Class E: Irrigation, Industrial Cooling, and Controlled Waste Disposal.

Below E: Not meeting A, B, C, D & E Criteria.

Note:

- The results relate only to the items received and tested.
- Test report shall not be reproduced except in full, without written approval of the laboratory.
- Sample shall be discarded after 15 days from the date of issue of the test reports.

Niraj

(Dr. Niraj Kumar Singh)
Authorized Signatory

-- End of the Report --

TEST REPORT

ULR No.: TC1116324000000048F	Test Report No.	: SRL/R/SW/MAY/24/48
Customer's Name & Address:	Report Issue Date	: 10/05/2024
M/s Integrated Municipal Solid Waste Management-Facility (Sanitary Land Fill).	Sample Receipt Date	: 30/04/2024
At.: Begunadih, Tehsil: Potka,	Analysis Date	: 01/05/2024 – 07/05/2024
District: East Singhbhum, Jharkhand.	Lab. Sample No.	: SW – 06

Type of Sample	: Surface Water	Sample Quantity	: 1 Litre
Location of Sample	: Nala Water (Near DVC Boundary), Nishchintpur Village	Sample Condition	: Properly Sealed
Date of Sampling	: 30/04/2024	Sampling Method	: APHA 1060 B
Weather Condition	: Clear	Sample Collected by	: Laboratory Personnel

TEST RESULTS

Sl. No.	Parameters	Results	Test Method (s)
1.	Colour, Hazen units, Max.	<5	APHA 23 rd Edn. 2120 B
2.	Turbidity, NTU, Max.	9.4	APHA 23 rd Edn. 2130 B
3.	pH Value	7.6	APHA 23 rd Edn. 4500H ⁺ B
4.	Electrical Conductivity, μ mhos/cm	662	APHA 23 rd Edn. 2510 B
5.	Dissolved Oxygen (as O ₂), mg/l	4.9	APHA 23 rd Edn. 4500 O C
6.	BOD, 3 days at 27° C, mg/l	8	IS 3025 (Part 44): 1993
7.	COD (as O ₂), mg/l	50	IS: 3025 (Part 58) 2006
8.	Total Hardness (as CaCO ₃), mg/l, Max.	190	APHA 23 rd Edn. 2340 C
9.	Iron (as Fe), mg/l, Max.	<0.1	APHA 23 rd Edn. 3500Fe B
10.	Chloride (as Cl), mg/l, Max.	56	APHA 23 rd Edn. 4500 Cl ⁻ B
11.	Fluoride (as F) mg/L, Max.	0.92	APHA 23 rd Edn. 4500 F D
12.	Dissolved Solids mg/l, Max.	316	APHA 23 rd Edn. 2540 C
13.	Total Suspended Solids, mg/l, Max	06	APHA 23 rd Edn. 2540 D
14.	Calcium (as Ca), mg/l, Max.	18	APHA 23 rd Edn. 3500 Ca B
15.	Magnesium (as Mg), mg/L, Max.	36	APHA 23 rd Edn. 3500 Mg B
16.	Sodium (as Na), mg/L, Max.	24	APHA 23 rd Edn. 3500 Na B
17.	Potassium (as K), mg/L, Max.	10	APHA 23 rd Edn. 3500 K B
18.	Copper (Cu), mg/l, Max.	<0.01	APHA 23 rd Edn. 3500 Cu B
19.	Manganese (as Mn), mg/l, Max.	0.56	APHA 23 rd Edn. 3500 Mn B
20.	Sulphate (as SO ₄), mg/l, Max.	3.7	APHA 23 rd Edn. 4500 SO ₄ ²⁻ E
21.	Nitrate (as NO ₃), mg/l, Max.	2.8	APHA 23 rd Edn. 4500 NO ₃ B
22.	Zinc (as Zn), mg/l, Max.	<0.01	APHA 23 rd Edn. 3500 Zn B
23.	Alkalinity (as CaCO ₃) mg/l, Max.	238	APHA 23 rd Edn. 2320 B

Water Quality Criteria as per Central Pollution Control Board is as follows:

Parameters	Class A	Class B	Class C	Class D	Class E
1. pH	6.5 – 8.5	6.5-8.5	6.5-8.5	6.5 8.5	6.5-8.5
2. Dissolved Oxygen (as O ₂), mg/l	6	5	4	4	-
3. BOD, 5 days at 20° C, mg/l	2	3	3	-	-
4. Electrical Conductivity μ mhos/cm Max	-	-	-	1000	2250

Class A: Drinking water source without conventional treatment but after dis-infection.

Class B: Outdoor bathing (organized).

Class C: Drinking water source after conventional treatment and after dis-infection.

Class D: Fish culture and Wildlife propagation.

Class E: Irrigation, Industrial Cooling, and Controlled Waste Disposal.

Below E: Not meeting A, B, C, D & E Criteria.

Note:

- The results relate only to the items received and tested.
- Test report shall not be reproduced except in full, without written approval of the laboratory.
- Sample shall be discarded after 15 days from the date of issue of the test reports.

Niraj

(Dr. Niraj Kumar Singh)
Authorized Signatory

-- End of the Report --



SCIENTIFIC RESEARCH LABORATORY

Analytical & Environmental Engineering Laboratory
An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
Accredited by Jharkhand State Pollution Control Board
C- 144, Aman Green City, Road No. 04, Pundag, Ranchi- 834 004, Jharkhand
Tele No.: 0651- 4057244, Mobile: 9470130700, E-mail: srlranchilab@gmail.com

TEST REPORT

ULR No.: TC11163240000000040F	Test Report No.	: SRL/R/AAQ/APR/24/40
Issued to:	Report Issue Date	: 10.05.2024
M/s Integrated Municipal Solid Waste Management-Facility, (Sanitary Landfill), At.: Begunadih, Tehsil: Potka, District: East Singhbhum, Jharkhand.	Sample Receipt Date	: 30.04.2024
	Analysis Date	: 01.05.2024 to 07.05.2024
	Weather Condition	: Clear
	Atmospheric Temp. ($^{\circ}$ C)	: 43
	Relative Humidity (%)	: 24
	Wind Speed (Km/hr)	: 7
	Wind Direction (From)	: W

Type of Sample	: Ambient Air
Date of Sampling	: 29.04.2024 to 30.04.2024
Sample Condition	: Refrigerated
Sample Collected by	: SRL Team

TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1. Sampling Location: Core Zone (Near Guard Room)					
I.	Respirable Particulate Matter (PM ₁₀)	$\mu\text{g}/\text{m}^3$	79.00	100	IS: 5182 (Part- 23) 2006
II.	Respirable Particulate Matter (PM _{2.5})	$\mu\text{g}/\text{m}^3$	46.00	60	IS: 5182 (Part- 24) 2006
III.	Sulphur Dioxide (SO ₂)	$\mu\text{g}/\text{m}^3$	06.00	80	IS: 5182 (Part- 2) 2001
IV.	Nitrogen Dioxide (NO ₂)	$\mu\text{g}/\text{m}^3$	18.60	80	IS: 5182 (Part- 6) 2006
2. Sampling Location: Upardiha Village (Government Primary School Campus)					
I.	Respirable Particulate Matter (PM ₁₀)	$\mu\text{g}/\text{m}^3$	71.00	100	IS: 5182 (Part- 23) 2006
II.	Respirable Particulate Matter (PM _{2.5})	$\mu\text{g}/\text{m}^3$	42.00	60	IS: 5182 (Part- 24) 2006
III.	Sulphur Dioxide (SO ₂)	$\mu\text{g}/\text{m}^3$	05.80	80	IS: 5182 (Part- 2) 2001
IV.	Nitrogen Dioxide (NO ₂)	$\mu\text{g}/\text{m}^3$	17.40	80	IS: 5182 (Part- 6) 2006
3. Sampling Location: Kuali Village, (Government Primary School Campus)					
I.	Respirable Particulate Matter (PM ₁₀)	$\mu\text{g}/\text{m}^3$	67.00	100	IS: 5182 (Part- 23) 2006
II.	Respirable Particulate Matter (PM _{2.5})	$\mu\text{g}/\text{m}^3$	39.00	60	IS: 5182 (Part- 24) 2006
III.	Sulphur Dioxide (SO ₂)	$\mu\text{g}/\text{m}^3$	05.60	80	IS: 5182 (Part- 2) 2001
IV.	Nitrogen Dioxide (NO ₂)	$\mu\text{g}/\text{m}^3$	17.20	80	IS: 5182 (Part- 6) 2006
4. Sampling Location: Nishchintpur Village, (Government Primary School Campus)					
I.	Respirable Particulate Matter (PM ₁₀)	$\mu\text{g}/\text{m}^3$	74.00	100	IS: 5182 (Part- 23) 2006
II.	Respirable Particulate Matter (PM _{2.5})	$\mu\text{g}/\text{m}^3$	43.00	60	IS: 5182 (Part- 24) 2006
III.	Sulphur Dioxide (SO ₂)	$\mu\text{g}/\text{m}^3$	06.20	80	IS: 5182 (Part- 2) 2001
IV.	Nitrogen Dioxide (NO ₂)	$\mu\text{g}/\text{m}^3$	18.00	80	IS: 5182 (Part- 6) 2006

*National Ambient Air Quality Standards (NAAQS).

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full without written approval of the laboratory.

(Dr. Niraj Kumar Singh)
Authorized Signatory

-- End of the Report --



SCIENTIFIC RESEARCH LABORATORY

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C- 144, Aman Green City, Road No. 04, Pundag, Ranchi- 834 004, Jharkhand
Tele No.: 0651- 4057244, Mobile: 9470130700, E-mail: srlranchilab@gmail.com

TEST REPORT

ULR No.: TC11163240000000041F	Test Report No.	: SRL/R/N/MAY/24/41
Issued to:	Report Issue Date	: 10.05.2024
M/s Integrated Municipal Solid Waste Management- Facility, (Sanitary Landfill), At.: Begunadih, Tehsil: Potka, District: East Singhbhum, Jharkhand.	Sample Receipt Date	: 30.04.2024
	Analysis Date	: 01.05.2024

Nature and Description of Sample	: Ambient Noise
Weather Condition	: Clear
Atmospheric Temperature ($^{\circ}$ C)	: 43
Sample Collected by	: SRL Team
Any Other Information (if any)	: Nil

AMBIENT NOISE MONITORING DATA

Sl. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	Core Zone (Near Guard Room)	29.04.2024 to 30.04.2024	56.0	40.9
2.	Upardiha Village (Government Primary School Campus)	29.04.2024 to 30.04.2024	56.5	41.7
3.	Kuali Village, (Government Primary School Campus)	29.04.2024 to 30.04.2024	54.1	39.5
4.	Nishchintpur Village, (Government Primary School Campus)	29.03.2024 to 30.03.2024	53.8	38.6

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,
Industrial Area: Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq

OSHA Norms in work place for 8 hr. exposure: 90 dB (A)

(Dr. Niraj Kumar Singh)
Authorized Signatory

-- End of the Report --



SCIENTIFIC RESEARCH LABORATORY

Analytical & Environmental Engineering Laboratory
An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
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C- 144, Aman Green City, Road No. 04, Pundag, Ranchi- 834 004, Jharkhand
Tele No.: 0651- 4057244, Mobile: 9470130700, E-mail: srlranchilab@gmail.com

SOIL TEST REPORT

Issued to:	Test Report No.	: SRL/R/S/MAY/24/49
M/s Integrated Municipal Solid Waste- Management- Facility, (Sanitary Landfill), At.: Begunadih, Tehsil: Potka, District: East Singhbhum, Jharkhand.	Report Issue Date	: 10.05.2024
	Type of Sample	: Soil (Project Site)
	Date of Sampling	: 30.04.2024
	Sample Receipt Date	: 30.04.2024
	Analysis Date	: 01.05.2024 to 07.05.2024
	Sample Collected by	: Lab. Personnel
	Weather Condition	: Clear
	Atmospheric Temp. ($^{\circ}$ C)	: 39

Table: 1

Sample Code	Sample Location	pH	Electrical Conductivity (μ s/cm)
S-1	Project Site (Beside Guard Room)	6.7	94.5

Soil: Water: 1: 2.5

Table: 2

Sample Code	Colour	Texture	Bulk Density (gm/cc)	Water Holding Capacity (%)
S-1	Yellowish	Sandy Loam	1.40	35.10

Table: 3

Results of Organic Carbon/ Organic Matter

Sample Code	Organic Carbon (%)	Rating	Organic Matter (%)
S-1	0.39	Low	0.67

(Walkley & Blank method)

Rating based on: <0.5 Low, 0.5-0.75 Medium and >0.75 High

Table: 4

Available N, P, K and their Rating

Sample Code	Available N (kg/ha)	Rating	Available P (kg/ha)	Rating	Available K (kg/ha)	Rating
S-1	276	Low	09.6	Low	110	Low

Rating based on:

Available Nitrogen < 280- Low; 280-560 Medium; > 560- High

Available Phosphorus < 10 - Low; 10- 25 Medium; > 25- High

Available Potassium < 120- Low; 120-280 Medium; > 280- High

Table: 5

Results of Available micronutrients in mg/kg (Soil: DTPA:: 1 : 2)

Sample Code	Fe	Cu	Zn	Mn
S-1	4.72	0.60	0.86	6.00

for Scientific Research Laboratory,

(Dr. Niraj Kumar Singh)
In-charge, Jharkhand Office.



भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

Annexure-II

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Integrated Municipality Solid Waste Management Facility		
Project Address:	Village: Begunadih Tehsil: Potka		
Village:	Begunadih	Block:	Potka
District:	East Singhbhum	State:	Jharkhand
Pin Code:			
Communication Address:	Central Public Health Office, Sakchi Boulevard Road, Northern Town, Bistupur, , East Singhbhum, Jharkhand - 831001		
Address of CGWB Regional Office :	Central Ground Water Board Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road Dak Banglow, Patna, Bihar - 800011		

1.	NOC No.:	CGWA/NOC/IND/ORIG/2024/19917					2.	Date of Issuance	16/02/2024						
3.	Application No.:	21-4/1433/JH/IND/2024					4.	Category: (GWRE 2023)	Safe						
5.	Project Status:	New Project					6.	NOC Type:	New						
7.	Valid from:	16/02/2024					8.	Valid up to:	15/02/2027						
9.	Ground Water Abstraction Permitted:														
		Fresh Water		Saline Water		Dewatering				Total					
		m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year		
		50.00	18250.00												
10.	Details of ground water abstraction /Dewatering structures														
Total Existing No.:0							Total Proposed No.:1								
		DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu		
Abstraction Structure*		0	0	0	0	0	0	0	0	1	0	0	0		
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps															
11.	Ground Water Abstraction/Restoration Charges paid (Rs.):							54750.00							
12.	Environment Compensation (if applicable) paid (Rs.):							0.00							
13.	Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.					No. of Piezometers		Monitoring Mechanism							
							Manual	DWLR**	DWLR With Telemetry						
**DWLR - Digital Water Level Recorder					1		1	0	0						

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m³/d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.
- 10) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

- 11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCE list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m³/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).
- 31) In the self-compliance report, the PP shall submit details of Drilling Agency/ Agencies, which has/ have constructed BW(s)/ TW(s) along with undertaking to the effect that all necessary measures have been taken as per directions of Hon'ble Supreme Court provided in Annexure-VII of guidelines dated 24.09.2020 in respect of abandoned/ failed BW(s)/ TW(s)/Piezometer(s), if any. The PP is advised to engage registered drilling agency/ agencies. In the event of any mishap/ unfortunate incident due to negligence in taking measures for prevention of accident due to falling in Bore Well, both PP and concerned drilling agency shall jointly be held responsible and penal action as per extant Government rules shall be taken.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

**पानी बचाये – जीवन बचाये
SAVE WATER - SAVE LIFE**

CENTRAL GROUND WATER AUTHORITY

Department of Water Resources, River Development and Ganga Rejuvenation
Ministry of Jal Shakti, Govt. of India

Receipt

(As per the MoJS guidelines dated 24.09.2020 vide SO No. 3289(E) and amendments dated 29.09.2023 vide SO No. 1509(E))
<https://cgwa-noc.gov.in>

Application No.:	21-4/1433/JH/IND/2024	Date of Issuance:	16/02/2024
Name of Firm:	INTEGRATED MUNICIPLE SOLID WASTE MANAGEMENT FACILITY		
AppType Category:	Waste Management		
Application Type:	Industrial		
PAN/GSTIN No. of Firm/Individual:	AAACT2803M /		

S N	Description	Amount (Rs.)
1.	Application Processing Fee	10000.00
2.	Ground Water Abstraction charges	
3.	Ground Water Restoration charges	
4.	Environmental Compensation Charges (ECRGW) (Date From to) Days-	
5.	Penalty for non-Compliance of NOC conditions Condition to be mentioned	
6.	Adjustment Charges	
7.	Rebate	
8.	Charges for correction/modification in the existing issued No Objection Certificate	
S.No.	Description	Rate
(i)	Change in User ID	Rs. 5000
(ii)	Change in firm Name	Rs. 5000
(iii)	Extension of No Objection Certificate	Rs. 5000
(iv)	Issuance of duplicate No Objection Certificate	Rs. 5000
(v)	Issuance of corrigendum to No Objection Certificate	Rs. 5000
(vi)	Any other items/correction etc.	
Rs. Rupees Sixty Four Thousand Seven Hundred Fifty Only		64750.00

This is an system generated invoice, hence, does not require ink signed.

Term and conditions:

- i. All disputes are subject to Delhi Jurisdiction.
- ii. Any complaint in regard to the rates will not be entertained.

Member-Secretary
CGWA, New Delhi

CENTRAL GROUND WATER AUTHORITY



Jharkhand Bijli Vitran Nigam Limited

Annexure-III

Regd. office: Engineering Bulding ,HEC , Dhurwa,Ranchi-834004

Contact no : 18003456570 / 18001238745, Website : www.jbvn.co.in, E-mail : info.jbvn@jseb.co.in

Initial Demand Note

Application Details

Application Date:	Jul 24 2023	Request No.	NC999565378
Applicant Name :	TATA STEEL UISL	Applicant Type:	Organisation
Gender:	MALE		
Connection Type :	Temporary	AEE Area :	Jadugora
Connection Address:	KHATA NO. : 3, 24, 26, 35, ETC KHEGRA NO. : 5, 19, 42, 68 ETC, BEGUNADIH, POTKA, 357, 831002, NIL	Communication Address.	PHS OFFICE, SAKCHI BOULEVARD ROAD, BISTUPUR, NORTHERN TOWN, 357, 831001

Load Details and other information

Supply Voltage:	400V	Supply Phase :	Three
Applied Load :	15KW	Nature of Premises :	Others
Tariff Applied:	COMMERCIAL SERVICES (CS) (NDS-II)	Payment Mode:	

Please indicate whether you want to carry out the works of laying service line and/or dedicated distribution facility for the electricity supply requisitioned : **No**

Please indicate whether you want to install your own CEA approved meter: **No**

Contract Demand

Initial Demand Note : Demand No.:54546596/2023 (Pending)

S.No	Description	Chargable Amount(Rs.)
1	Application Fee	100
2	Meter Test Fee	100
3	Security Amount	88650
4	Service Connection Charge	503
5	Service Material Cost	12549
	Total Demand Amount (Rs.)	101902

Note I: All the services line material and metering equipments required , if provided by nigam will be charged additionally subjected to availability, and if not, the same will be provided by the applicant.

Note II : If actual estimate prepare on the basis of site verification differs from online Demand note than balance amount will be payable by the applicant.

Assistant Electrical Engineer

Jadugora



Deemand No..54546596/2023

JHARKHAND BIJLI VITRAN NIGAM LIMITED

Money Receipt

Division : Ghatshila

Sub-Div : Jadugora

Application No. : NC999565378

Date : 8/16/2023 10:48:54 AM

Customer Name : TATA STEEL UISL

Transaction ID : 102766272/ 9E4617B

SI No.	Particular Name	Reciept No.	Amount
1.	Application Fee	42243270723	100
2.	Meter Test Fee	55595270723	100
3.	Service Connection Charge	83493270723	503
4.	Service Material Cost	11131270723	12549
5.	Security Amount	96235270723	88650
Total			Rs. 101902

For and on behalf of
Jharkhand Bijli Vitran Nigam Limited

दैनिक जागरण

झारखंड, बिहार, पं. बंगाल, दिल्ली, उत्तरप्रदेश, मध्यप्रदेश, हरियाणा, उत्तराखंड, पंजाब, जम्मू कश्मीर और हिमाचल प्रदेश से प्रकाशित

गया। घटना की सूचना मिलते ही कालीमांझर पहुंचा।

सूचना

यह सूचित किया जाता है कि टाटा स्टील लिमिटेड, जमशेदपुर को पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकार नई दिल्ली से 'एकीकृत नगरपालिका ठोस अपशिष्ट प्रबंधन सुविधा' के लिए इसी पहचान संख्या EC23A037JH170166 दिनांक 13-02-2023 के माध्यम से पर्यावरण मंजूरी प्रदान की गई है।

पर्यावरण मंजूरी पत्र की प्रति मंत्रालय की वेबसाइट:

http://164.100.213.216/Esign/Esign/ECL_AUTH_47F101_JA_JH_INFRA2_410593_2022.pdf पर उपलब्ध है। टाटा स्टील लिमिटेड जमशेदपुर

झारखण्ड- 831001

JHARKHAND'S OWN ENGLISH DAILY

THE AVENUE MAIL

JAMSHEDPUR FRIDAY, FEBRUARY 17, 2023 VOL: 30 NO: 235 RS.3/- PAGES- 12 www.avenuemail.in

NOTICE

This is to inform that Tata Steel Limited, Jamshedpur has been accorded Environmental Clearance vide EC Identification No. EC23A037JH170166 dated 13.02.2023 from Ministry of Environment, Forest & Climate Change, Government of India New Delhi for "Integrated Municipal Solid Waste Management Facility".

The copy of environmental clearance letter is available on website of Ministry's website:

https://164.100.213.216/Esign/Esign/ECL_AUTH_47F101_JA_JH_INFRA2_41593_2022.pdf

Tata Steel Limited, Jamshedpur
Jharkhand - 831001

Annexure-V

Name of Recipient	Acknowledgement
EMD/C-10/034/23 February 17, 2023 Deputy Commissioner Office of Deputy Commissioner East Singhbhum	
EMD/C-10/035/23 February 17, 2023 General Manager District Industries Centre East Singhbhum	
EMD/C-10/036/23 February 17, 2023 Special Officer Jamshedpur Notified Area Committee East Singhbhum	
EMD/C-10/037/23 February 17, 2023 Sarpanch Janamdih Gram Panchayat Potka, East Singhbhum	
EMD/C-10/038/23 February 17, 2023 Block Development Officer Zonal Office, Potka, East Singhbhum	
EMD/C-10/039/23 February 17, 2023 Regional Officer, Jharkhand State Pollution Control Board M.B./15, New Housing Colony, Adityapur	

CHAPTER – VI : ENVIRONMENT MONITORING PROGRAMME

6.1 INTRODUCTION

Environmental monitoring is collection of data using a series of repetitive measurements of environmental parameters. Environmental Monitoring post EC are undertaken for effects monitoring and compliance monitoring.

6.1.1 Effect Monitoring

Effect monitoring is the measurement of environmental parameters during construction operation and post closure phase to detect changes in quality of environment which are attributable to the project to provide necessary information to:

- Verify accuracy of EIA predictions
- Determine the effectiveness of mitigation measures

6.1.2 Compliance Monitoring

Compliance monitoring is periodic measurement of environmental parameters to ensure that regulatory requirements and standards are met. Compliance and effect monitoring are undertaken during construction, operation & closure phase.

6.2 ATTRIBUTE & PARAMETERS TO BE MONITORED

Following attributes & parameters are proposed to be included in environment monitoring programme.

1. Ambient Air Quality: No. of AAQ Monitoring Stations 3.
During Construction Phase:
 - PM_{2.5}
 - PM₁₀
 - SO₂
 - NO_x
 During Operations Phase:
 - PM_{2.5}
 - PM₁₀
 - SO₂
 - NO_x
 - CH₄
 - H₂S
2. Ground Water Quality: No. of Groundwater monitoring stations - Around. SFL – 5
No. of Groundwater monitoring stations in Buffer zone -3
As per parameters given in BIS10500.
3. Surface Water Quality: No. of Surface water monitoring 3.
As per parameters prescribed by CPCB.
4. Noise Level

As per standards prescribed by MoEF & CC/ CPCB.

5. Soil Quality

Parameters to be monitored.

Sl. No.	Parameters
1.	Ph
2.	EC
3.	Bulk Density
4.	Available Nitrogen
5.	Available P as PO ₄
6.	Available K
7.	Water Soluble Sulphates as SO ₄
8.	Organic Matter
9.	Organic Carbon
10.	Total Iron
11.	Manganese
12.	Zinc
13.	Boron

6.3 ENVIRONMENTAL MONITORING STATIONS

A. Ambient Air Quality: No. of AAQ monitoring stations is 3.

One monitoring station on upwind direction near human habitation. One station on downwind direction near habitation. One at the Project site.

B. Ground Water Quality: No. of GW Quality monitoring stations is 8.

One station at on the upstream site of the Project and two stations at the downstream site beyond the Project boundary. Five stations near SLF,

C. Surface Water Quality: No. of monitoring stations is 3.

One station in Juriya Nala upstream of Confluence

One station in Dosimani Nadi, upstream of Confluence.

One station in Gudra Nadi, in downstream, after confluence.

D. Noise Level

One station in plant area (near office).

One station at Kuali Village.

One station at Begunadih Village.

6.4 FREQUENCY

1. Ambient Air Quality

Once (24 Hrs. sample) in a fortnight at every AAQ monitoring station for all seasons except monsoon.

2. Ground Water Quality & Surface Water Quality

Once at every monitoring station in all seasons.

3. Noise Level

Once in every season day & night at all identified noise monitoring station.

6.5 AGENCY

The proponent has its own NABL accredited environmental lab. Environmental monitoring would be done through this lab.

6.6 BUDGET

Separate budgets for Rs. 5 Lakhs per Year has been provided for environmental monitoring.

In Chapter - III Shows the location of Environment Quality Monitoring Station in the study area of proposed IMSWMF for lease area of TSL at Jamshedpur (Jharkhand).