



TSJ/EMD/C-10/093/23

Date: 31 May 2023

Additional Principal Chief Conservator of Forests

(Eastern-Central) Regional Office (ECZ)
Ministry of Environment, Forests & Climate Change
2nd Floor, Headquarter-Jharkhand State Housing Board,
Harmu Chowk, Ranchi-834002

Sub.: Submission of Half Yearly (October'2022 to March'2023) 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 letter no. F. No. 10-56/2019-IA-III (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'2022 to March'2023** 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 acknowledgement the same and place in your records.

Thanking you

Yours Faithfully

For Tata Steel Limited

Utsav Kashyap

Head, Environment Clearance & Compliance (TSL)

Encl: 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

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

Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001

Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com



"Pro Active and Responsive facilitation by Interactive, Virtuous and Environmental Singlewindow"

Home Environment Clearance Only CRZ Clearance Forest Clearance Wildlife Reference

Form for

Proposal Details

Proposal No IA/JH/INFRA2/410593/2022

Category INFRA-2

MoEF File No 10-56/2019-IA.III

Name of the Entity /
Corporate Office* Tata Steel Limited, Jamshedpur

Entity's PAN* AAAC2803M

E-KYC (Please click on E-KYC for Correction / Incomplete Registration Details.)

Proposal No: IA/JH/INFRA2/410593/2022 has been Uploaded successfully.

**Total Conditions=81
Complied=18,Being Complied=13, Not Complied=0,
Partially Complied=0, Agreed to Comply=50**

[VIEW](#)

[CLOSE](#)

Please do not



SOLID WASTE MANAGEMENT FACILITY



Compliance status 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	CTE for the project shall be obtained from the SPCB as Required under the Air Act,1981 and Water Act,1974	CTE Application Applied dated 16.03.2023 via Application no: 15672282
ii	Using of Air Pollution control device 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 emissions shall be carried out.	Will be implemented as per requirement
iii	No tree Can be felled/transplanted unless exigencies demand. Where 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 shall be done and maintained.	Not Applicable, if any required will take approval from concern 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. as committed.	Proposed, the same will develop as per condition
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
vii	The landscape planning should include plantation of native species. Water intensive should not be used for landscaping.	Proposed, the same will develop as per condition
viii	Analysis of Dioxins and Furans shall be done through CSIR-NIIST or equivalent NABL Accredited laboratory.	Base line test done. Will continue the same as per proposed condition
ix	Leachates to be collected and utilized within project after proper treatment.	Treated Leachate water will be used for floor cleaning and Maintain Green belt
x	Fresh water requirement shall not exceed 50KLD during Operational phase. Extraction of GW shall be subject to the permission of CGWA.	Application submission under Progress
xi	Treated wastewater of 20KLD shall be recycle within the premises as committed.	Proposed Treated water of LTP will be used for floor cleaning and Maintain Green belt
xii	No Fresh water to be used except for potable use.	We will abide by the condition

Compliance status 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	
xiii	Six number of Piezometer wells shall be installed in and around the project site to monitor the GW quality shall be carried out each season and information shall be submitted to the SPCB and the regional Office of MoEF & CC.	Proposed Monitoring Borewells as per requirement. Will implement the same.
xiv	GW monitoring for Physio-Chemical parameters to be carried out record maintained by providing piezometric wells along the flow channel.	Ground water quality and water table level analysed. Report attached as Annexure-1 .
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	EMP 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.
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 SPCB.	We will abide by the condition
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.	Biogas plant will be established for collection of the gas generated.
xxii	Pre-medical check up to 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 record 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.	Emergency plan will made and implemented
xxiv	Rainwater runoff from the landfill area shall be collected and treated in the LTP.	We will abide by the condition
xxv	Adequate covering arrangement in site should be done to prevent the runoff of rainwater in the project premises.	Rainwater run-off will be collected. Liner pond will pump to LTP Inlet

Compliance status 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
B	Standard Condition	
I.	Statutory compliance	
i.	The project proponent shall obtain forest clearance under the provision of forest Act1980, in case of the diversion of forest land for non-forest purpose involved in the project.	Not required
ii	The project proponent shall obtain clearance from National Board for Wildlife, If applicable.	Not required
iii	The 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.	We will abide by the condition as per requirement.
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 Application Applied dated 16.03.2023 via Application no: 15672282
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 drawl of surface water required for the project	We will abide by the condition as per requirement.
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.	Application submission is in progress with JBVNL
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.	Application yet to submitted
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)	Base line air analysis done. Report attached as Annexure-1 .
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.	We will abide by the condition
iii	Analysis of dioxins and furans shall be done through CSIR-NATIONAL institute for interdisciplinary Science and technology	Base line air analysis done will continue Periodically

Compliance status 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
B	Standard Condition	
	(NIIST)Thiruvananthapuram or equivalent NABL Accredited laboratory.	
iv	Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator	Not required
v	Gas generated in the landfill should be properly collected, monitored and flared.	Biogas plant will be established for collection of the gas generated.
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., PM10 and PM25 in reference to SO2 and NOx emissions) within and outside the plant area at the angle of 120 each), covering upwind and downward wind.	Base line air analysis done will continue Periodically.
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.	We will abide by the condition as per requirement.
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	Monitoring Borewells Proposed as per Requirement
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.	Rainwater runoff will collect Liner Pond will pump to LTP Inlet
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.	Only used 50 KLD fresh water remaining required water used from treated LTP water
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
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
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
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

Compliance status 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
B	Standard Condition	
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	ZLD Proposed
IV	Waste management	
i	No non-Hazardous waste, as defined under hazardous and other waste Rules,2016, shall be handled in the premises	We will abide by the condition
ii	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.	We will abide by the condition
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	We will abide by the 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 Operated Authorized Person only
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 develop as per Condition
ii	Topsoil shall be separately stored and used in the development of green belt.	Proposed the same will develop as per Condition
VII	Public Hearing and Human health/safety issues	

Compliance status 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
B	Standard Condition	
i	Emergency Preparation plan based on the HIRA and Disaster management plan shall ne implement.	HIRA done yet be Approved
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.	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 conditions 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-2 .
ii	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which on 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 in 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-2 .
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-3 .
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.	We will abide by the condition.
V	The company shall have a well laid down environmental policy duly approve 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.	Agreed and noted

Compliance status 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
B	Standard Condition	
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.	Planned as per requirement
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.	We will abide by the condition
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.	Agreed and noted
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).	Not required
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.	EIA Report done for this project
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.	We will abide by the condition

Compliance status 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
B	Standard Condition	
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.	We will abide by the condition
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 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.	We will abide by the condition
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

ANNEXURE-1

AMBIENT AIR QUALITY

Location Code	Location Name	PM10 ($\mu\text{g}/\text{m}^3$)			PM2.5($\mu\text{g}/\text{m}^3$)			SO2 ($\mu\text{g}/\text{m}^3$)			NOX ($\mu\text{g}/\text{m}^3$)		
		Max	Min	98th perc	Max	Min	98th perc	Max	Min	98th perc	Max	Min	98th perc
BA1	Upardiha	52.5	41.8	50.8	26.4	21.1	25.9	19.2	16.7	18.8	18.9	13.2	18.5
CA2	Core Zone	48.5	43.2	47.2	24.2	16.9	23.7	12.1	10.5	11.9	16.1	12.6	15.8
BA3	Sukal Bhalki	45.4	43	53.8	25.1	24.7	24.6	14.8	12.6	14.5	16.1	14.3	15.8
BA4	Kuali	61.0	56.8	44.6	29.4	27.1	28.8	13.5	11.7	13.2	15.8	12.5	15.5
BA5	Begunadih	60.5	53.5	58.1	28.2	18.5	27.6	14.2	12.1	13.9	17.1	12.3	16.8
Range Value		61.0-41.8			29.4-16.9			19.2-10.5			18.9-12.3		
NAAQS STANDARD (Nov 2009)		100			60			80			80		

AMBIENT NOISE LEVEL

S. No.	Monitoring Stations	Project Site	Result (Leq)	
			DAY*	NIGHT*
1.	BN1	Nishchintpur	54	48
2.	CN2	Core Zone	55.6	42.5
3.	BN3	Begunadih	46.5	41.0
4.	BN4	Nishchintpur	49.4	38.6
5.	BN5	Begunadih	57.5	39.2

ANNEXURE-1

GROUND WATER QUALITY

Sl. No.	Characteristics	Unit	Desirable limits (BIS:10500)	Permissible limits	GW1	GW2	GW3	GW4
1	Colour	Hazen	-	25	2.0	1.1	1.3	1.8
2	Odour	UO	UO	No relaxation	UO	UO	UO	UO
3	taste	Agreeable	Agreeable	No relaxation	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	5	10	2.1	1.7	1.4	1.6
5	pH			No relaxation	6.8	7.1	7.4	7.3
6	Total hardness as CaCO ₃	mg/l	300	600	121	210	205	280
7	Iron as Fe	mg/l	0.3	1	0.26	0.30	0.22	0.30
8	Chloride as Cl	mg/l	250	1000	46	58	41	82
9	Residual free chlorine	mg/l	0.2	-	ND	ND	ND	ND
10	Total dissolved solid	mg/l	500	2000	221	301	346	401
11	Calcium as Ca	mg/l	75	200	43	52	56	69
12	Magnesium as Mg	mg/l	30	100	5.3	3.1	4.8	5.1
13	Copper as Cu	mg/l	0.05	1.5	0.001	0.003	0.003	0.006
14	Manganese as Mn	mg/l	0.1	0.3	0.002	0.003	0.002	0.004
15	Sulphate as SO ₄	mg/l	200	400	41.2	36.2	30.1	46.0
16	Nitrate as NO ³⁻ N	mg/l	45	100	3.1	2.7	4.1	5.3
17	Fluoride as F	mg/l	1	1.5	0.21	0.32	0.23	0.37
18	Phenolic Compound as C ₆ H ₅ OH	mg/l	0.001	0.002	ND	ND	ND	ND
19	Mercury as Hg	mg/l	0.001	No relaxation	<0.001	<0.001	<0.001	<0.001
20	Cadmium as Cd	mg/l	0.01	No	<0.001	<0.001	<0.001	<0.001

ANNEXURE-1

SURFACE WATER QUALITY

Sl. No.	Characteristics	Unit	SW1	SW2	SW3	Test Methods
1.	Colour	-	Colorless	Colorless	Colorless	IS3025:PART04:1983
2.	pH	-	7.6	8.2	8.0	IS3025:PART11:1983
3.	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025:PART16:1984
4.	Chloride as Cl	mg/l	7.5	8.0	8.2	IS 3025:PART32:1988
5.	Sulphate as SO ₄	mg/l	2.4	2.5	2.3	IS 3025:PART24:1986
6.	Nitrate as NO ₃ - N	mg/l	0.7	0.19	0.2	IS 3025:PART34:1988
7.	Temperature	DEG.C	31.0	24	27	--
8.	Electrical Conductivity	mS/cm	0.31	0.292	0.22	APHA22nd Edition(2510 B)
9.	Pottasium	mg/l	1.3	1.40	1.20	APHA-22 nd Edition(3500-K-B)
10.	Fluoride as F	mg/l	0.2	0.23	0.2	IS 3025:PART60:2008
11.	Total Dissolved Solids	mg/l	221	190	200	IS 3025:PART16:1984
12.	Calcium as Ca	mg/l	25.0	25.6	25.6	IS 3025(Part 40)
13.	Magnesium as Mg	mg/l	1.68	1.94	1.84	IS 3025(Part 46)
14.	Carbonate Alkanity	mg/l	3.5	< 4.0	< 4.0	IS 3025(Part 23):1986RA 2009
15.	Bicarbonate Alkanity	mg/l	13.8	144	134	IS 3025(Part 23):1986RA 2009
16.	Chemical Oxygen Demand	mg/l	18.6	20.8	20.4	APHA-22 nd Edition(5220B)
17.	Boron	mg/l	<0.3	< 0.1	< 0.1	IS 3025 PART 57
18.	Nitrite as NO ₂	mg/l	0.034	0.034	0.034	IS 3025(Part 34)
19.	Phosphate	mg/l	<0.50	< 0.50	< 0.50	APHA-22 nd Edition(4500-P-D)
20.	Dissolved Oxygen	mg/l	6.1	5.60	5.50	APHA-22 nd Edition (4500-O-C)
21.	Ammonia	mg/l	<0.50	< 0.50	< 0.50	IS 3025 (Part 34)
22.	Biochemical Oxygen Demand	mg/l	2.5	5.0	4.8	APHA 22 nd Edition-2012(5210B)
23.	Sodium	mg/l	7.80	7.80	7.80	APHA-22 nd Edition(3500-Na-B)
24.	Total Coliform	MPN/100ml	180	180	180	APHA 22 nd Edition
25.	Feacal Coliform	MPN/100ml	60	60	60	APHA 22 nd Edition
					Remarks:	
					Any unusual feature observed during determination	Nil

ANNEXURE-1

SOIL QUALITY

Sl. No.	Parameter	Unit	Location	
			Landfill 1 (S1)	Near site for leachate treatment plant (S2)
1.	pH	--	6.61	7.0
2.	EC	µmhos/cm	122	85
3.	Bulk Density	g/cc	0.98	1.11
4.	Available Nitrogen	kg/ha	245	222
5.	Available P as PO ₄	kg/ha	98	75
6.	Available K	kg/ha	245	320
7.	Water Soluble Sulphates as SO ₄	mg/kg	63	22
8.	Organic Matter	%	1.11	0.95
9.	Organic Carbon	%	0.72	0.45
10.	Total Iron	%	0.23	1.23
11.	Manganese	mg/kg	122	162
12.	Zinc	mg/kg	9.8	10.5
13.	Boron	mg/kg	9.8	12.6
14.	Permeability	Cm/Hour	0.25	

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 कालोमांदर 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

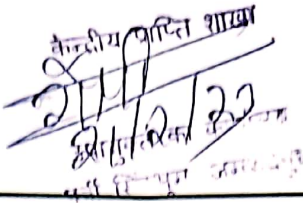


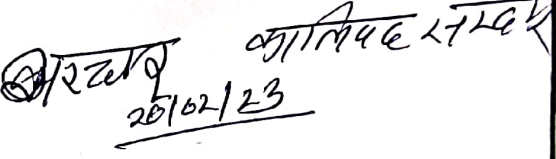
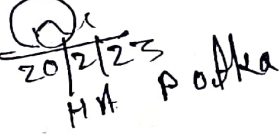
NOTICE

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

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	