

TSJ/EMD/C-38/018/24 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

Sub.: Submission of Half Yearly (October'2023 to March'2024) Environment Clearances Compliance Reports (ECCR) for Cold Rolling Mill Complex (CRMC) of Tata Steel Limited at Bara, Golmuri-cum-Jugsalai, Jamshedpur, District- East Singhbhum, Jharkhand

Reference:

- 1. EC of CRMC for 0.3 MTPA vide MoEF&CC letter no. F.No. J-11011/199/2007-IA II (I) dated: 07.08.2007
- 2. EC of CRMC for 0.8 MTPA vide MoEF&CC letter no. F.No. J-11011/22/2013-IA II (I) dated: 15.09.2015

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

utlay Kashyap

Utsav Kashyap

Head Environment Clearance & Compliance (TSL)

Enclosures as above

Copy to:

- Zonal Officer, Central Pollution Control Board, Southern Conclave, Block 502, 5th and 6th Floors, 1582
 Rajdanga Main Road, Kolkata 700 107
- 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

5/30/24, 11:30 AM Home Page

Your (Environment Clearance) application has been Submitted with following details				
Proposal No	IA/JH/IND/21196/2007			
Compliance ID	27610493			
Compliance Number(For Tracking)	EC/M/COMPLIANCE/27610493/2024			
Reporting Year	2024			
Reporting Period	01 Jun(01 Oct - 31 Mar)			
Submission Date	30-05-2024			
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.

https://parivesh.nic.in/compliance/api/showData

5/30/24, 11:23 AM Home Page

Your (Environment Clearance) application has been Submitted with following details				
Proposal No	IA/JH/IND/3455/2012			
Compliance ID	27603916			
Compliance Number(For Tracking)	EC/M/COMPLIANCE/27603916/2024			
Reporting Year	2024			
Reporting Period	01 Jun(01 Oct - 31 Mar)			
Submission Date	30-05-2024			
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.

ENVIRONMENTAL CLEARANCE COMPLIANCE STATUS REPORT

October 2023 to March 2024

Cold Rolling Mill Complex (CRMC), Jamshedpur

Six Monthly Compliance Status report of Environmental Clearance of Cold Rolling Mill Complex (CRMC) to produce Cold Rolled Coils (2,50,000 TPA) and Hot Rolled Pickled Coils (50,000 TPA)

ENVIRONMENTAL MANAGEMENT DEPARTMENT
TATA STEEL LIMITED
JAMSHEDPUR

SN	Compliance Conditions	Compliance Status				
Spe	cific Conditions:					
i	Fume extraction system shall be provided to extract acid vapors or fumes from pickling line, Pickling bath shall be covered with tight granite covers. Ventilation chamber shall be provided in Cold Rolling Mill (CRM) plant to control LPG emissions.	 The following equipment are provided to control Air Pollution: Fume extraction system including scrubber in pickling line. Bag filter in shot blasting machine. Roof-top ventilation system. This system is used to collect, scrub, clean and vent fumes and vapors from the wash tank, pickling tanks, rinse tank, storage, and re-circulating tanks. Pickling baths are covered with tight granite covers. There is no LPG emission inside plant premises. 				
ii	Total water requirement from M/s JUSCO is about 1712 m³/day as per the present available data. No ground water shall be used. Wastewater treatment plant for treatment of wastewater shall be provided using oil separation, acid neutralization and clarification. The treated effluent shall be used for green belt development. The plant as indicated shall adopt zero discharge concepts in disposing the wastewater. Domestic effluent shall be treated in Sewage Treatment Plant.	No groundwater is used. Wastewater treatment plant for the treatment of oily and acidic waste have been installed and are in operation The excess treated effluent is being stored at the pond inside Bara Complex. The treated water is being used for plantation/dust suppression and other low end uses The plant is ZED unit. In last FY- service water and drinking water line overgrounding activity was carried out which resulted in reduction of specific water consumption. Domestic wastewater generated inside plant is being treated in STP having capacity of 25 m3/day.				
iii	Iron oxide from Acid Regeneration Plant (ARP) shall be sold to authorized vendors for further use. Non-hazardous solid waste from neutralization process in CRM shall also be properly disposed of. Oily sludge shall be sold to authorized re-cyclers / reprocessors for proper disposal through incineration.	 Proper handling, storage, utilization, and disposal of all the solid waste generated are being ensured. Iron oxide is recycled by paint industry. Oily scum and sludge are disposed by authorized agency (Adityapur waste management private limited). Solid waste generated at CRM Bara is being 100% utilized through internal and external applications. 				
iv	Green belt shall be developed in 2.5 ha (33%) out of the total of 7.4 ha within and around the plant premises as per the CPCB guidelines in consultation with DFO.	 Green belt at CRM Bara complex has been developed as per CPCB guidelines. Approx. 3.5 Ha area in and around plant is under plantation which is more than 33% of the plant area. We have planted 13235 no. of samplings in the above area till date. We have developed approx. 5m wide area of plantation around the plant as per CPCB guidelines. Density of plantation > 3000 plants/Ha which is more than CPCB guidelines. 				

SN	Compliance Conditions	Compliance Status	
Spe	cific Conditions:		
V	Permission from the State Government shall be obtained regarding impact of the proposed project on the Dalma Reserve Forest.	It has been stated that the project has necessary permission from the S Department and approval received vio 1204 dated 17-04-2008 & letter no 26, 09-2014.	tate Forest le letter no.
vi	As mentioned in EIA / EMP, 10.20 Crores and 0.21 Crores earmarked	For environment protection, 29.2 Cr rup as capital cost. Details are as below:	pees spent
	towards the capital cost and recurring cost per annum	Details	Capital Cost
	respectively for Environmental & Pollution Control Measures shall be judicially utilized to implement the conditions stipulated by MoEF as well as the State Government.	Pollution control measures (WWTP, ARP, fume extraction systems, etc.	12
		Provision of online environment monitoring equipment and display	2.26
	The funds shall not be diverted for	Rejuvenation of water bodies	6.94
	any other purpose.	ARP environmental upgradation	7.49
		PL rinse scrubber	0.510
		Total capital cost (Cr.)	29.20
		Recurring cost for upkeep the pollu facilities till FY24 is 96.2 crores.	tion control

SN	Compliance Conditions	Compliance Status			
Gene	eral Conditions:				
i.	The project authorities shall strictly adhere to the stipulations made by Jharkhand State Pollution Control Board (Jharkhand SPCB) and the State Government.	We are abiding by all the compliance conditions made by JSPCB and State Government of Jharkhand.			
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of MoEF.	No further expansion or modifications beyond the existing capacity of 0.8 MTPA in the plant will be carried out without prior approval from MoEF&CC.			
iii.	The gaseous emissions from various process units shall conform to the load / mass-based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The state board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	Standards issued by the Ministry vide G.S.R. 414(E) dated 30 th May 2008 is not applicable for CRM Complex, Bara. Interlocking facilities has been provided with pollution control equipment at acid regeneration plant, pickling line, reversing mill and Shot Blasting machine to stop the process.			
iv.	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _X are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission should be regularly submitted to this ministry including its Regional Office at Bhubaneswar, SPCB and CPCB once in six months.	Ambient air quality is being monitored for the following four locations in the plant premises. 1. Near Mill dispatch shutter 2. Near Pickling dispatch shutter 3. Near Roll Shop shutter 4. Near HR Receiving Shutter All parameters as per NAAQS, 2009 standards are being monitored and monitoring reports are being submitted to JSPCB on monthly basis and CPCB and MoEF&CC on six monthly basic. Monitoring reports for all relevant parameters from October 2023 to March 2024 are attached in Annexure-1.			

SN	Compliance Conditions	Compliance Status
Gene	eral Conditions:	
V	In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measures like water sprinkling shall be carried out and fugitive emissions shall be controlled, regularly monitored and records maintained.	 The following equipment are provided to control Air Pollution: Fume extraction system including scrubber in pickling line. Bag filter in shot blasting machine. Roof-top ventilation system. Water sprinkling and mechanized sweeping machine. Hot Rolled Coils from Main Steel Works are used as raw material in the manufacturing process. As Ore and Minerals are not being handled inside plant premises, there is no generation of secondary fugitive dust emission. However, fugitive dust emission monitoring is being carried out on regular basis, records are maintained and submitted to JSPCB and MoEF&CC.
vi.	Secondary fugitive emissions shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.	Hot Rolled Coils from Tata Steel Jamshedpur and Kalinganagar are used as raw material in the manufacturing process. As Ore and Minerals are not being handled inside plant premises, there is no generation of secondary fugitive dust emission. Therefore, Standards issued by the Ministry vide G.S.R. 414(E) dated 30th May 2008 are not applicable for CRM Complex, Bara.
vii.	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Effluent treatment plant for the treatment of oily and acidic waste have been installed and this is in operation. The excess treated effluent is being stored at the pond inside Bara Complex. The treated water is being used for plantation/dust suppression and other low end uses. All applicable effluent parameters are being monitored and found within prescribed standards. Monitoring reports are being submitted to JSPCB on monthly basis and CPCB and MoEF&CC on six monthly basis.
viii.	The Company shall develop surface as well as ground water harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	We have rejuvenated an abandoned ash pond inside CRM Bara Complex. The area comprises of two large and three small ponds and serves the purpose of rainwater harvesting. The pond capacity is 11,500 m3 in an area of 1.6 Acres. Green Belt has been developed around the pond in an area of 0.4 acres with native species in the surrounding. Photograph attached Annexure-2 .
ix.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on	High noise generating equipment has been provided with acoustic enclosures and silencer. However, closed cabins are provided for workers wherever required and people are encouraged to use ear plugs or earmuffs. Monitoring reports for noise from Oct 2023 to

SN	Compliance Conditions	Compliance Status				
Gene	eral Conditions:					
	all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	March 2024 are attached in Annexure-1 .				
Х	Recommendations made in the Corporate Responsibility for Environment Conservation (CREP) issued for the steel plant shall be implemented.	No specific recommendations are there under CREP for Cold rolling mills.				
xi.	Occupational Health Surveillance of the workers shall be done on the regular basis and records maintained as per the Factories Act.	Regular health surveillance of all the workers is being conducted half yearly and annually.				
xii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report.	Environment protection measures are being implemented according to measures and safeguard recommended in the EIA/ EMP report.				
xiii.	The Company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking	Community development programs in surrounding areas are being implemented. Year wise expenditure for implementation of enterprise social commitment for in and around Jamshedpur are given below (Rupees in crores):				
	water supply and health care etc.	Interventions FY18 FY19 FY20 FY21 FY22 FY23 FY24				
		Health 2.3 66.8 1.5 0.5 0.6 2.2 2.2				
		Education 0.9 1.5 1.8 1.3 3.0 5.0 1.77				
		Livelihood- Skill 1.6 1.6 1.5 1.2 3.9 1.14 Development				
		Sports 4.4 6.7 4.7 13.3 12.3 13.2 9.16				
		Rural 2.1 - 0.0 1.4 3.1 5.3 0.02				
		Environment 2.1 2.0 2.7 2.8 4.0 4.3 4.00				
		Ethnicity 2.7 4.5 5.3 1.7 4.8 13.3 2.23				
xiv.	The Regional Office at Bhubaneswar / CPCB / SPCB will monitor the stipulated conditions. A six-monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	The six-monthly compliance reports of all existing environment clearances granted by Ministry are being submitted to JSPCB's regional office, Ministry's Regional office, Zonal office CPCB Kolkata and JSPCB Ranchi regularly and being submitted online through the respective website. FY24 H1 compliance report submitted via TSJ/EMD/C-38/213/23 dated 28 Nov 2023. The six-monthly compliance reports along the monitored data is also uploaded in the website https://www.tatasteel.com/corporate/our-organisation/environment/environment-				

SN	Compliance Conditions	Compliance Status
Gene	eral Conditions:	
		compliance-reports/
xv.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB / Committee and may also be seen at website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office.	Environment clearance notice had been advertised in two local newspapers <i>viz.</i> Chamakta Aina (Hindi) and Avenue Mail (English) on August 11, 2007 and communication to this effect was also sent to MoEF&CC vide our letter no. EMD/C38/2119/07 dated August 18, 2007
xvi.	Project authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Financial closure and final approval of the project by Board of Tata Steel was done in March 2006.

ENVIRONMENTAL CLEARANCE COMPLIANCE STATUS REPORT

October 2023 to March 2024

Cold Rolling Mill Complex (CRMC), Jamshedpur

Six Monthly Compliance Status report of Environmental Clearance of Cold Rolling Mill Complex (CRMC) Capacity Expansion (0.3 MTPA to 0.8 MTPA) (Ph-II)

ENVIRONMENTAL MANAGEMENT DEPARTMENT
TATA STEEL LIMITED
JAMSHEDPUR

S.No	Compliance Conditions	Compliance Status			
Speci	fic Conditions:				
i	The PP shall prepare a WL Conservation Plan in and around the project site drawn up in consultation with the PCCF (WL), Government of Jharkhand. Separate Funds shall be earmarked for the various activities identified and details of the expenditure made thereon shall be submitted as part of the Compliance Report to RO, Ranchi.	Wildlife Conservation Plan (WLCP) for Tata Steel works and CRM Complex Bara has been prepared in consultation with Principal Chief Conservator of Forests – Wildlife (PCCF-WL) GoJ which was approved by him on 13 November 2017. Further, Payment of levies as per w.r.t. approved Site Specific WLCP has been deposited into DFO Jamshedpur account vide challan no. 108 dated: 20.02.2023 attached as Annexure-3 .			
ii	On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc., shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology.	Online ambient air quality monitoring station has been provided inside CRM Complex Bara and Continuous stack monitoring facility has been provided in Boiler stack. The following equipment are provided to keep the emission levels below 50 mg/Nm³: 1. Fume extraction system including scrubber in pickling line. 2. Bag filter in shot blasting machine. 3. Roof-top ventilation system. 4. Water sprinkling and mechanized sweeping machine.			
iii	In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.	 The following equipment are provided to control Air Pollution: Fume extraction system including scrubber in pickling line. Bag filter in shot blasting machine. Roof-top ventilation system. Water sprinkling and mechanized sweeping machine. Hot Rolled Coils from Main Steel Works are used as raw material in the manufacturing process. As Ore and Minerals are not being handled inside plant premises, there is no generation of secondary fugitive dust emission. 			
iv	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30 th May, 2008 and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed.	414(E) dated 30 May 2008 are not applicable for CRM Complex, Bara. It is environmental standard for Sponge iron plant.			
v	The water consumption shall not exceed as per the standard prescribed for the sponge iron plants and steel plants.	regularly & the same is within prescribed limfor Steel Plants and as mentioned in EC.			
		Requireme UoM Standar FY'2 FY'23 FY24 Steel Plant M³/ 5 0.78 0.77 0.47			

S.No	Compliance Conditions	Compliance Status				
Speci	fic Conditions:					
vi	Efforts shall further be made to use maximum water from the rainwater harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air-cooled condensers shall be explored and closed-circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly.	 2 nos. of rainwater harvesting structures have been constructed having total capacity of 25 m³ to capture rainwater from rooftop and surface catchment area. The harvested rainwater is being used for low end applications. Closed circuit cooling system is deployed to reduce water consumption. We have rejuvenated an abandoned ash pond inside CRM Bara Complex. The area comprises of two large and three small ponds and serves the purpose of rainwater harvesting. The pond capacity is 11,500 m³ in an area of 1.6 Acres. In last FY- service water and drinking water line overgrounding activity was carried out which resulted in reduction of specific water consumption. 				
vii	All the effluents shall be treated and used for dust suppression and green belt development. No effluent shall be discharged, and 'zero' discharge shall be adopted. Domestic wastewater will be treated in the Sewage Treatment Plant.	Effluent treatment plant for the treatment of oily and acidic waste have been installed and are in operation. The excess treated effluent is being stored at the pond inside Bara Complex. The treated water is being used for plantation/dust suppression and other low end uses. Domestic wastewater generated inside plant is being treated in STP having capacity of 25 m³/day.				
viii	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured, and treated wastewater shall be meet the norms prescribed by the State Pollution Control Board or described under the E (P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB.	Effluent treatment plants for the treatment of oily and acidic waste have been installed and are in operation. The excess treated effluent is being stored at the pond inside Bara Complex. The treated water is being used for plantation/dust suppression and other low end uses. No groundwater is used. Ground water monitoring is conducted monthly and monitoring reports are being submitted regularly. Ground water and effluent monitoring report for Apr 2023 to March 2024are attached in Annexure-1 .				
ix	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB.	Proper handling, storage, utilization, and disposal of all the solid waste generated is being ensured. Iron oxide is sold to paint industry and other recyclers; Oily scum and sludge is sold to authorized recyclers. Details of solid waste and manifest of hazardous waste is being regularly submitted to statutory authorities. Annual Return of Hazardous waste submitted for FY23 via TSJ/EMD/C-26/117/2023 dated 28 June 2023.				
х	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	Solid waste generated at CRM Bara is being 100% utilized and sustained through internal and external applications.				

S.No	Compliance Conditions	Compliance Status							
Speci	fic Conditions:								
xi	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement, and brick manufactures for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Ranchi.	This condition is not applicable as per of manufacturing process does not involve C burning and Ash generation.							
xii	Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB within 3 months of issue of environment clearance letter.	Onsite e Manageme approved Jharkhand 10215/201 attached as submitted	by C v 6-46 s Anr	lan l Chief ide 7 d lexu 1	nas l Insp lett ated :e-4.	ector ter 14 The r	of no. Mar eport	ared Facto 7/ ch 2 has	ries; Plan 2018
xiii	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	Solid waste 100% utiliz and externa	zed a	nd su	ıstair	ed th			
xiv	As proposed, green belt shall be developed in 33% of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.	Green belt developed a • Approx. 3 under plathe plant • We have the above • We have plantation guideline • Density which is	as pe 3.5 H antati area plante area devel n are s. of p	r CPC a are ion w . ced 13 a till coped ound lanta	CB gua in a chich 3235 date. approthe	nidelinand a is mo on	nes. aroun ore the of san wie as p	d pla an 33 apling de arc ber C	nt is 3% of gs in ea of PCB
xv	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants shall be implemented.	No specific CREP for C					ire th	ere u	nder
xvi	At least 5% of the total cost of the expansion project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Ranchi.	Year wise enterprise around Jaccrores): Interventions Health Drinking Water Education Livelihood- Skill Development Sports Rural Infrastructure Environment Ethnicity Total	soci	al co	ommi	itmen	t for	in	and

S.No	Compliance Conditions	Compliance Status
Speci	fic Conditions:	
xvii	All the commitments made to the public during the public Hearing / Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Ranchi.	Public hearing commitment compliance implementation status is attached as Annexure-5 .
xviii	Provision shall be made for the housing of construction labour within the site with 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 of temporary structures to be removed after the completion of the project.	The construction work has been completed. All the necessary infrastructure and facilities such as food, medical health care, toilets, safe drinking water, etc. had been provided to construction labour during the project work.

S.No	Compliance Conditions	Compliance Status
Gener	ral Conditions:	
i	The project authorities must strictly adhere to the stipulations made by the Jharkhand Pollution Control Board and the State Government.	We are abiding by all the compliance conditions made by JSPCB and State Government of Jharkhand.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the MoEF&CC.	No further expansion or modifications beyond the existing capacity of 0.8 MTPA in the plant will be carried out without prior approval from MoEF&CC.
iii	At least four ambient air quality monitoring stations should be established in the downward directions well as where maximum ground level concentration of PM ₁₀ , PM _{2.5} , SO ₂ and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Ranchi and the SPCB/CPCB once in six months.	Ambient air quality is being monitored for the following four locations in the plant premises. 1. Near Mill dispatch shutter 2. Near Pickling dispatch shutter 3. Near Roll Shop shutter 4. Near HR Receiving Shutter All parameters as per NAAQS, 2009 standards are being monitored and monitoring reports are being submitted to JSPCB on monthly basis and CPCB and MoEF&CC on sixmonthly basis. Monitoring reports for all relevant parameters from Oct'2023 to March'2024 are attached in Annexure-1 .
iv	Industrial Wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	Effluent treatment plants for the treatment of oily and acidic waste have been installed and are in operation. The excess treated effluent is being stored at the pond inside Bara Complex. The treated water is being used for dust suppression and other low end uses. All applicable effluent parameters are being monitored and found within prescribed standards. Monitoring reports are being submitted to JSPCB on monthly basis and CPCB and MoEF&CC on six -monthly basis.

S.No	Compliance Conditions		Co	mplia	ance	Stat	us		
Gener	al Conditions:	•							
v	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night-time).	High noise generating equipment has been provided with acoustic enclosures and silencer. However, closed cabins are provided for workers wherever required and people are encouraged to use ear plugs or earmuffs. Monitoring reports for noise from Oct'2023 to March'2024 are attached in Annexure-1 .					and vided e are		
vi	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Regular he is being co Occupation conducted	nduc nal h	ted h iealth	alf ye	early a	and a	ınnua	ally.
vii	The company shall develop rainwater harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	We have rejuvenated an abandoned ash pond inside CRM Bara Complex. The area comprises of two large and three small ponds and serves the purpose of rainwater harvesting. The pond capacity is 11,500 m³ in an area of 1.6 Acres. Green Belt has been developed around the pond in an area of 0.4 acres with native species in the surrounding. Photograph attached as Annexure-2					area onds water m³ in been of 0.4		
viii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	Environme implement safeguard report. Consurrounding Year wise enterprise around Jacrores):	ed a recommunate recommunite r	nity of eas and all colors	ding nded levelore bei re for ommi	to in to pmending in imperior	measine Ent properties of the Enterent propertie	ures CIA/ ograr nente ntation	and EMP ms in d. on of and
		Interventions	FY18	FY19	FY20	FY21	FY22	FY23	FY24
		Health Drinking	2.3	66.8	1.5	0.5	0.6	2.2	2.2
		Water Education	0.0	0.1	0.1	0.0	3.0	0.1 5.0	1.77
		Livelihood- Skill Development	1.6	1.6	1.6	1.5	1.2	3.9	1.14
		Sports	4.4	6.7	4.7	13.3	12.3	13.2	9.16
		Rural Infrastructure	2.1	-	0.0	1.4	3.1	5.3	0.02
		Environment Ethnicity	2.1	2.0 4.5	2.7 5.3	2.8 1.7	4.0 4.8	4.3 13.3	4.00 2.23
		Total	16.1	83.1	17.7	22.4	29.02	47.2	20.62

S.No	Compliance Conditions	Compliance Status					
Gener	ral Conditions:						
ix	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control	For environment protection, 29.2 (spent as capital cost. Details are a					
	measures to implement the conditions stipulated by the MoEF&CC as well as the	Details	Capital Cost				
	State Government. An implementation schedule for implementing all the conditions stipulated herein shall be	for implementing all the as stipulated herein shall be (WWTP, ARP, fume extraction systems, etc.					
	submitted to the Regional Office of the Ministry at Ranchi. The funds so provided shall not be diverted for any other purpose.	Provision of online environment monitoring equipment and display	2.26				
		Rejuvenation of water bodies	6.94				
		ARP environmental upgradation	7.49				
		PL rinse scrubber	0.510				
		Recurring cost for upkeep the control facilities till FY24 is 96.2	-				
х	A copy of clearance letter shall be sent by the proponent to concerned Panchnyat, Zila Parishad /Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company the proponent.	District Commissioner, Block Development, Officer and Jamshedpur Notified Area Committee vide our letter no. EMD/C 38/135,137,138/15 dated 16 September 2015, attached as Annexure-6					
xi	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC at Ranchi. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM ₁₀ , SO ₂ , NOx (ambient levels as well as stack emission) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	existing environment clearances granted by Ministry are being submitted to JSPCB's regional office, Ministry's Regional office Zonal office CPCB Kolkata and JSPCB Ranch regularly and being submitted online through the respective website. The six-monthly compliance reports along the monitored data is also uploaded in the website https://www.tatasteel.com/corporate/our-organisation/environment/environment-compliance-reports/ Monitoring data is being displayed near the main gate of the company in the public					
xii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by email) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of the Ministry at Ranchi / CPCB shall monitor the stipulated conditions.	environment clearances granted by Ministral along with environment monitoring report are being submitted to JSPCB's regional office, Ministry's Regional office, Zonal office CPCB Kolkata and JSPCB Ranchi through email also the same is being uploaded of MoEF&CC website.					

S.No	Compliance Conditions	Compliance Status
Gener	al Conditions:	
xiii	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional office of the MoEFCC at Ranchi by e-mail.	 The environmental statement for each financial year in Form-V is regularly being submitted to the Jharkhand State Pollution Control Board. Environment Statement for FY'23 has been submitted to JSPCB through hard and soft copies vide letter no. TSJ/EMD/C-23/176/23 dated 26 September 2023. The environmental statement has also been uploaded on the company's website: https://www.tatasteel.com/corporate/our-organisation/environment/environment-compliance-reports/
xiv	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the MoEF&CC at http://envor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office at Ranchi.	Environment clearance information/notice had been advertised in two local newspaper dated September 20, 2015, in English Paper and Hindi Paper <i>viz</i> The Telegraph and Prabhat Khabar attached as Annexure-8 . Copy of these have been sent to the Regional Office, MoEF&CC at Ranchi vide letter no. EMD/C38/136/15 dated 16 September 2015.
xv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Financial closure and final approval of the project by Board of Tata Steel was done in April 2013.
xvi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	We are abiding for implementation of all the above compliance conditions. The progress report of above conditions will be submitted on regular basis.
xvii	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 be in accordance with implementation of necessary additional conditions stipulated by the Ministry for compliance (if any).

S.No	Compliance Conditions	Compliance Status
Gener	al Conditions:	
xviii	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 Waste (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	We are abiding by all the applicable legal requirements and Statutory clearances.

MONITORING & ANALYSIS REPORT

October 2023 to March 2024

Cold Rolling Mill Complex (CRMC), Jamshedpur

ENVIRONMENTAL MANAGEMENT DEPARTMENT
TATA STEEL LIMITED
JAMSHEDPUR



Annexure-1 , monitoring reports

TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY CRM BARA EFFLUENT QUALITY TEST REPORT SUMMARY FROM OCT-23 to MARCH-24

Sample Location	S. No.	Parameter	Unit	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Gate No-2	1	рН		7.76	7.82	7.78	7.49	7.8	7.78
	2	Total Suspended solids	mg/L	24	20	12	< 10	< 10	< 10
	3	Oil & Grease	mg/L	0.8	1.8	1.6	2.4	1.4	2
at (4	Hexavalent Chromium, Cr+6	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
fain	5	Biological Oxygen Demand, BOD	mg/L	8	9	8	9	8	6
Ū	6	Chemical Oxygen Demand, COD	mg/L	34	54	45	55	37	20

Note: Standards applicable as per Environment (Protection) (Third Amendment) Rules, 2012 issued in Gazette of India Notification vide No.: G. S. R. 277 (E) dated March 31, 2012.

UoM - Unit of Measurement,

NT - Not Traced

This test report was generated by TATA STEEL LIMITED JSR EMD LAB having NABL Accreditation No.TC-8363.

Sr. Manager Monitoring and Analysis

Head Envt. Monitoring Testing & Analysis (TSJ)



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT CONTINUOUS AMBIENT AIR QUALITY REPORT FOR CRM BARA - OCT 2023 TO MARCH 2024

ANNEXURE - I

Sl. No.	D	II-M	Standard -	CAAQMS#1	CAAQMS#1	CAAQMS#1	CAAQMS#1	CAAQMS#1	CAAQMS#1
51. 140.	Parameter	UoM		Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
1	Particulate Matter (PM10)	$\mu g/m^3$	100	138	185	185	222	162	135
2	Particulate Matter (PM2.5)	$\mu g/m^3$	60	51	87	86	117	75	57
3	Sulphur Dioxide (SO2)	$\mu g/m^3$	80	6	22	36	36	36	34
4	Nitrogen Dioxide (NOx)	μg/m ³	80	22	42	51	47	37	35
5	Carbon Monoxide (CO)	mg/m ³	2	1.3	1.4	1.1	1	0.8	0.7

Note:

Standards applicable as per National Ambient Air Quality Standards vide Notification No.: B-29016/20/90/PCI-L dated 18th November 2009.

UoM - Unit of Measurement, WPFA - West Plant First Aid Station

L' fairlain.

CRM - Cold Roll, PH - Powerhouse

NT - Not Traced

This test report was generated by TATA STEEL LIMITED JSR EMD LAB having NABL Accreditation No.TC-8363.

. Manager Monitoring and Analysis Head Environment Monitoring, Testing & Analysis (TSJ)



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY AMBIENT AIR QUALITY REPORT FOR CRM BARA - OCT 2023 TO MARCH 2024

Location	Parameter	UoM	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	March-24
	Particulate Matter, PM10		142.16	159.82	234.43	222.78	186.88	131.13
	Particulate Matter, PM2.5		54.04	61.15	92.08	82.31	69.17	51.84
	Sulphur Dioxide (SO2)		10.98	8.55	25.21	28.68	20.75	13.32
	Nitrogen Dioxide, (NO2)		23.55	33.22	42.85	36.09	37.10	36.41
	Carbon Monoxide (CO)		0.21	0.26	0.21	0.26	0.28	0.26
NEAR DISPATCH	Ammonia (NH3)		31.77	35.02	60.70	61.70	38.69	31.02
SHUTTER	Ozone (O3)	μg/m3	14.89	8.54	9.77	9.77	9.28	10.74
	Nickel (Ni)		0.11	0.12	0.10	0.09	< 0.01	< 0.01
	Arsenic (As)		NT	NT	NT	NT	NT	NT
	Lead (Pb)		0.05	0.07	0.06	0.05	0.01	0.01
	Benzene (C6H6)		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Benzo alpha Pyrene (BaP)		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Particulate Matter, PM10		107.74	149.58	232.01	248.03	169.09	95.79
	Particulate Matter, PM2.5		42.41	56.95	89.07	96.21	66.34	36.26
	Sulphur Dioxide (SO2)	•	11.88	9.82	21.95	13.43	20.80	13.56
	Nitrogen Dioxide, (NO2)		44.25	25.63	39.53	33.43	43.72	45.31
	Carbon Monoxide (CO)		0.26	0.27	0.19	0.30	0.29	0.24
NEAR FIRE	Ammonia (NH3)	, ,	38.02	36.98	55.37	48.02	67.37	46.03
FIGHING STATION	Ozone (O3)	μg/m3	11.47	10.01	12.45	16.84	11.23	16.11
	Nickel (Ni)		0.14	0.15	0.13	0.15	< 0.01	< 0.01
	Arsenic (As)		NT	NT	NT	NT	NT	NT
	Lead (Pb)		0.09	0.10	0.08	0.09	0.01	0.01
	Benzene (C6H6)		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Benzo alpha Pyrene (BaP)		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Particulate Matter, PM10		164.07	194.18	268.18	229.98	146.84	131.83
	Particulate Matter, PM2.5		64.75	68.45	100.66	87.43	53.04	50.75
	Sulphur Dioxide (SO2)		8.04	17.82	19.03	20.14	16.41	13.76
	Nitrogen Dioxide, (NO2)		33.32	42.20	34.64	33.97	39.45	28.26
	Carbon Monoxide (CO)		0.24	0.22	0.20	0.25	0.26	0.25
NEAR ROLL	Ammonia (NH3)	, ,	55.73	31.35	36.35	62.70	31.02	29.02
SHUTTER	Ozone (O3)	μg/m3	10.99	10.74	10.50	15.38	11.23	11.48
	Nickel (Ni)		0.15	0.13	0.12	0.16	< 0.01	< 0.01
	Arsenic (As)		NT	NT	NT	NT	NT	NT
	Lead (Pb)		0.05	0.06	0.05	0.08	0.01	0.01
	Benzene (C6H6)		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	Benzo alpha Pyrene (BaP)		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY AMBIENT AIR QUALITY REPORT FOR CRM BARA - OCT 2023 TO MARCH 2024

Note:

Standards applicable as per National Ambient Air Quality Standards vide Notification No.: B-29016/20/90/PCI-L dated 18th November 2009.

UoM - Unit of Measurement,

WPFA - West Plant First Aid Station

CRM - Cold Roll, PH - Powerhouse

NT - Not Traced

This test report was generated by TATA STEEL LIMITED JSR EMD LAB having NABL Accreditation No. TC-8363.

Sr. Manager Monitoring and Analysis

> Head Environment Monitoring, Testing & Analysis (TSJ)



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY NOISE LEVEL MONITORING REPORT SUMMARY FOR CRM BARA FROM OCT 2023 TO MARCH 2024

			Oct-23	3	Nov-2	3	Dec-23	3	Jan-24	4	Feb-2	4	Mar-2	:4
Sl.No.	Sampling Location		Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
			dB(A)	Leq	dB(A)) Leq	dB(A)	Leq	dB(A)	Leq	dB(A)	Leq	dB(A)	Leq
1	Entrance Main Gate		70.1	59.9	73.6	56.5	72.7	68.1	57.6	56.5	68.5	65.2	65.3	56.6
2	Circle Near Main Gate		68.3	58.2	70.7	58.2	68.3	65.2	60.3	58.2	69.8	62.4	58.9	55.6
3	Circle Near Gate No-1	Result	72.4	60.8	69.2	55.7	70.4	65.6	67.5	55.6	70.1	65.5	73.6	55.8
4	Gate No-1		73.3	63.8	71.3	54.6	69.3	64.5	73	55.2	71.6	62.6	72.1	56.5
5	Gate No-2		68.8	57.8	74.4	58.1	56.8	60.6	61.1	57.4	67.8	63.4	65.7	53.5

Note: Standards applicable as per Noise Pollution (Regulation and Control) (Amendment) Rules, 2000 notified vide S. O. 1046 (E), dated 22-11-2000.

Sr. Manager

Monitoring and Analysis

Head Environment Monitoring, Testing & Analysis (TSJ)



Tata Steel Limited Environmental Monitoring Report of CRM Bara Manual Stack Emission Monitoring Report from October 2023 to March 2024

Month	Location	UoM	Standard	Parameter	Result
	ARP				6.5
Oct-23	Pickling				5.8
Oct-23	Boiler				7.8
	Shot Blasting				12.5
	ARP				
Nov. 22	Pickling				5.5
Nov-23 Dec-23	Boiler				6
	Shot Blasting				7.9
	ARP		100	PM	12
	Pickling	mg/Nm ³			7.6
	Boiler				9.7
	Shot Blasting				18.3
	ARP				9.6
Jan-24	Pickling				<5
Jan-24	Boiler				5.1
	Shot Blasting				10
	ARP				
Feb-24	Pickling				
Feb-24	Boiler				
	Shot Blasting				
	ARP				8.1
March-24	Pickling				5
Iviarcii-24	Boiler				7.8
	Shot Blasting				5.3

Note:

Standards applicable as per CTO, Ref No. JSPCB/HO/RNC/CTO-10350692/2022/109 Dated on 28-01-2022.

Farmi Thapa Manager Steel Making,CRM Bara &

Tubes Division

Head Environment Monitoring,

Testing & Analysis (TSJ)

	TATA STEEL LIMITED								
	ENVIR	RONMENTAL MANAGEMENT DEPARTMENT-	LABORATORY						
WORKZONE MONITORING DATA_FY 23-24									
SL No.	Date	Section	Classification	Acid Mist as					
				HCL					
				(mg/Nm3)					
1	05.10.2023	CRM BARA (ARP Tank Fram Area)	Acid Mist (HCL)	0.39					
2	05.10.2023	CRM BARA (ARP Pump Room)	Acid Mist (HCL)	0.41					
3	05.10.2023	CRM BARA (ARP Roaster at 16 M)	Acid Mist (HCL)	0.51					
4	07.10.2023	CRM BARA (Pickling Line Column B12 Lower)	Acid Mist (HCL)	0.47					
5	07.10.2023	CRM BARA (Pickling Line Column B13 Upper)	Acid Mist (HCL)	0.43					
6	07.10.2023	CRM BARA (ARP Pickling A 12 to A 13 Crane Gantry)	Acid Mist (HCL)	0.26					
7	12.10.2023	CRM BARA (DM Plant)	Acid Mist (HCL)	0.42					
8	14.10.2023	CRM BARA (Pickling Tank 5)	Acid Mist (HCL)	0.38					
9	14.10.2023	CRM BARA (ARP Ventury at 12 m)	Acid Mist (HCL)	0.39					
10	06.10.2023	Reversing Mill Table	Oil Fumes	NA					
11	06.10.2023	Reversing Mill Drive Side	Oil Fumes	NA					
12	06.10.2023	Electro Static Oiler Near HSPM	Oil Fumes	NA					
13	09.10.2023	Reversing Mill Behind DTR Cabin	Oil Fumes	NA					
14	12.10.2023	Reversing Mill Behind ETR Cabin	Oil Fumes	NA					
15	04.10.2023	ARP Roaster Bottom	Iron Oxide	NA					
16	04.10.2023	ARP Cyclone at 12 Meter	Iron Oxide	NA					
17	12.10.2023	DM Plant	NaoH	NA					
18	04.11.2023	CRM BARA (Pickling Line Column B12 Lower)	Acid Mist (HCL)	0.36					
19	04.11.2023	CRM BARA (Pickling Line Column B13 Upper)	Acid Mist (HCL)	0.42					
20	04.11.2023	CRM BARA (ARP Pickling A 12 to A 13 Crane Gantry)	Acid Mist (HCL)	0.30					
21	06.11.2023	CRM BARA (ARP Roaster at 16 M)	Acid Mist (HCL)	0.49					
22	07.11.2023	CRM BARA (ARP Tank Fram Area)	Acid Mist (HCL)	0.28					
23	07.11.2023	CRM BARA (ARP Pump Room)	Acid Mist (HCL)	0.21					
24	07.11.2023	CRM BARA (ARP Ventuary at 12 M)	Acid Mist (HCL)	0.48					
25	08.11.2023	CRM BARA (Pickling Tank 5)	Acid Mist (HCL)	0.44					

SL No.	Date	Section	Classification	Acid Mist as HCL (mg/Nm3)
26	09.11.2023	CRM BARA (DM Plant)	Acid Mist (HCL)	0.46
27	03.11.2023	Reversing Mill Table (N-46)	Oil Fumes	NA
28	03.11.2023	Electrostatic Oiler Near HSPM	Oil Fumes	NA
29	03.11.2023	Reversing Mill Behind DTR Cabin	Oil Fumes	NA
30	08.11.2023	Reversing Mill Drive Side	Oil Fumes	NA
31	08.11.2023	Reversing Mill Behind ETR Cabin	Oil Fumes	NA
32	06.11.2023	ARP Roaster Bottom	Iron Oxide	NA
33	06.11.2023	ARP Cyclone at 12 Meter	Iron Oxide	NA
34	09.11.2023	DM Plant	NaoH	NA
35	08.12.2023	CRM BARA (ARP Tank Fram Area)	Acid Mist (HCL)	0.42
36	08.12.2023	CRM BARA (ARP Roaster at 16 M)	Acid Mist (HCL)	0.53
37	09.12.2023	CRM BARA (Pickling Line Column B12 Lower)	Acid Mist (HCL)	0.46
38	09.12.2023	CRM BARA (Pickling Line Column B13 Upper)	Acid Mist (HCL)	0.45
39	09.12.2023	CRM BARA (ARP Pickling A 12 to A 13 Crane Gantry)	Acid Mist (HCL)	0.32
40	13.12.2023	CRM BARA (DM Plant)	Acid Mist (HCL)	0.41
41	13.12.2023	CRM BARA (Pickling Tank 5)	Acid Mist (HCL)	0.39
42	14.12.2023	CRM BARA (ARP Pump Room)	Acid Mist (HCL)	0.57
43	14.12.2023	CRM BARA (ARP Ventuary at 12 M)	Acid Mist (HCL)	0.56
44	15.12.2023	Reversing Mill Drive Side	Oil Fumes	NA
45	15.12.2023	Electrostatic Oil Near HSPM	Oil Fumes	NA
46	16.12.2023	Reversing Mill Table	Oil Fumes	NA
47	16.12.2023	Reversing Mill Behind ETR Cabin	Oil Fumes	NA
48	16.12.2023	Reversing Mill Behind DTR Cabin	Oil Fumes	NA
49	07.12.2023	ARP Cyclone at 12 M	Iron Oxide	NA
50	07.12.2023	ARP Roaster Bottom	Iron Oxide	NA
51	13.12.2023	DM Plant	NaoH	NA
52	04.01.2024	CRM BARA (ARP Ventuary at 12 M)	Acid Mist (HCL)	< 0.02
53	08.01.2024	CRM BARA (DM Plant)	Acid Mist (HCL)	< 0.02

SL No.	Date	Section	Classification	Acid Mist as HCL (mg/Nm3)
54	08.01.2024	CRM BARA (ARP Roaster at 16 M)	Acid Mist (HCL)	< 0.02
55	09.01.2024	CRM BARA (ARP Tank Fram Area)	Acid Mist (HCL)	0.45
56	09.01.2024	CRM BARA (ARP Pump Room)	Acid Mist (HCL)	0.57
57	09.01.2024	CRM BARA (ARP Pickling A 12 to A 13 Crane Gantry)	Acid Mist (HCL)	0.39
58	16.01.2024	CRM BARA (Pickling Line Column B12 Lower)	Acid Mist (HCL)	0.57
59	16.01.2024	CRM BARA (Pickling Line Column B13 Upper)	Acid Mist (HCL)	0.49
60	16.01.2024	CRM BARA (Pickling Tank 5)	Acid Mist (HCL)	0.44
61	05.01.2024	Electrostatic Oiler Near HSPM	Oil Fumes	NA
62	06.01.2024	Reversing Mill table	Oil Fumes	NA
63	06.01.2024	Reversing Mill Drive Side	Oil Fumes	NA
64	15.01.2024	Reversing Mill Behind ETR Cabin	Oil Fumes	NA
65	15.01.2024	Reversing Mill Behind DTR Cabin	Oil Fumes	NA
66	04.01.2024	ARP Roaster Bottom	Iron Oxide	NA
67	04.01.2024	ARP Cyclone at 12 Meter	Iron Oxide	NA
68	08.01.2024	DM Plant	NaoH	NA
69	02.03.2024	CRM BARA (Pickling Line Column B12 Lower)	Acid Mist (HCL)	0.53
70	02.03.2024	CRM BARA (Pickling Line Column B13 Upper)	Acid Mist (HCL)	0.53
71	02.03.2024	CRM BARA (ARP Pickling A 12 to A 13 Crane Gantry)	Acid Mist (HCL)	0.60
72	05.03.2024	CRM BARA (DM Plant)	Acid Mist (HCL)	0.45
73	08.03.2024	CRM BARA (ARP Roaster at 16 M)	Acid Mist (HCL)	0.5
74	09.03.2024	CRM BARA (ARP Ventuary at 12 M)	Acid Mist (HCL)	0.61
75	12.03.2024	CRM BARA (Near Pickling Tank 5)	Acid Mist (HCL)	0.47
76	13.03.2024	CRM BARA (ARP Near Pump Room)	Acid Mist (HCL)	0.44
77	13.03.2024	CRM BARA (ARP Near Tank Farn Area)	Acid Mist (HCL)	0.32
78	04.03.2024	Reversing Mill Table	Oil Fumes	NA
79	04.03.2024	Reversing Mill Behind DTR Cabin	Oil Fumes	NA
80	04.03.2024	Electrostatic Oiler Near HSPM	Oil Fumes	NA
81	11.03.2024	Reversing Mill Drive Side	Oil Fumes	NA

S	L No.	Date	Section	Classification	
					HCL (mg/Nm3)
	82	11.03.2024	Reversing Mill Behind ETR Cabin	Oil Fumes	NA
	83	09.03.2024	ARP Cyclone at 12 Meter	Iron Oxide	NA
	84	09.03.2024	ARP Roaster Bottom	Iron Oxide	NA
	85	05.03.2024	DM Plant	NaoH	NA



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY GROUNDWATER MONITORING REPORT- OCT 2023 TO MARCH 2024

Month	Sampling Locations	pН	Temperature	Conductivity	Total	Total	Alkalinity as	Total	Calcium	Chlorides	Sulphates
		-	_		Dissolved Solids	Suspended Solids	CaCO ₃	Hardness as CaCO ₃	as Ca	as Cl	as SO ₄ -2
			oC	μMho/Cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	SonariBore water	8.4	26.8	972.0	476.3	<10	250.0	407.6	47.8	80.0	97.8
	Baganhattu Bore water	6.5	27.9	991.0	485.6	<10	85.0	370.2	93.8	62.4	63.3
Oct-23	Jemco Bore Water	6.7	28.1	772.0	378.3	<10	138.0	298.0	85.3	58.5	98.1
	Parvati GhatBore water	6.9	28.2	3397.0	1664.5	<10	664.0	1154.6	311.6	67.0	517.2
	Jugsalai Bore Water	7.2	28.3	1455.0	713.0	<10	440.0	582.3	183.6	30.0	225.4
	Parvati GhatBore water	6.8	27.8	2950.0	1445.5	<10	638.0	1459.8	341.2	229.9	471.5
	Jugsalai Bore Water	7.2	27.3	1081.0	529.7	<10	352.0	407.6	112.3	81.0	132.1
Nov-23	SonariBore water	6.9	26.6	941.0	461.1	<10	248.0	329.3	77.5	82.0	124.2
	Baganhattu Bore water	6.5	27.2	984.0	482.2	<10	94.0	80.3	99.4	66.0	57.9
	Jemco Bore Water	7.1	26.5	1113.0	545.4	<10	412.0	453.8	89.2	75.4	58.2
	Parvati GhatBore water	7.0	26.8	2951.0	1446.0	2.0	638.0	1512.0	322.6	202.9	338.0
	Jugsalai Bore Water	7.4	26.9	1060.0	519.4	2.0	324.0	423.7	110.3	80.0	107.2
Dec-23	Baganhattu Bore water	6.8	25.2	990.0	485.1	<10.0	100.0	386.0	96.4	219.9	62.5
	SonariBore water	6.9	25.5	781.0	382.7	<10.0	236.0	314.0	83.1	63.0	99.6
	Jemco Bore Water	7.1	24.5	1111.0	544.4	6.0	418.0	498.0	94.2	110.0	69.3
	Jugsalai Bore Water	7.2	26.9	1138.0	557.6	<10.0	432.0	492.0	115.4	115.0	26.5
	Parvati GhatBore water	7.0	26.8	2899.0	1420.5	<10.0	620.0	1393.6	298.4	234.9	46.3
Jan-24	Jemco Bore Water	7.7	27.8	1538.0	753.6	<10	48.0	508.0	103.4	156.0	170.5
	SonariBore water	6.9	27.6	772.0	378.3	<10.0	236.0	307.2	97.1	61.0	94.9
	Baganhattu Bore water	6.7	27.6	973.0	476.8	<10.0	110.0	361.4	1184	203.9	57.0
	Jugsalai Bore Water	6.9	26.9	665.0	325.9	<10	216.0	239.0	71.1	51.0	50.9
	Parvati GhatBore water	7.0	27.5	2624.0	1285.8	<10	588.0	1253.0	310.8	167.9	153.0
Feb-24	Jemco Bore Water	7.7	26.4	1530.0	749.7	<10	52.0	524.1	173.7	184.9	339.0
	Baganhattu Bore water	6.9	26.6	665.0	325.9	<10	156.0	289.2	70.3	53.0	21.8
	SonariBore water	7.0	28.0	905.0	443.5	<10.0	256.0	415.7	107.6	76.0	28.0
	SonariBore water	7.1	26.9	911.0	446.4	<10	236.0	351.4	102.6	72.9	65.9
	Baganhattu Bore water	6.7	27.3	935.0	458.2	<10	86.0	352.6	78.3	203.9	52.6
Mar-24	Jemco Bore Water	7.3	26.3	1514.0	741.9	<10	32.0	502.0	184.1	154.0	98.0
	Jugsalai Bore Water	7.1	25.4	1109.0	543.4	<10	400.0	283.1	141.4	76.0	117.7
	Parvati GhatBore water	7.1	25.2	2562.0	1255.4	<10	360.0	616.5	255.8	194.9	119.3



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY GROUNDWATER MONITORING REPORT- OCT 2023 TO MARCH 2024

Month	Sampling Locations	Nitrate Nitrogen as N	Nitrite Nitrogen as N	Fluorides as F	Silica as SiO ₂	Iron as Fe	Manganese as Mn	Hexavalent Chromium as Cr+6	Copper as Cu	Total Chromium as Cr	Cadmium Cd	Nickel as Ni	Zinc as Zn	Lead as Pb
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	SonariBore water	4.3	0.04	1.654	10.4	0.12	0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.06
	Baganhattu Bore water	4.1	0.07	0.503	9.3	0.42	0.69	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.05	0.01
Oct-23	Jemco Bore Water	5	< 0.02	0.354	7.7	0.04	0.36	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.01
	Parvati GhatBore water	3.7	0.06	0.92	25.8	0.01	0.08	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.00
	Jugsalai Bore Water	1.5	< 0.02	0.507	26.18	0.00	0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.10	0.02
	Parvati GhatBore water	19.9	0.12	0.84	25.14	0.02	0.07	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.04	0.03
	Jugsalai Bore Water	1.1	< 0.02	0.521	19.26	< 0.1	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.02
Nov-23	SonariBore water	2.1	0.03	0.96	26.21	0.09	0.02	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.04	0.06
	Baganhattu Bore water	< 0.5	0.05	0.12	25.64	0.26	0.38	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.04
	Jemco Bore Water	4.7	0.07	0.08	7.32	0.05	0.21	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.05	0.06
	Parvati GhatBore water	1.3	0.05	0.874	27.51	0.01	0.05	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.08	0.08
	Jugsalai Bore Water	1.7	< 0.02	0.486	25.75	0.01	0.02	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.05
Dec-23	Baganhattu Bore water	0.4	0.04	0.074	24.06	0.19	0.25	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.1	0.05
	SonariBore water	0.7	0.03	0.456	27.78	0.07	0.03	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.11	0.02
	Jemco Bore Water	2.8	0.11	0.2	10.84	0.04	0.14	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.07	0.04
	Jugsalai Bore Water	0.6	< 0.02	0.568	26.46	0.04	0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.06
	Parvati GhatBore water	12.2	0.09	0.557	46.3	0.02	0.03	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.03
Jan-24	Jemco Bore Water	4.3	0.28	0.447	170.5	0.05	0.19	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.06	0.01
	SonariBore water	0.9	0.04	0.39	94.9	0.05	0.04	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.02
	Baganhattu Bore water	0.5	0.03	0.444	56.96	0.16	0.21	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.05	0.04
	Jugsalai Bore Water	1.5	< 0.02	1.77	10.9	0.38	13.47	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.04	0.01
	Parvati GhatBore water	1.4	0.10	1.101	24.95	0.11	84.82	< 0.05	< 0.01	0.07	< 0.01	< 0.01	0.1	0.04
Feb-24	Jemco Bore Water	4.4	0.03	2.72	27.35	0.1	6.1	< 0.05	< 0.01	< 0.01	< 0.01	0.01	0.02	0.15
	Baganhattu Bore water	0.6	0.06	0.059	15.06	0.14	20.12	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.05	0.01
	SonariBore water	1.3	<0.02	1.564	28.95	0.04	18.94	< 0.05	< 0.01	< 0.01	< 0.01	0.03	0.03	0.01
	SonariBore water	9.57	0.17	0.24	31.1	< 0.01	18.46	<0.05	< 0.01	< 0.01	< 0.01	0.02	0.05	0.02
	Baganhattu Bore water	4.65	0.03	0.33	39	0.12	22.43	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.02
Mar-24	Jemco Bore Water	3.2	0.02	0.23	13.4	0.08	7.8	<0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.04	0.03
	Jugsalai Bore Water	6.93	0.02	0.57	29.24	0.28	28.89	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.05	0.01
	Parvati GhatBore water	12.43	0.12	0.94	27.11	0.03	64.96	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.01



TATA STEEL LIMITED ENVIRONMENT MANAGEMENT DEPARTMENT – LABORATORY GROUNDWATER MONITORING REPORT- OCT 2023 TO MARCH 2024

Month	Sampling Locations	Nitrogen (Ammonia) as N	Residual Chlorine as Cl	Sulphide as S ⁻²	Phenolic Compounds as Phenols	Free Cyanide	Aluminum
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	SonariBore water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	0.04
	Baganhattu Bore water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
Oct-23	Jemco Bore Water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
	Parvati GhatBore water	<1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	Jugsalai Bore Water	<1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	Parvati GhatBore water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
	Jugsalai Bore Water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
Nov-23	SonariBore water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
	Baganhattu Bore water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
	Jemco Bore Water	<1.0	< 0.2	< 0.10	< 0.10	< 0.1	< 0.01
	Parvati GhatBore water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	Jugsalai Bore Water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
Dec-23	Baganhattu Bore water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	SonariBore water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	Jemco Bore Water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	Jugsalai Bore Water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	Parvati GhatBore water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
Jan-24	Jemco Bore Water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	SonariBore water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	Baganhattu Bore water	<1.0	< 0.1	< 0.10	< 0.10	< 0.1	< 0.01
	Jugsalai Bore Water	<1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	Parvati GhatBore water	<1.0	<1.0	< 0.10	< 0.10	< 0.1	0.05
Feb-24	Jemco Bore Water	<1.0	<1.0	< 0.10	< 0.10	< 0.1	0.07
	Baganhattu Bore water	<1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	SonariBore water	0.43	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	SonariBore water	< 1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	Baganhattu Bore water	< 1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
Mar-24	Jemco Bore Water	< 1.0	<1.0	< 0.10	< 0.10	< 0.1	< 0.01
	Jugsalai Bore Water	< 1.0	<1.0	< 0.10	0.47	< 0.1	0.07
	Parvati GhatBore water	< 1.0	<1.0	< 0.10	0.65	< 0.1	< 0.01

Naaganzura

fing.





Ramky Enviro Engineers Limited

Unit :- Rajasthan Waste Management Project, TSDF-Udaipur

Report No.	RW	MP/L	ab/CA	/102/	20-21		Re	port Date	2	3	0	9		2		0	2	G.
								","										dde
Name of Client :	M/s	. TA	TA ST	EEL L	.TD.													sustainable of wit
Contact Details :	l ma					Z							(30)				3	2
of a	CRM	COM	IPLEX	BARA	, PO:A	AGRIC	AL,O	MSHEDPUR	-8310	009								
						8												owards
Telephone No. :					Fax	No.		:										2
Email ID :																	×	
Membership No.	140																	
Description of Sa	-			ived	:	Solid			-									
Description of Sa Sample Reference	ample		n Rece	eived /20-2	1	3,000,000,000	e Rec	eived Date		0	8		0	9	1.0	2	0	2
Description of Sa Sample Reference Number	ample	Whe	n Rece		1	3,000,000,000	Rec	eived Date		0	8		0	9		2	0	2
Description of Sample Reference Number Sample Drawn By	ample	When	102,	/20-2	1 S	3,000,000,000	e Rec	eived Date		0	8		0	9	•	2	0	2
Description of Sa Sample Reference Number Sample Drawn By Waste Category: \$	ample Sched	When	102,	/20-2	1 S	3,000,000,000	e Rec		/NO	0	8		0	9	-	2	0	2
Description of Sa Sample Reference Number Sample Drawn By Waste Category: \$ RAW Material List Process Details En MSDS Provided by	ample Sched /	When	102,	/20-2 -35.3	1 S	3,000,000,000	e Rec	Ţ.	NO NO	0	8		0	9		2	0	2
Name of Sample / Description of Sample Reference Number Sample Drawn By Waste Category: \$ RAW Material List Process Details En MSDS Provided by Client Sample Registration	Sched /	When	102,	- 35. 3	1 S	iample	e Rec	Ţ.	/	0	8		0	9		2	0	2
Description of Sample Reference Number Sample Drawn By Waste Category: \$ RAW Material List Process Details En MSDS Provided by Client	Sched / closed	When	102, , Cat.	- 35. 3	1 S	iample	e Rec	Ţ.	NO							2	0	2
Description of Sample Reference Number Sample Drawn By Waste Category: \$ RAW Material List Process Details En MSDS Provided by Client Sample Registratio Confirmation	Sched / closed	When	102, , Cat.	- 35. 3	1 S 3 es 102/26 2 (0-21		<u>t</u>	NO							2	0	2

Q-Daying BORATOR Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 1 of 6

Rev. No. 01/04.08.2018

MANAGING HAZARDOUS WASTE Site Address:

Ramky Enviro Engineers Limited
Unit: Rajasthan Waste Management Project, TSDF-Udaipur Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road, Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54 Email: rwmp@ramky.com



Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032 Ph. No.: 040-23015000, Fax No:040-23015100 E-mail: info@ramky.com Website: www.ramky.com REEL CIN: U74140AP1994PLC018833





Ramky Enviro Engineers Limited
Unit :- Rajasthan Waste Management Project, TSDF-Udaipur

| ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 | C No IMS 5705907 | C NO IMS 5705907

Repor	t No. RWMP/Lab/CA/102/20	-21	Report I	Date	2	3	194	0	9		2	0	2	
Sr. No.	Particulars	Ob	servation	Rer	narks	s (If	any)		9				
1*	Does the waste have strong Odor?	ΠY	KN											
2*	Does the waste give fumes exposed to the atmosphere?	□Y	ÓŅ.		54									
3*	Does the waste react with water?	ΠY	√N								-			
4*	Is the waste incompatible with any material? If so specify	□Y	□N			-								

TEST REPORT

Sr. No.	Parameter	Unit	Method	Result	CPCB limit for direct landfill disposal
5*	Physical State	-	•	Solid	Not Specified
6*	Color	-	i i i	Black	Not Specified
7*	Texture	-	el .	Wet	Not Specified
8	PFLT (Paint Filter Liquid Test)	-	USEPA 1998, SW-846; 9095A	Pass	Pass
9	Bulk Density	g/cc	APHA 23 rd Edition; 2710 F	1.22	Not Specified
10	Calorific Value	cal/g	IS:1350 Part II - 1970	385.40	<2500
11*	Flash Point	°C	USEPA 1998, SW 846; 1020 A	>60	>60
12	Moisture Content	%	IS 326 (Part 21): 2001	NA	Not Specified
13	LOD @ 105°C	%	APHA 23 rd Edition, 2017; 2540	66.59	Not Specified
14	LOI @ 550°C	%	APHA 23 rd Edition, 2017; 2540	7.32	<20
15*	Ash Content @ 900°C	%	APHA 23 rd Edition, 2017; 2540	91.48	Not Specified

Authorized Signatory 2000 Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 2 of 6

Rev. No. 01/04.08.2018

MANAGING HAZARDOUS WASTE

Ramky Enviro Engineers Limited Unit : Rajasthan Waste Management Project, TSDF-Udaipur Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road, Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54 Email: rwmp@ramky.com

Site Address:



Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032





Ramky Enviro Engineers Limited Unit :- Rajasthan Waste Management Project, TSDF-Udalpur

COMPREHENSIVE CAN 1991 Y ST 97.07 P. COMPREHENSIVE COMPREHENSIVE CAN 1991 Y ST 97.07 P. COMPREHENSIVE COMPREHENSIV

Report No.	RWMP/Lab/CA/102/20-21	Report Date	2	3		0	9		2	0	2	
------------	-----------------------	-------------	---	---	--	---	---	--	---	---	---	--

Sr. No.	Parameter	Unit	Method	Result	CPCB limit for direct landfill disposal
16	pH (At Room Temperature)	-	USEPA 1998, SW-846; 9045 C	8.46	4 -12
17	Chloride as Cl ⁻	mg/kg	APHA 23 rd Edition; 4500 SO ₄ E	3610.67	Not Specified 🕏
18*	Nitrate as NO ₃ -	mg/kg	APHA 23 rd Edition,4500 NO ₃ B	5.04	<30 O
19	Sulphate as SO ₄	mg/kg	USEPA 1998, SW-846; 9253	217.47	Not Specified
20*	Fluorides as F	mg/kg	APHA 23 rd Edition; 4500 F ⁻ - D	ND	Not Specified
21*	Phosphate as PO ₄	mg/kg	APHA 23 rd Edition; 4500 PO ₄ E	15.12	Not Specified
22*	Specific Gravity	g/cc	APHA 23 rd Edition; 2710 F	NA	Not Specified
23*	Organic Halogens	mg/kg	SW-846; 5050 & 9253	ND	Not Specified
24*	Reactive Cyanide as	mg/kg	USEPA 1998, SW-846; 9014	<1.0	<250
25*	Reactive Sulphide as	mg/kg	USEPA 1998, SW-846; 9034	<10.0	<500
26*	Carbon	%	CHNS Analyzer	NA	Not Specified
27*	Hydrogen	%	CHNS Analyzer	NA	Not Specified
28*	Nitrogen	%	CHNS Analyzer	NA	Not Specified
29*	Sulphur	%	CHNS Analyzer	NA	Not Specified
30	Copper as Cu- Total	mg/kg	USEPA 1998, SW-846; 7210	122.10	Not Specified
31	Total Chromium as Cr- Total	mg/kg	USEPA 1998, SW-846; 7190	108.57	Not Specified
32	Iron as Fe- Total	mg/kg	USEPA 1998, SW-846; 7380	217944.90	Not Specified
33	Lead as Pb- Total	mg/kg	USEPA 1998, SW-846; 7420	93.47	Not Specified
34	Manganese as Mn – Total -	mg/kg	USEPA 1998, SW-846; 7460	1495.41	Not Specified

Q-Danns Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 3 of 6

Rev. No. 01/04.08.2018

Site Address:

Ramky Enviro Engineers Limited
Unit : Rajasthan Waste Management Project, TSDF-Udaipur Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road, . Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54

Email: rwmp@ramky.com



Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032

Ph. No.: 040-23015000, Fax No: 040-23015100 E-mail: info@ramky.com Website: www.ramky.com REEL CIN: U74140AP1994PLC018833







Unit :- Rajasthan Waste Management Project, TSDF-Udaipur

ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 | C No FRS70987 | C No GHS 570797 | C No GHS 570590 | C No IM 570807

Report Date 3 0 9 2 0 RWMP/Lab/CA/102/20-21 2 Report No.

Sr. No.	Parameter	Unit	Method	Result	CPCB limit for direct landfill disposal
35	Nickel as Ni- Total	mg/kg	USEPA 1998, SW-846; 7520	440.62	Not Specified
36	Zinc as Zn- Total	mg/kg	USEPA 1998, SW-846; 7950	2053.10	Not Specified 0
37*	Cobalt as Co- Total	mg/kg	USEPA 1998, SW-846; 7200	13.52	Not Specified
38	Cadmium as Cd- Total	mg/kg	USEPA 1998, SW-846; 7130	12.43	Not Specified
	(TCLP)	Toxicity	y Characteristics Leaching Pro	cedure	F
39*	Arsenic as As	mg/L	USEPA 1998, SW-846; 7061 A	NA	<1
40	Cadmium as Cd	mg/L	USEPA 1998, SW-846; 7130	BDL	<0.2
41	Total Chromium as Cr	mg/L	USEPA 1998, SW-846; 7190	BDL	Not Specified
42*	Hexavalent Chromium as Cr ⁶⁺	mg/L	APHA 23 rd Edi., 2017: 3500 Cr B	<0.1	<0.5
43*	Cobalt as Co	mg/L	USEPA 1998, SW-846; 7200	BDL	Not Specified
44	Copper as Cu	mg/L	USEPA 1998, SW-846; 7210	BDL	<10
45	Iron as Fe	mg/L	USEPA 1998, SW-846; 7380	1.940	<3
46	Lead as Pb	mg/L	USEPA 1998, SW-846; 7420	0.074	<2
47	Manganese as Mn	mg/L	USEPA 1998, SW-846; 7460	0.066	Not Specified
48	Nickel as Ni	mg/L	USEPA 1998, SW-846; 7520	0.049	<3
49	Zinc as Zn	mg/L	USEPA 1998, SW-846; 7950	0.052	<10
	(WI	.T) Wate	r Leaching Testing		CPCB/HAZWAMS /TSDF Protocol/2010- 2011
50*	Arsenic as As	mg/L	USEPA 1998, SW-846; 7061 A	NA	<1.0
51*	Cadmium as Cd	mg/L	APHA 23 rd Edition,3111 B	0.069	<0.2
52*	Total Chromium as Cr	mg/L	APHA 23 rd Edition,3111 B	BDL	Not Specified

Authorized Signatory (Rajkumar Parmar - Dy. Manager) ATOR

Page 4 of 6

Rev. No. 01/ 04.08.2018

MANAGING HAZARDOUS WASTE Site Address:

Ramky Enviro Engineers Limited Unit : Rajasthan Waste Management Project, TSDF-Udaipur Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road,

Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54 Email: rwmp@ramky.com

Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032 Ph. No.: 040-23015000, Fax No:040-23015100 E-mail:info@ramky.com Website:www.ramky.com REEL CIN: U74140AP1994PLC018833





Unit :- Rajasthan Waste Management Project, TSDF-Udaipur ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 | C No FMS 570507 | C No GMS 570500 | C No IM 570907

COMPREHENSIVE ANALYSIS REPORT

Repor	rt No.	RWMP/Lab/C	A/102/20	-21	Report Date	2	3		0	9	*	2	0	2	6
53*	Hexavale as Cr ⁶⁺	ent Chromium	mg/L	APHA 2	23 rd Edi., 2017: 3	500	Cr B		<(0.1			<1	0.5	olden
54*	Cobalt a	s Co	mg/L	API	HA 23 rd Edition,3	111 E	3		ВІ	DL		N	ot Sp	ecifie	
55*	Copper a	as Cu	mg/L	API	HA 23 rd Edition,3	L11 E	3		0.0	800			<	10	0
56*	Iron as F	=e	mg/L	API	HA 23 rd Edition,3:	L11 E	3		1.9	920			<	:3	2
57*	Lead as	Pb	mg/L	API	HA 23 rd Edition,3:	111 E	3		0.0)72			<	:2	0
58*	Mangane	ese as Mn					0.063			Not Specifi			ed C		
59*	Nickel as	s Ni	mg/L	API	HA 23 rd Edition,3	111 E	3		0.0	048			<	<3	
60*	Zinc as 2	Zn	mg/L	API	HA 23 rd Edition,3	111 E	3	Ĭ.	0.0	049			<	10	

Safety Instructions for Handling of Hazardous Waste (if any) -

Use PPE's during handling of ETP Sludge.

ABBREVIATIONS

CPCB - Central Pollution Control Board

SW 846 - Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA,1998

Std. Methods - Standard Methods for the Examination of Water & Wastewater, APHA 23rd Edition, 2017

TCLP - Toxicity Characteristic Leaching Procedure

WLT - Water Leaching Testing

LOD – Loss on Drying
LOI Loss on Ignition

NA - Not Applicable
ND - Not Detected

BDL – Below Detectable Limit

Y - YesN - No

"The tests marked with an are not accredited by NABL"

Authorized Signatory (Rajkumar Parmar – Dy. Manageri)

Page 5 of 6

Rev. No. 01/ 04.08.2018

Site Address:

Ramky Enviro Engineers Limited
Unit: Rajasthan Waste Management Project, TSDF-Udaipur
Survey No- 1018/13, Village-Gudli,
Zinc Smelter Chauraha, Debari Railway Station Road,
Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54
Email: rwmp@ramky.com



MANAGING HAZARDOUS WASTE

Corporate Office : Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032 Ph. No.: 040-23015000, Fax No:040-23015100 E-mail: info@ramky.com Website: www.ramky.com

REEL CIN: U74140AP1994PLC018833





Unit :- Rajasthan Waste Management Project, TSDF-Udaipur

					 		B				
Report No.	RWMP/Lab/CA/102/20-21	Report Date	2	3	0	9		2	0	2	5

Inland Surface discharge water standard Applicable.

Fowards sustainable

4

TERMS AND CONDITIONS

- 1. The analysis report refers only to the 'as received' sample of waste
- 2. The report cannot be produced in part or in full without the permission of Rajasthan Waste Management Project
- 3. In the absence of specific request from the customer, RWMP follows National/International standards specifications for conducting the tests. Alternatively, in the absence of these methods, RWMP shall follow the operating procedures developed by RWMP.
- 4. The laboratory, normally, will not offer any opinion/advise or recommendation with respect to the suitability or otherwise of the sample for any application or use. Conformities to a specification or Act will be mentioned as per the Act/specification, if
- 5. Under no circumstances RWMP accepts any liability or loss or damage caused by use or misuse of the test report. Liability is limited to the testing fee charged, in case of proven negligence by the laboratory.
- 6. RWMP shall not assume any responsibility for variation in test results of samples kept on hold for want of clarification.
- 7. Client may visit (If desired) our laboratory to witness the related tests.
- 8. This Test report is valid for two years from the date of issue of report, if there is no change in processes, raw materials etc.

Disposal Pathway/Opinions/Interpretations

Direct Landfill

END OF REPORT

(2 - Dayms Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 6 of 6

Rev. No. 01/04.08.2018

Site Address: MANAGING HAZARDOUS WASTE Ramky Enviro Engineers Limited

Corporate Office: Ramky Enviro Engineers Ltd.







Unit :- Rajasthan Waste Management Project, TSDF-Udalpur

ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 C No FS570987 | C No EMS 570797 | C No OHS 570500 | C No IM 570907

COMPREHENSIVE ANALYSIS REPORT

Report No.		I	RWM	IP/L	ab/C	A/99	/20-	-21		R	eport Date	2	3		0		9		2	0	2	O
1										-							40					d
Name of Client	:	M	/s. 1	TAT.	A ST	EEL	LTD).						_								sustainable @rowt
Contact Details															222							87
		CR	RM C	OMF	PLEX	BAR	А, Р	O:A0	SRIC	O,JA	MSHEDPUR-	8310	09						GT.			
																						191
Telephone No.	:						F	ax N	lo.		:											Towards
Email ID	:												9.									
Membership No.	:	-																				
Name of Sampl	le /	Haza	ardou	us V	Vaste	9		: W	ast	es/I	Residues Co	ntai	ning	Oil								
Description o	f Sa	mple	e Wh	nen	Rece	eived		: So	olid								-					
Sample Referer Number	nce			:	99/2	20-21		Sar	nple	Rec	ceived Date		0		8		0	9) .	2	0	2
	Ву						1150					1112										
Sample Drawn																						
Sample Drawn Waste Category	y: S	che	dule	-I,	Cat.	-																
Waste Category	ist /			-I,	Cat.	_					\forall	, ,							- 5			
Waste Category	ist / Enc			-I,	Cat.	ΠY					Ø	•										
Waste Category RAW Material L Process Details MSDS Provided Client	ist / Enc by	lose	d				es				<u>d</u>	•										
Waste Category RAW Material L Process Details MSDS Provided Client Sample Registr	ist / Enc by	lose	d				es	20-2	1		/	•										
Waste Category RAW Material L Process Details MSDS Provided Client Sample Registr Confirmation	ist / Enc by	lose	d				es	20-2	1 2	0	/	NO	v: MB	D D	ept	., R	WMI	P				
Waste Category RAW Material L Process Details MSDS Provided Client	ist / Enc by	n No	d	VMP	/LAE		es '99/'			0		NO	у: МВ	D D	ept	., R	WMI	p			4	

Authorized Signatory (Rajkumar Parmar – Dy. Manager)

Page 1 of 6

Rev. No. 01/ 04.08.2018

Site Address:

MANAGING HAZARDOUS WASTE

Corporate Office : Ramky Enviro Engineers Ltd.

Ramky Enviro Engineers Limited
Unit: Rajasthan Waste Management Project, TSDF-Udaipur
Survey No- 1018/13, Village-Gudli,
Zinc Smelter Chauraha, Debari Railway Station Road,
Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54
Email: rwmp@ramky.com



Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032 Ph. No.: 040-23015000, Fax No:040-23015100 E-mail : info@ramky.com Website : www.ramky.com REEL CIN:U74140AP1994PLC018833





Ramky Enviro Engineers Limited Unit: - Rajasthan Waste Management Project, TSDF-Udaipur

Unit :- Rajasthan Waste Management Project, TSDF-Udaipur ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 C No FS570987 | C No EMS 570797 | C No OHS 570500 | C No IM 570907

COMPREHENSIVE ANALYSIS REPORT

Repor	t No.	RWMP/Lab/CA/99/20-2	1	Report [Date	2	3	•	0	9	2	0	2
Sr. No.		Particulars	Ob	servation	Ren	narks	s (If	any)				
1*	Does th Odor?	e waste have strong	□Y	RN									
2*	Does th	ne waste give fumes d to the atmosphere?	□Y	ÓW.									
3*	Does th	ne waste react with water?	□Y	√N /									
4*	Is the w	vaste incompatible with terial? If so specify	□Y	□N									

TEST REPORT

Sr. No.	Parameter	Unit	Method	Result	CPCB limit for direct landfill disposal
5*	Physical State		*	Solid	Not Specified
6*	Color	-		Black	Not Specified
7*	Texture	-	*	Wet	Not Specified
8	PFLT (Paint Filter Liquid Test)	-	USEPA 1998, SW-846; 9095A	Pass	Pass
9	Bulk Density	g/cc	APHA 23 rd Edition; 2710 F	0.84	Not Specified
10	Calorific Value	cal/g	IS:1350 Part II - 1970	8237.32	<2500
11*	Flash Point	°C	USEPA 1998, SW 846; 1020 A	>60	>60
12	Moisture Content	%	IS 326 (Part 21): 2001	NA	Not Specified
13	LOD @ 105°C	%	APHA 23 rd Edition, 2017; 2540	13.55	Not Specified
14	LOI @ 550°C	%	APHA 23 rd Edition, 2017; 2540	83.51	<20
15*	Ash Content @ 900°C	%	APHA 23 rd Edition, 2017; 2540	16.20	Not Specified

Authorized Signatory (Rajkumar Parmar – Dy. Manager)

Page 2 of 6

Rev. No. 01/04.08.2018

MANAGING HAZARDOUS WASTE

r BSI ™

ASTE Corporate Office :
Ramky Enviro Engineers Ltd.
Ramky Grandiose - Floors - 12,13, Ramky Towers Complex
Gachibowli, Hyderabad - 500032

Ph. No.: 040-23015000, Fax No:040-23015100
E-mail: info@ramky.com Website: www.ramky.com
REEL CIN:U74140AP1994PLC018833

Ramky Enviro Engineers Limited
Unit: Rajasthan Waste Management Project, TSDF-Udalpur
Survey No- 1018/13, Village-Gudli,
Zinc Smelter Chauraha, Debari Railway Station Road,
Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54

Site Address:

Email: rwmp@ramky.com







Unit :- Rajasthan Waste Management Project, TSDF-Udaipur ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 C No FS570987 | C No EMS 570797 | C No OHS 570500 | C No IM 570907

COMPREHENSIVE ANALYSIS REPORT

Report No. RWMP/Lab/CA/99/20-21 Report Date 2 3 . 0 9 . 2 0 2

Sr. No.	Parameter	Unit	Method	Result	CPCB limit for direct landfile disposal
16	pH (At Room Temperature)	-	USEPA 1998, SW-846; 9045 C	6.89	4 -12
17	Chloride as Cl-	mg/kg	APHA 23 rd Edition; 4500 SO ₄ - E	307.30	Not Specified
18*	Nitrate as NO ₃ -	mg/kg	APHA 23 rd Edition,4500 NO ₃ - B	6.37	<30 Not Specified
19	Sulphate as SO ₄	mg/kg	USEPA 1998, SW-846; 9253	224.15	Not Specified
20*	Fluorides as F	mg/kg	APHA 23 rd Edition; 4500 F ⁻ - D	ND	Not Specified
21*	Phosphate as PO ₄	mg/kg	APHA 23 rd Edition; 4500 PO ₄ E	3.18	Not Specified
22*	Specific Gravity	g/cc	APHA 23 rd Edition; 2710 F	NA	Not Specified
23*	Organic Halogens	mg/kg	SW-846; 5050 & 9253	1232.34	Not Specified
24*	Reactive Cyanide as HCN	mg/kg	USEPA 1998, SW-846; 9014	<1.0	<250
25*	Reactive Sulphide as H ₂ S	mg/kg	USEPA 1998, SW-846; 9034	<10.0	<500
26*	Carbon	%	CHNS Analyzer	NA	Not Specified
27*	Hydrogen	%	CHNS Analyzer	NA	Not Specified
28*	Nitrogen	%	CHNS Analyzer	NA	Not Specified
29*	Sulphur	%	CHNS Analyzer	NA	Not Specified
30	Copper as Cu- Total	mg/kg	USEPA 1998, SW-846; 7210	NA	Not Specified
31	Total Chromium as Cr- Total	mg/kg	USEPA 1998, SW-846; 7190	NA	Not Specified
32	Iron as Fe- Total	mg/kg	USEPA 1998, SW-846; 7380	NA .	Not Specified
33	Lead as Pb- Total	mg/kg	USEPA 1998, SW-846; 7420	NA	Not Specified
34	Manganese as Mn – Total	mg/kg	USEPA 1998, SW-846; 7460	NA	Not Specified

Authorized Signatory
(Rajkumar Parmar – Dy. Manager)

Page 3 of 6

Rev. No. 01/ 04.08.2018

Site Address:

Ramky Enviro Engineers Limited
Unit: Rajasthan Waste Management Project, TSDF-Udeipur
Survey No- 1018/13, Village-Gudli,
Zinc Smelter Chauraha, Debari Railway Station Road,
Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54
Email: rwmp@ramky.com



MANAGING HAZARDOUS WASTE

Corporate Office : Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032
Ph. No.: 040-23015000, Fax No:040-23015100
E-mail: info@ramky.com Website: www.ramky.com
REEL CIN:U74140AP1994PLC018833





Unit :- Rajasthan Waste Management Project, TSDF-Udaipur

5

| ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2006 | C No FMS 570797 | C No FMS 570797 | C No OHS 570500 | C No IM 570907 | C No FMS 570797 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C No OHS 570500 | C No IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C NO OHS 570500 | C NO IM 570907 | C NO OHS 570500 | C

- Control of the Cont	DWMD# 1 /04/00/20 24		_	-	41.11	•	_	1 1	-	_	-
Report No.	RWMP/Lab/CA/99/20-21	Report Date	2	3	1 .	U	9		2	0	2

Sr. No.	Parameter	Unit	Method	Result	CPCB limit for direct landfile disposal
35	Nickel as Ni- Total	mg/kg	USEPA 1998, SW-846; 7520	NA	Not Specified
36	Zinc as Zn- Total	mg/kg	USEPA 1998, SW-846; 7950	NA	Not Specified
37*	Cobalt as Co- Total	mg/kg	USEPA 1998, SW-846; 7200	NA _	Not Specified
38	Cadmium as Cd- Total	mg/kg	USEPA 1998, SW-846; 7130	NA	Not Specified
			y Characteristics Leaching Pro		_
39*	Arsenic as As	mg/L	USEPA 1998, SW-846; 7061 A	NA	<1
40	Cadmium as Cd	mg/L	USEPA 1998, SW-846; 7130	0.089	<0.2
41	Total Chromium as Cr	mg/L	USEPA 1998, SW-846; 7190	BDL	Not Specified
42*	Hexavalent Chromium as Cr ⁶⁺	mg/L	APHA 23 rd Edi., 2017: 3500 Cr B	<0.1	<0.5
43*	Cobalt as Co	mg/L	USEPA 1998, SW-846; 7200	0.009	Not Specified
44	Copper as Cu	mg/L	USEPA 1998, SW-846; 7210	BDL	<10
45	Iron as Fe	mg/L	USEPA 1998, SW-846; 7380	69.230	<3
46	Lead as Pb	mg/L	USEPA 1998, SW-846; 7420	0.132	<2
47	Manganese as Mn	mg/L	USEPA 1998, SW-846; 7460	1.112	Not Specified
48	Nickel as Ni	mg/L	USEPA 1998, SW-846; 7520	2.578	<3
49	Zinc as Zn	mg/L	USEPA 1998, SW-846; 7950	0.821	<10
	(WL	T) Water	Leaching Testing		CPCB/HAZWAMS /TSDF Protocol/2010- 2011
50*	Arsenic as As	mg/L	USEPA 1998, SW-846; 7061 A	NA	<1.0
51*	Cadmium as Cd	mg/L	APHA 23 rd Edition,3111 B	0.068	<0.2
52*	Total Chromium as Cr	mg/L	APHA 23 rd Edition,3111 B	BDL	Not Specified

2 - Oction BORATOR Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 4 of 6

Rev. No. 01/ 04.08.2018

Site Address:

MANAGING HAZARDOUS WASTE Ramky Enviro Engineers Limited
Unit : Rajasthan Waste Management Project, TSDF-Udaipur

Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road, Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54 Email: rwmp@ramky.com



Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032 Ph. No.: 040-23015000, Fax No:040-23015100 E-mail: info@ramky.com Website: www.ramky.com REEL CIN:U74140AP1994PLC018833





Unit :- Rajasthan Waste Management Project, TSDF-Udaipur ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 C No FS570987 | C No EMS 570797 | C No OHS 570500 | C No IM 570907

COMPREHENSIVE ANALYSIS REPORT

Repor	t No. RWMP/Lab	/CA/99/20	-21	Report Date	2	3	0	9		2	0	2	Car
53*	Hexavalent Chromium as Cr ⁶⁺	mg/L	АРНА	23 rd Edi., 2017: 3	3500	Cr B	<0).1			1200	0.5	400
54*	Cobalt as Co	mg/L	AP	HA 23 rd Edition,3	111 E	3	0.0	006		- 1	lot Sp	oecifi	ed.
55*	Copper as Cu	mg/L	AP	PHA 23 rd Edition,3	111 E	3	BI	DL.			<	10	-
56*	Iron as Fe	mg/L	AP	PHA 23 rd Edition,3	111 E	3	59.	850			<	<3	7
57*	Lead as Pb	mg/L	AF	PHA 23 rd Edition,3	111 F	3	0.1	26			<	<2	0
58*	Manganese as Mn	mg/L APHA 23 rd Edition,3111 B		1.002		Not Spe			pecifi	ed			
59*	Nickel as Ni	mg/L	AF	PHA 23 rd Edition,3	111 F	В	2.5	501			<	<3	
60*	Zinc as Zn	mg/L	AF	PHA 23 rd Edition,3	111	В	0.6	577			<	10	

Safety Instructions for Handling of Hazardous Waste (if any) -

Use PPE's during handling of Wastes/Residues Containing Oil.

ABBREVIATIONS

CPCB

Central Pollution Control Board

SW 846

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, 1998

Std. Methods

Standard Methods for the Examination of Water & Wastewater, APHA 23rd Edition, 2017

TCLP

Toxicity Characteristic Leaching Procedure (Carried out in Ash Sample)

WLT

Water Leaching Testing (Carried out in Ash Sample)

LOD

Loss on Drying

LOI

Loss on Ignition

NA

Not Applicable

ND

BDL

Not Detected

Below Detectable Limit

No

"The tests marked with an * are not accredited by NABL"

& Dayros Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 5 of 6

Rev. No. 01/04.08.2018

Site Address:

MANAGING HAZARDOUS WASTE

Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Enviro Engineers Limited
Unit: Rajasthan Waste Management Project, TSDF-Udaipur Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road. Udaipur - 313024 (Raj.) Tel.: +91-294-2802032, 2658253-54

Email: rwmp@ramky.com









Unit :- Rajasthan Waste Management Project, TSDF-Udaipur ISO 9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | IMS PAS 99:2066 C No FS570987 | C No EMS 570797 | C No OHS 570500 | C No IM 570907

COMPREHENSIVE ANALYSIS REPORT

2	3		0	9		2	0	2
RWMP/Lab/CA/99/20-21 Report Date discharge water standard Applicable.					RWMP/Lab/CA/99/20-21 Report Date 2 3 . 0 9	RWMP/Lab/CA/99/20-21 Report Date 2 3 . 0 9 .	RWMP/Lab/CA/99/20-21 Report Date 2 3 . 0 9 . 2	RWMP/Lab/CA/99/20-21 Report Date 2 3 . 0 9 . 2 0
					Report Date 2 3 . 0 9	Report Date 2 3 . 0 9 .	Report Date 2 3 . 0 9 . 2	Report Date 2 3 . 0 9 . 2 0
	2	2 3	2 3 .	2 3 . 0	2 3 . 0 9	2 3 . 0 9 .	2 3 . 0 9 . 2	2 3 . 0 9 . 2 0

TERMS AND CONDITIONS

- 1. The analysis report refers only to the 'as received' sample of waste
- 2. The report cannot be produced in part or in full without the permission of Rajasthan Waste Management Project
- 3. In the absence of specific request from the customer, RWMP follows National/International standards specifications for conducting the tests. Alternatively, in the absence of these methods, RWMP shall follow the operating procedures developed by RWMP.
- 4. The laboratory, normally, will not offer any opinion/advise or recommendation with respect to the suitability or otherwise of the sample for any application or use. Conformities to a specification or Act will be mentioned as per the Act/specification, if
- 5. Under no circumstances RWMP accepts any liability or loss or damage caused by use or misuse of the test report. Liability is limited to the testing fee charged, in case of proven negligence by the laboratory.
- 6. RWMP shall not assume any responsibility for variation in test results of samples kept on hold for want of clarification.
- 7. Client may visit (If desired) our laboratory to witness the related tests.
- 8. This Test report is valid for two years from the date of issue of report, if there is no change in processes, raw materials etc.

Disposal Pathway/Opinions/Interpretations

Incineration After Treatment

END OF REPORT

Authorized Signatory (Rajkumar Parmar - Dy. Manager)

Page 6 of 6

Rev. No. 01/04.08.2018

MANAGING HAZARDOUS WASTE

Corporate Office: Ramky Enviro Engineers Ltd.

Ramky Grandiose - Floors - 12,13, Ramky Towers Complex Gachibowli, Hyderabad - 500032 Ph. No.: 040-23015000, Fax No: 040-23015100 E-mail: info@ramky.com Website: www.ramky.com REEL CIN: U74140AP1994PLC018833

Site Address:

Ramky Enviro Engineers Limited Unit: Rajasthan Waste Management Project, TSDF-Udaipur Survey No- 1018/13, Village-Gudli, Zinc Smelter Chauraha, Debari Railway Station Road, Udaipur - 313024 (Raj.) Tel. : +91-294-2802032, 2658253-54

Email: rwmp@ramky.com



Annexure-2

CRM Bara Water reservoirs





Utsav Kashyap

Head Environment Clearance & Compliance TSL

TSJ/EMD/C-41/044/23 Date: 24.02.2023

To, Divisional Forest Officer, Jamshedpur Forest Division, Jamshedpur - 831001 East Singhbhum, Jharkhand

Sub: Payment of levies w.r.t. approved Site-Specific Wildlife Conservation Plan (SSWLCP) of Tata Steel Limited (Main Steel Plant Jamshedpur & CRM Bara Rolling Mills Complex)

Ref: Approval of SSWLCP by Principle Chief Conservator of Forest - Wildlife & Chief Wildlife Warden (PCCF-WL & CWW), Jharkhand vide letter no. 1945 dated: 13.12.2017.

Demand note raised of your good office vide letter no. 3182 dated: 23.12.2023

Dear Ma'am,

This has reference to the captioned subject and cited references. We would like to inform you that we have made the payment of Rs.2,00,00,000/- (Rupees Two Crores only) with respect to the approved SSWLCP of Tata Steel Limited (Main Steel Plant Jamshedpur & CRM Bara Rolling Mills Complex) and submitting the e-challan copy of the payment as per the demand note received from your good office.

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)

Encl: As above

-24/2/23

Mobno > 6207901848 8092087043



e-Challan

Finance Department, Government of Jharkhand

Receiving Dept:

Forest, Environment and Climate Change Department



Valid UpTo :-01/03/2023

Remitter's Copy

GRN:-2315871703

Date:- 20/02/2023 17:17:34

Receiving Office :-

JSRFOR051-D.F.O.JAMSHEDPUR PRM.JSR.-FOREST

District :- Purbi Singhbhum

Treasury:- Jamshedpur

Year:-20/02/2023

to:- 28/02/2023

Head(8782)

Amount

₹

Head Details

878200103010101

FOREST REMITTANCES

20000000.00

1292497

Net Payable Amount:-

Two Crore Rupees And Zero Paisa Only

20000000.00

For Treasury Use Only(Jamshedpur)

Challan No and Date: 108 Identity Proof(Registration No) - 000260

(20/02/2023)

PAN No:-

Address :-

Remitter Name:-

TATA STEEL LIMITED

Remarks :-

BISTUPUR, JAMSHEDPUR, 831001

Deposit Work

Treasury Officer Signature is not reugired.

FOR USE IN TREASURY LINK BANK

CHEQUE/DD No :-

650925 DT. 16/02/2023

Scroll No and (Date) :-

Bank Name:-SBI, JAMSEDPUR, DISTRICT TREASURY OFFICE

Note:- Bank Official are requested to update the receipt Online before Stamping

Signature & Seal of Bank

LETTER NO.7/Plan 10 215/2016 श्राठनि०(मु०का०नि०)—2 6 7 OFFICE OF THE CHIEF INSPECTOR OF FACTORIES, JHARKHAND, RANCHI. LABOUR BUILDING, DORANDA, RANCHI-834002

From.

Chief Inspector of Factories, Jharkhand, Ranchi.

To,

The occupier, M/s Tata Steel Limited, C.R.M. Complex, Bara Jamshedpur.

Ranchi, Dated 14/03/18

Sub: Recommendation of On-site Emergency Plan of M/s Tata Steel Limited, C.R.M. Complex, Bara, Jamshedpur.

Sir,

The On–site Emergency plan Submitted by you through Inspector of Factories, Jamshedpur Circle no.-1, Jamshedpur have been examined and the same is recommended subject to the following conditions: -

- Regular Mock-drill shall be carried out in the factory at least once in every year and a
 detailed report should be made available to the Chief Inspector of Factories, Jharkhand,
 Ranchi office
- A detailed safety audit report conducted by an experienced outside agency shall be submitted along with details of health & safety policy of your factory.
- The On- site Emergency plan will be up-dated and revised if there is any modification in the plant, process or industrial activity.
- Adequate arrangement of medical/ relief facilities (first aid equipments etc.) should be provided and maintained in the emergency control room.
- 5. Telephone number of key persons to be noted and displayed in the central control room. A copy of the recommended plan is enclosed herewith.

Yours Faithfully

Chief Inspector of Factories, Jharkhand, Ranchi

SN	Name	Questions	Action Plan given in EIA	Present status of complia	ince
01	Shri Suresh Sonthalia President, Singhbhum Chamber of Commerce	People will get employment. Region will be developed. Permission for expansion of plant should be granted. Company is doing good	Focus will be made on environment compliance.	CRM Bara plant is running on environmental complian	nce.
02	Shri Pavan Tiwari, Bhuiadih	We welcome the expansion of the project. It is a welcoming step that the company is expanding. But the management has to pay special attention for the development of surrounding region. Attention may be given on basic problems of local people.	CSR Committee has been formed and action plan is under preparation.	Health, Sanitation (Domest Drinking Water, Education (Skill Development), Livelil (Agriculture), Sports, Infra- Urban Services, Environme Ethnicity are undertaken u activities of Tata Steel Ltd.	, Livelihood hood structure & ent and
03.	Shri Bharat Vasani Vice-President, Singhbhum	We welcome the expansion of the project. Whatever the plans are made by the company to ensure that there should not be any pollution effect on environment with	Action plan prepared and will be implemented accordingly.	For environment protection spent as capital cost. Debelow:	
	Chamber of Commerce	expansionof plant. Company has to spend on environmental protection as per its plan so		Details	Capital Cost
	Commerce	that the environment can be protected.		Pollution control measures (WWTP, ARP, fume extraction systems, etc.	12
				Provision of online environment monitoring equipment and display	2.26
				Rejuvenation of water bodies	6.94
				ARP environmental upgradation	7.49
				PL rinse scrubber	0.510
				Total capital cost(Cr.)	29.20

04.	Shri Ramashray Prasad, INTUC	Company has to expand. Company should be developed. People should also get employment. Civic amenities should be developed in the surrounding area. Management should also focus and share information about how many permanent and temporary employees/ workers will be required.	Issues are being taken care under CSR activities.	Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. More than 50% employment has been given to local people.
05.	Shri Dev Sharan Singh Govindpur	Employment opportunities will increase with the expansion of the plant. Employment should be provided to the citizens/ locals residing within 10 km radius. Infrastructural facilities like drinking water, medical facilities for good health and other basic amenities should be provided by the company. Special attention should be given on environment and pollution.	Various environment protection measures have been taken by the company in the plant as per environment norms. Other issues have been taken care by CSR activities.	Various environment protection measures have been taken by the company such as: • Fume extraction system including scrubber in pickling line. • Bag filter in shot blasting machine. • Roof-top ventilation system. • Water sprinkling and mechanized sweeping machine • Effluent treatment plants for the treatment of oily and acidic waste and • STP is installed and operational for treatment of domestic water. • Rejuvenation of water bodies • Green belt development in and aroundplant. Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. More than 50% employment has been given to local people.

06.	Shri Sonaram Bothra	Employment should be provided to local unemployed people. Priority should also be given in employment for SC and ST people. Management should give attention on poor people. We are not provided any facility.	Local employment has been given on top priorities as per their skill during construction work.	More than 50% employment has been given to local people.
07.	Shri Gunjan Yadav, Sitaramdera	Due to proposed expansion the traffic may increase. Cutting of trees may be involved. Development of green belt is recommended. Public pumps/ taps should be arranged in local areas by the company/ Unit. We will oppose the plant if water is not available. There is a tribal school in Babudih where 450 children study. Management should also pay attention on this. We are not against for the expansion of the plant. But at the same time company should also give attention on basic problems of local people.	Plantation has been done in & around premises (More than three thousand). Other issues have been considered in CSR activities.	 Roads at the Bhuiyadih area are being widened. Other issues had been undertaken under CSR activities. Green belt at CRM Bara complex has been developed as per CPCB guidelines. Approx. 3.5 Ha area in and around plant is under plantation which is more than 33% of the plant area. We have planted 13235 no. of samplings in the above area till date. We have developed approx. 5m wide area of plantation around the plant as per CPCB guidelines. Density of plantation > 3000 plants/Ha which is more than CPCB guidelines. Public pumps/taps have been provided at Bhuiyadih and Babudih.
08.	Shri Chandra Sekhar Mishra, President Housing Development Committee	We welcome the expansion of the project. The facilities which were provided by Tata Steel 20 years back, are not made available today. The management should provide infrastructure facilities like electricity, water, medical, education etc. at least in 5 kms radius area instead of 10 kms radius.	Issues are taken care under CSR activities.	Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd.

09.	Shri Krishna Prasad Swarnakar, Babudih Basti	Babudih Basti is located in 1 km radius of the company. Waste is dumped by the plant in this area. Basic amenities should be provided to the citizens residing in 10 km radius. Pollution has increased a lot by which people are becoming sick.	Environment management plan under implementation will be strengthened for proposed expansion also.	 Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. Various environment protection measures have been taken by the company such as: Fume extraction system including scrubber in pickling line. Bag filter in shot blasting machine. Roof-top ventilation system. Water sprinkling and mechanized sweeping machine Effluent treatment plants for the treatment of oily and acidic waste and STP is installed and operational for treatment of domestic water. Rejuvenation of water bodies Green belt development in and around plant.
-----	---	--	--	---

10.	Shri Sudhir Singh, Secretary Singhbhum Chamber of Commerce	Expansion of plant is a good thing and we welcome the same. Sewage discharge is released without treatment into Kharkai and Swarnarekha rivers. This should be stopped immediately. Plant should be operated with pollution free environment.	Company will comply with CPCB norms	 Various environment protection measures have been taken by the company such as: Effluent treatment plants for the treatment of oily and acidic waste and STP is installed and operational for treatment of domestic water. Rejuvenation of water bodies Green belt development in and around plant. Fume extraction system including scrubber in pickling line. Bag filter in shot blasting machine. Roof-top ventilation system. Water sprinkling and mechanized sweeping machine are used for dust suppression.
11.	Shri Kaushal Prasad	We welcome the expansion of the plant. Employment will be generated after the expansion. Our income will increase. Our living standards will also improve. Plant Management should also give attention on basic problems of local people. Drinking water, education, medical and training programmes for women for their self-development etc. should be provided.	Issues are taken care under CSR activities. Local employment has been given on top priorities as per theirskill.	Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. More than 50% employment has been given to local people.

12.	Shri Navin Kumar Bagunnagar	Since Tata steel prefers global tender, contractors from other states will get their work with outside workers. This policy should not work out. The presentation shown by the company is fully false one. We are not opposing expansion of the plant, but expect that the quality of life of contract workers should also be improved.	Local area will be developed under CSR.	Basic needs such as Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. More than 50% employment has been given to local people.
13.	Shri Shankar Soren Baridih	The entire area where plant is established belongs to Tribal. Management should aware and concentrate on the welfare of tribals. Training should be imparted to local youth. Facilities like water education, and health should be provided. If management gives attention on these issues, I don't have any objection for expansion of the plant. We are in favour of this plant.	company and knowledgeable / qualified persons will be constituted to solve	Basic needs such as Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd.
14.	Shri Jeevan Kumar Sahu	I am in favour of expansion of the plant. Company has done a wonderful thing by afforestation work. Water, Electricity, Education and other works which will be beneficial for the public should be done.	CSR committee has been formed and action plan is under preparation.	Basic needs such as Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd.
15.	Shri Ram Sahni Babudih	Fishes (aquatic) are getting killed due to the acid water discharged from Tata Steel Company. River water is also contaminated leading to skin irritation. Polluted water should be controlled. Facilities like drinkingwater, education, electricity and medical facilities for health should be provided.	No wastewater is being discharged into the rivers. Environmental control measure has been already inplace.	No wastewater is being discharged into the rivers. All the effluents generated in plant are treated at Effluent treatment plant and domestic waste is treated in Sewage treatment plant. Environmental control measure has been already in place. Basic needs are undertaken under CSR activities.

16.	Shri Goutam Lohar Bagunhatu	Water from the company is discharged in the river. This should be stopped. Employment is given to the outside people. Local people should get employment. Water, electricity, education and better medical facilities for good health should be provided. Nobody knows where women are being trained.	Wastewater treatment plant is already in place. No water discharge from our premises. Experts team study is under progress.	All the effluents generated in plant are treated at Effluent treatment plant and domestic waste is treated in Sewage treatment plant. Basic needs such as Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd.
17.	Shri P.N.Dixit President, Builders Association	Expansion of the plant should invariably take place. I have been observing and experiencing for the last 52 years that whatever work done by Tata Steel was for the welfare of local people. Plant expansion should take place by paying special attention on environment.	Environment control measure has been already in place.	 Environment pollution control measures are already in place. Various environment protection measures have been taken by the company such as: Fume extraction system including scrubber in pickling line. Bag filter in shot blasting machine. Roof-top ventilation system. Water sprinkling and mechanized sweeping machine Effluent treatment plants for the treatment of oily and acidic waste and STP is installed and operational for treatment of domestic water. Rejuvenation of water bodies Green belt development in and around plant.

18.	Shri Vijay Khan	Most of the people from the region are in favour of the expansion of plant. The expectations of people from the company management are not fulfilled by the unit. Contract labourers of Tata group of companies are not getting medical facility in MGM Hospital. One ITI should be opened for the local youth. Water, Electricity, Technical arrangements for higher education, and other basic facilities should be taken care. I am in favour of expansion of the plant.	CSR committee has been formed and action plan is under preparation.	Basic needs such as Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd.
19.	Shri Beli Bodhanwala Social worker Jamshedpur	Here everybody wish for the expansion of the plant. I too want the same. Proper planning should be done for controlling pollution effects on environment. Local problems should be resolved under CSR. Attention should be paid for improvement of standard of living.	CSR committee has been formed and action plan is under preparation.	Local problems are being resolved under CSR. Basic needs such as Health, Sanitation (Domestic Toilets), Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. Environment pollution control measures are already in place.
20.	Shri Ranjit Bhattarcharya , Jamshedpur	Acid water released from the unit should be avoided. Traffic will also be a problem which should also be addressed. I am in favour of expansion of the plant.		No acid water is discharged from the unit/plant. All the effluents generated in plant are treated at Effluent treatment plant and domestic waste is treated in Sewage treatment plant. Roads at the Bhuiyadih and other area are being widened to cater increased traffic load.
21.	Shri Mahesh Santhalia, Jamshedpur	I am in favour of expansion of the plant. There should be control/ stoppage of discharge of polluted water from the plant. Drinking water facility should be provided for the local/ Basti people. Proper arrangement should be done to ensure that there is no pollution from the unit/plant.	measure has been already inplace.	Environment control measures are already in place. All the effluents generated in plant are treated at Effluent treatment plant and domestic waste is treated in Sewage treatment plant. Drinking water facility has been provided to local people.
22.	Smt. Santoshi Devi Babudih	Water facility should be provided in Babudih Basti. Even if a Tap is arranged for the publicin the road side will also help to some extent.	CSR committee has been formed and action plan is under preparation.	Water facility has been provided in Babudih Basti under CSR activities.
23.		Earlier also Public Hearing was conducted here in the same place. Assurance was also given for solving / avoiding problems of local	A committee will be constituted with the company representatives	Local problems are being resolved under CSR. Basic needs such as Health, Sanitation (Domestic Toilets),

24.	Shri Feroz Ali Khan Dhatakidih	•	considering view of local people. Efforts will be made to solve the problems in the surrounding areas. Special attention will be given for the community development activities. Direct and indirect employment opportunities will be provided.	Drinking Water, Education, Livelihood (Skill Development), Livelihood (Agriculture), Sports, Infrastructure & Urban Services, Environment and Ethnicity are undertaken under CSR activities of Tata Steel Ltd. • Work for rejuvenation of ponds completed which also cater rain-water harvesting. • Green belt in and around plant has been developed. 10850 no. of samplings have been planted till date. • No polluted water is discharged from the unit/plant. All the effluents generated in plant are treated at Effluent treatment plant and domestic waste is treated in Sewage treatment plant. • More than 50% employment has beengiven to local people.
25.	Shri A.K.Srivatsava	We all want that the plant should be expanded. Management also should concentrate on the local problems. Chances will increase for improving employment opportunities with the expansion of the company during this recession period.	Employment opportunities will be provided.	More than 50% employment has been given to local people.



Shubhanand Mukesh Head Environment Management

EMD/C-38/135/15 September 16, 2015

District Commissioner, East Singhbhum Office of the District Commissioner JAMSHEDPUR-831 001

Subject: Information of grant of Environmental Clearance for expansion of Cold Rolling Mill from 0.3 MTPA to 0.8 MTPA capacity at CRM Complex of Tata Steel Limited, Bara, Jamshedpur

Reference: MoEFCC Environmental Clearance letter no. J-11011/22/2013-IS II (I)

dated September 15, 2015

Dear Sir,

This has reference to the captioned subject and cited reference. It is to inform that the Ministry of Environment, Forests and Climate Change (MoEFCC), Govt. of India vide their letter no. J-11011/22/2013-IS II (I) dated September 15, 2015 has accorded Environment Clearance to M/s Tata Steel Limited for expansion of Cold Rolling Mill from 0.3 to 0.8 MTPA at CRM Complex at Bara, Jamshedpur in accordance with the EIA Notification, 2006 of the Environment (Protection) Act, 1986.

It is also to inform that copy of the said Environmental Clearance letter may also be seen at Company's Website at http://www.tatasteelindia.com/corporate-citizen/environment-compliance-reports.asp.

Thanking you,

Warm regards,

For Tata Steel Limited

Shubhanand Mukesh

Head, Environment Management

Encl: Copy of Environmental Clearance letter

TATA STEEL LIMITED

Environment Management Jamshedpur 831 001 India
Tel 91 657 2424125 6644859 Fax 91 657 2427819 e-mail shubhanand.mukesh@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



Shubhanand Mukesh Head Environment Management

EMD/C-38/137-/15 September 16, 2015

Block Development Officer
East Singhbhum
JAMSHEDPUR- 831 001

Subject: Information of grant of Environmental Clearance for expansion of Cold Rolling Mill from 0.3 MTPA to 0.8 MTPA capacity at CRM Complex of Tata Steel Limited, Bara, Jamshedpur

Reference: MoEFCC Environmental Clearance letter no. J-11011/22/2013-IS II (I) dated September 15, 2015

Dear Sir,

This has reference to the captioned subject and cited reference. It is to inform that the Ministry of Environment, Forests and Climate Change (MoEFCC), Govt. of India vide their letter no. J-11011/22/2013-IS II (I) dated September 15, 2015 has accorded Environment Clearance to M/s Tata Steel Limited for expansion of Cold Rolling Mill from 0.3 to 0.8 MTPA at CRM Complex at Bara, Jamshedpur in accordance with the EIA Notification, 2006 of the Environment (Protection) Act, 1986.

It is also to inform that copy of the said Environmental Clearance letter may also be seen at Company's Website at http://www.tatasteelindia.com/corporate-citizen/environment-compliance-reports.asp.

Thanking you,

Warm regards,

For Tata Steel Limited

Shubhanand Mukesh

Head, Environment Management

Encl: Copy of Environmental Clearance letter

TATA STEEL LIMITED

Environment Management Jamshedpur 831 001 India
Tel 91 657 2424125 6644859 Fax 91 657 2427819 e-mail shubhanand.mukesh@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



Shubhanand Mukesh Head Environment Management

EMD/C-38/138/15 September 16, 2015

Special Officer
Jharkhand Notified Area Committee
East Singhbhum
JAMSHEDPUR- 831 001

Subject: Information of grant of Environmental Clearance for expansion of Cold Rolling Mill from 0.3 MTPA to 0.8 MTPA capacity at CRM Complex of Tata Steel Limited, Bara, Jamshedpur

Reference: MoEFCC Environmental Clearance letter no. J-11011/22/2013-IS II (I) dated September 15, 2015

Dear Sir,

This has reference to the captioned subject and cited reference. It is to inform that the Ministry of Environment, Forests and Climate Change (MoEFCC), Govt. of India vide their letter no. J-11011/22/2013-IS II (I) dated September 15, 2015 has accorded Environment Clearance to M/s Tata Steel Limited for expansion of Cold Rolling Mill from 0.3 to 0.8 MTPA at CRM Complex at Bara, Jamshedpur in accordance with the EIA Notification, 2006 of the Environment (Protection) Act, 1986.

It is also to inform that copy of the said Environmental Clearance letter may also be seen at Company's Website at http://www.tatasteelindia.com/corporate-citizen/environment-compliance-reports.asp.

 l Thanking you,

Warm regards,

Shubhanand Mukesh

For Tata Steel Limited

Head, Environment Management

Encl: Copy of Environmental Clearance letter

TATA STEEL LIMITED

Environment Management Jamshedpur 831 001 India
Tel 91 657 2424125 6644859 Fax 91 657 2427819 e-mail shubhanand.mukesh@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

Annexure-7 Online Display Board at CRM Bara



	& Possession Notice	Amount of Notice
Plot louza 5003 it and	04.07.2014 & 17.09.2015	Rs.15,87,717.01 + Infl. w.e.f. 30.06.2014
f Plot within the stava	30.01.2014 & 17.09.2015	Rs 2.50 Lakhs + Inft, w.e.f. 30.05.2014
By- ortion)		











TATA STEEL

PUBLIC NOTICE

General Public is hereby informed that the Ministry of Environment, Forests and Climate Change (MoEPCO), Govt. of India vide their Change (MoEPCO), Govt. of India vide India vid

PUBLIC NOTICE

JHARKHAND THE TELEGRAPH 20 SEPTEMBER 2015

Met office predicts heavy rain today



RU seeks slap report

CISF complaint

प्रभात खबर \ सिटी

TATA STEEL

सार्वजनिक सूचना

सर्वसाधारण को एतत् द्वारा यह सूचना दी जाती है कि भारत सरकार के पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय ने पर्यावरण (संरक्षण) अधिनियम, 1986 की पर्यावरण प्रभाव आकलन (ईआईए) अधिसूचना, 2006 के अनुरूप 15 सितंबर, 2015 के अपने पत्र संख्या J-11011/22/2013-IS II (I) के जरिए मेसर्स टाटा स्टील लिमिटेड को बारा, जमशेदपुर स्थित सीआरएम कॉम्प्लेक्स की कोल्ड रॉलिंग मिल के 0.3 मिलियन टन प्रतिवर्ष से 0.8 मिलियन टन प्रतिवर्ष तक के विस्तारीकरण के लिए पर्यावरण स्वीकृति (इन्वायर्नमेंट क्लियरेन्स) प्रदान की है। सर्वसाधारण को यह भी सूचित किया जाता है कि उपरोक्त पर्यावरण स्वीकृति पत्र की प्रति झारखंड राज्य प्रदूषण नियंत्रण बोर्ड, राँची के कार्यालय में उपलब्ध है और इसे पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय के वेबसाईट http:/moef.nic.in. पर जाकर देखा जा सकता है।

यह सार्वजनिक सुचना पर्यावरण स्वीकृति पत्र की सामान्य शर्त संख्या (xiv) के अनुपालन हेतु जारी की जा रही है।



प्रभातं खबर Sun, 20 September 2015 epaper.prabhatkhabar.com/c/6607321