BY SPEED POST

Steel Authority of India Limited
Rourkela Steel Plant
Rourkela – 769011
Fax : 0661-2510183

Ref. No.: 691/EE/59/ 181
Date : 08 /11/2025.

Dear Sir,

Sub : Implementation Status of Env. Clearance Conditions issued to RSP.

Ref. : EC vide ref. no. F No. J-11011/757/2007-IA II(I), dated 29/01/2008, extension order dated 05/07/2013 & amendment order dated 26/03/2014.

# # #

This has reference to the aforesaid Environment Clearance (EC) accorded to Rourkela Steel Plant (RSP) for its Expansion project, its extension order and amendment w.r.t. water consumption. The implementation status of the various Special and General Conditions mentioned in EC order for the period of April - September, 2025 is enclosed as Annexure-2. The softcopy is mailed and also uploaded to the web sites of MoEFCC & SAIL.

Thanking you sir,

With warm regards,

Yours faithfully,
For Rourkela Steel Plant,

(P C Dash)
General Manager I/c
Environmental Engg. Department

Note : Soft copy mailed to roez.bsr-mef@nic.in

To : The Dy. Director General of Forests (C),
Integrated Regional Office,
Ministry of Environment & Forests,
A/3, Chandrasekharpur,
Bhubaneswar. – 751023.

Annexure-2

Steel Authority of India Limited
Rourkela Steel Plant's Expansion Project
(Environment Clearance vide ref. no. F No. J-11011/757/2007-IA II(I), dated 29/01/2008 & EC extension up to 29/01/2018 vide order , dated 05/07/2013 & Amendment order dated 26/03/2014)
Half Yearly Report (April – September., 2025)

Contact Persons : Sri P C Dash, GM I/c (Env. Engg.) Phone : 0661-2447258
Sri V V R Murty, GM(Env. Engg.) Phone : 0661-2448524

Special Conditions

SN.	CONDITION	STATUS/ ACTION PLAN
i)	All the existing batteries shall be rebuilt by 2012 meeting all the pollution control norms as per CPCB guidelines and a commitment in this regard shall be submitted to the Ministry	RSP has 6 no. of Coke Oven Batteries. • COB#1, COB#3, COB#4 & COB#5 have been rebuilt. • COB#2 has been rebuilt and commissioned in Oct.,2024. • COB#6 is a new battery constructed as per this EC. Battery wise details are, • COB#1 --Rebuilt & commissioned in May, 2007 • COB#2 – Commissioned after rebuilding in Oct., 2024. • COB#3 – Rebuilt and commissioned in December, 2016. • COB#4 – Last rebuilt & commissioned in May 2010 • COB#5 – Last rebuilt & commissioned in July, 2000 • COB#6 – Built & commissioned in March, 2014
ii)	The industry shall follow coke oven standards as per E(P) Rules. VOCs from the coke oven shall be monitored and controlled as per CPCB guidelines.	RSP is following the Coke Oven Standards as per E(P) Rules. VOCs are being monitored by a NABL accredited external agency. The monitoring results along with interpretation are given at Annexure- 1.
iii)	Efforts shall be made to further reduce the existing ambient air and stack emissions and waste generation and a report submitted to the Ministry, its Regional Office at Bhubaneswar, CPCB and OPCB.	All out efforts are being made to further reduce waste generation, reduce all stack emissions, thereby to improve ambient air quality. A report is being submitted to CPCB and SPCB once in a month regularly giving the status of stack emissions, ambient air quality & solid waste utilization. A report showing the stack emissions, ambient air quality and solid waste utilization for the period of April – September., 2025 along with interpretation are given at Annexure-2, 3 & 4 respectively.
iv)	Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line stack monitoring facilities for all the stacks and sufficient air pollution control methods shall be provided to control emissions below 100 mg/Nm^3 viz. ESP and bag filters etc. and data submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB	a) All out efforts are being taken for reducing RSPM levels. b) On-line stack monitoring facilities are provided in all stacks under Expansion Project. c) All air pollution control systems viz., ESPs, Bag Filters etc., are designed to control stack emissions < 100 mg/Nm3. d) The stack emissions are monitored regularly and data submitted to all statutory authorities once in a month. The ambient air quality & stack emissions during April – September., 2025 along with interpretation is given at Annexure -2 & 3.

SN.	CONDITION	STATUS/ ACTION PLAN
v)	Electrostatic precipitator (ESP) shall be provided to Sinter plant, Power Plant and Blast Furnace (BF) to control gaseous emissions from all the vents/stacks within 100 mg/Nm3. Coal dust injection (CDI) shall be provided to Blast furnace plants. Bag filter shall be provided to lime Calcining Plant, new vertical shaft kiln and Dolomite plant. Emissions shall be controlled from the Cast house and Stock house within permissible limits. High Pressure Liquor Aspiration (HPLA) system shall be provided to new Coke Oven Battery	a) 3 no. of ESPs were provided in Sinter Plant No. 3 & another 3 no. of ESPs were provided in Blast Furnace No. 5, under this project. b) One new ESP was provided for MP Boiler#3 and 2 no. of ESPs were augmented for HP Boiler#5 & #6 of Captive Power Plant#1 for bringing down stack emissions below 100 mg/Nm3. c) CDI is provided in all Blast Furnaces viz., BFc#1, BFc#4 & BFc#5. d) 9 no. of Bag houses were provided in Calcining Plant. e) Dedicated ESPs are provided for Cast House de-fuming and Stock House of BFc#5. f) Dedicated ESPs were provided for Cast House De-fuming of BFc#1 & BFc#4. g) HPALA system was provided in new COB#6. The stack emissions i.e., at the outlet of pollution control systems are regularly monitored and cross checked with norms. Preventive and corrective actions are being taken for maximizing the efficiency of ESPs based on the monitoring results.
vi)	Regular monitoring of the Benzo(a)Pyrene, Poly Aromatic Hydrocarbons (PAHs) and Volatile Organic Compounds (VOCs) in the ambient air and stack emissions shall be carried out.	BaP, PAHs and VOCs are monitored in Ambient air and Stack emissions regularly and the reports are submitted to all statutory authorities at regular intervals. The PAH levels along with interpretations are given at Annexure-5. VOCs in stacks and ambient air are monitored and the results along with interpretation are given at Annexure- 1 & 2.
vii)	Secondary fugitive emissions from all the sources including blast furnace and sinter plant shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.	Dust extraction systems viz., ESPs, Bag Houses & Cold Fog Dust suppression systems are provided in COB#6, Sinter Plant#3 & Blast Furnace #5 to control the fugitive emissions and to meet statutory guidelines. RSP is following all the CPCB guidelines / code of practices in controlling secondary fugitive emissions.
viii)	Total make up water requirement of the Plant from Brahamani River shall not exceed *2,27,352 m3/day and prior permission shall be obtained from the concerned department. No ground water shall be used for the plant. The effluent shall be treated in the effluent treatment plant. Maximum treated wastewater shall be recycled and reused in the process for cooling, gas cleaning plant (GCP), steel making, slag granulation plant (SGP), dust suppression, green belt development etc. The excess wastewater shall be discharged only after conforming all the parameters to the prescribed standards within the permissible limits of OPCB. *MoEF's Corrigendum dated 26th March, 2014.	a) The water requirement is being confined to 2,27,352 m3/day as per the Corrigendum issued by MoEF dated 26/03/2014. (Total water drawl in 2024-25 was 1,86,002 m3/day). b) Dedicated WWTPs are provided in all Units & treated water is recycled back. c) Only little quantity of blow down water is discharged after confirming to norms. d) No ground water is used in RSP. The quality of finally treated effluent discharged to river during April – September., 2025 is monitored by a NABL accredited external agency along with interpretation is given at Annexure-6.

SN.	CONDITION	STATUS/ ACTION PLAN
ix)	As proposed, 90% of the solid waste shall be recycled and reused and remaining shall be disposed off in secured landfill designed as per the specifications of the CPCB. BF slag shall be granulated and used in environment-friendly manner. Slag from SMS-I & II shall be used for making road embankments. Iron ore fines, Fluxes cinder, Mill scales and Scrap etc. shall be recycled and reused in Sintering Plant. SMS scrap shall be recycled in Steel Melting Shop. All the waste oil shall be sold to recyclers/re-processors.	a) The Solid Waste Utilization for 2025-26 up to Sept.,2025 is 125.66% b) The un-utilized Solid Wastes were kept earlier inside RSP's Plant boundary for future utilization. c) A Secured Landfill Facility has been constructed as per CPCB guidelines, first time in SAIL and is in operation. The utilization of total solid wastes have already been enhanced by maximizing the utilization of BFc slag for cement making. SMS slag utilization is being increased by selling to external agencies from stock and by enhancing its utilization in base mix preparation (Sinter making) in blast furnaces, as rail ballast, road making and its use for development of land areas inside the plant premises. All the metallic scrap is being recycled back to SMS. All the waste oil is being sold to the outside parties who are having valid registration with statutory agencies. The solid waste utilization during April – September., 2025 is given at Annexure-4.
x)	Ground water monitoring around the solid waste disposal site / secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhubaneswar / CPCB and OPCB.	Ground Water Samples are regularly collected from waste disposal areas & Secured Land Fills i.e., from Sitalpara dump area and Old BFc Slag Dump area (Deogaon) once in a month and are analyzed through a NABL accredited external agency. The data is submitted to all statutory authorities through monthly basis. The ground water quality during April – September., 2025 along with interpretation is given at Annexure-7. Monitoring of the Ground Water Table levels has been carried out at 6 locations covering all directions along the plant boundary using Water Level meter. Location wise Water table level is given at Annexure-7a.
xi)	An action plan for the disposal of fly ash, granulated and SMS slag shall be submitted to the Ministry within 3 months. All the BF slag generated shall be granulated and provided to cement manufacturers for further utilization and should not be disposed off anywhere else. SMS slag shall also be properly utilized. All the char from DRI plant shall be utilized in AFBC boiler of power plant and no char shall be disposed off anywhere else. All the fly ash shall be utilized as per the Fly Ash Notification, 1999 and subsequently amended in 2003.	All the Blast Furnace Slag is being granulated through in-house slag granulation units and used for making slag cement. State of the art technologies are being adopted in steel making so that the SMS slag generation rate will be minimized. The SMS slag is being utilized for Sinter Making through base mix, charged into Blast Furnaces to replace lime stone and also used for pavement making and as rail ballast. The balance slag is sold to outside parties and also used for development of land inside the plant premises.

SN.	CONDITION	STATUS/ ACTION PLAN
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xii)	Green belt shall be developed in 33 % area within and around the plant premises as per the CPCB guidelines in consultation with DFO.	RSP is developing green belt in and around steel plant. 30,508 no. of saplings planted during Apr-Sept., 2025. So far, more than 51.50 lakh trees have already been planted, covering more than 33% of the area.
xiii)	Recommendations of the State Forest Department shall be obtained regarding impact of the proposed expansion of the plant on the Sona Parbat RF, North Chirobeda RF and South Chirobeda RF and implemented.	The findings of EIA/EMP were submitted to State Forest Department. DFO, Rourkela has authenticated the report and the copy of the letter from DFO is enclosed at Annexure-8.
xiv)	All the recommendations mentioned in the CREP guidelines for the steel plants shall be implemented	RSP is strictly following all the CREP action points and will continue to follow the same. The status of implementation is being submitted to SPCB, CPCB & MoEFCC on monthly basis. CREP status report for the month of September, 2025 is enclosed as Annexure-20.

GENERAL CONDITIONS

SN.	CONDITION	STATUS/ ACTION PLAN
i)	The project authorities must strictly adhere to the stipulations made by the Orissa Pollution Control Board (OPCB) and the State Government	Complied.
ii)	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	The Expansion Project has been executed as per the approval obtained from MoEFCC.
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. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. NOx burners shall be installed to control NOx levels	RSP is following all the standards notified by the MoEFCC and State Pollution Control Board from time to time. a) All gaseous emissions (SO_2, NOx & CO) are being monitored regularly and meeting the norms. b) 20 no. of On- line stack monitoring systems for SPM are installed in RSP and the systems have been uplinked with the servers of SPCB & CPCB. c) State of the art Burners are provided in COB#6 for under firing for controlling NOx levels.
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, SO2 and NOX are anticipated in consultation with the OPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar / OPCB / CPCB once in six months	a) RSP has installed 6 no. of Ambient Air Quality Monitoring Stations in consultation with SPCB covering all directions. b) The monitored data viz., Stack Emissions and Ambient Air Quality is being submitted to all statutory authorities on monthly basis regularly through email. The ambient air quality for the period April – September., 2025 along with data interpretation is given at Annexure – 2.
v)	In-plant control measures for checking fugitive emissions from all the vulnerable sources like Coke oven area, Sinter plant, Blast Furnace area etc. shall be adopted. Further, specific measures like water sprinkling shall be carried out at the stock piles of raw material, stacker, reclaimer, transfer points etc. Dust extraction system and bag filters shall be provided to the sinter plant, stock house, blast furnace and steel melting shop etc. Fume extraction system in steel refining units shall also be provided. Centralized dedusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed and height conforming to the standards for induction furnaces in the industry shall be provided. Fugitive emissions shall be controlled, regularly monitored and records maintained.	a) RSP has a dedicated Env. Engg. Department with an Environment Laboratory which is certified with ISO-14001. b) Env. Engg. Dept.'s monitoring group carry out monitoring of fugitive emissions regularly throughout the plant and data is submitted to statutory authorities regularly on monthly basis. In addition, RSP engaged a NABL accredited external agency for monitoring fugitive emissions and the data is submitted to statutory authorities. c) Dust suppression systems are provided in stock yard. d) Dust extraction systems viz., ESP & Bag Houses are provided in all Expansion Units. e) Fume extraction units with Bag House and ESP are provided for LHF#2A, #2B & #3 of SMS#2. f) Dog house systems are being provided for control of secondary fugitive emissions from converters of SMS#2 The fugitive emissions monitored during April – September., 2025, along with data interpretation monitored through NABL accredited third party is given at Annexure-9.

SN.	CONDITION	STATUS/ ACTION PLAN
vi)	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.	a) Dedicated Waste Water Treatment Plants are provided in all units of Expansion Units. b) The treated water is recycled back to the process. c) Only little quantity of blow down water is discharged through a net work of drains to Lagoon for final treatment.
vii)	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 (nighttime).	a) Noise control devices viz., Acoustic Hoods, Silencers and Enclosures are provided to control noise at source. b) RSP has developed a buffer zone along with RSP plant boundary by planting Trees for control of Noise. c) Noise levels are regularly monitored by Env. Engg. Dept. and data is submitted to Statutory authorities on monthly basis. The monitored noise levels at various ambient air quality monitoring stations during April – September., 2025 along with data interpretation are given at Annexure-2.
viii)	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	3 no. of Rain water harvesting systems were installed during 2016-18. 16 no. of Rain Water Harvesting systems have been constructed and put into operation during 2018-20.
ix)	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	RSP established Occupational Health Service Center (OHSC) inside the plant itself with dedicated team of doctors, and other skilled medical staff. Health checkup of all the workers is carried out by OHSC once in a year and the records are being kept.
x)	Recommendations made in the CREP guidelines issued for the steel plants shall be implemented.	RSP is implementing all the action points mentioned under CREP for Steel Industry. The status is being submitted on monthly basis to all statutory authorities, CREP status report for the month of September, 2025 is given as Annexure-20.
xi)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company shall undertake socio economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	a) All the pollution control measures recommended in EIA/EMP report have been implemented. b) RSP has a dedicated CSR department for the socio-economic development activities in surrounding villages. The main focus areas of CSR department are; a) Infrastructure development b) Water & Sanitation c) Education d) Health e) Sustainable livelihood and Income generation programmes f) Alternate Renewable Energy g) Community welfare & Industrial Township development. The highlights of CSR activities during 2024-25 are given at Annexure-14.

SN.	CONDITION	STATUS/ ACTION PLAN
xii)	The project authorities shall utilize Rs. 614.00 Crs. and Rs. 36.00 Crs. earmarked total capital cost and recurring cost/annum for environment pollution control measures respectively judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry's Regional Office at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	Funds allocated for the Pollution control were not diverted. The list of Pollution Control schemes implemented in different new units and their value are given below; a) COB#6 Complex : Rs. 440 Crs. b) Blast Furnace No. 5 : Rs. 80 Crs. c) Sinter Plant#3 : Rs. 47 Crs. d) Steel Melting Shop#2 : Rs. 120 Crs. e) New Plate Mill : Rs. 10 Crs. f) New Calcining Plant#2 : Rs. 10 Crs. g) New OBBP : Rs. 5 Crs. Total : Rs. 616 Crs. RSP has not diverted the funds allocated for pollution control measures and implemented all the conditions. The implementation schedule of various conditions stipulated in EC is enclosed at Annexure-10.
xiii)	The Regional Office of this Ministry at Bhubaneswar/CPCB/OPCB 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 compliance report is being submitted & uploaded to MoEFCC's web site, once in six months, regularly.
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 OPCB/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.	RSP released an advertisement In the following news papers. 1) The Times of India, Bhubaneswar edition dated 07/02/2008. (English) 2) Samaj, Rourkela dated 07/02/2008 (Odia) Copies of the paper advertisement were submitted to MoEF regional office vide letter no. 691/EE/59/354-355, dated 08/02/2008. Copy of the news paper cutting is enclosed at Annexure-11.
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.	The project was sanctioned by SAIL on 23/06/2007. Copy of the sanction order is enclosed at Annexure-12. The land development work started in November, 2008.

Additional Conditions

(Reference : Letter of Dr. V P Upadhyay, Director(S) addressed to Managing Director, RSP 106-9/EPE, dtd. 08/06/2011)

SN.	CONDITION	STATUS/ ACTION PLAN
(i)	Continuous monitoring of stack emissions as well as ambient air quality (as per notified standards) shall be carried out and continuous records maintained. Based on the monitored data, necessary corrective measures as may be required from time to time shall be taken to ensure that the levels are within permissible limits. The results of monitoring shall also be put on the website of the company in the public domain	Ambient air quality is monitored continuously using 4 no. of AAQMS- automatic ambient air quality monitoring stations installed at Sector-2, Sector-22 of Steel Township and along the plants boundary - one at ERWPP and another at SSSY area. All these four stations have been uplinked with SPCB & CPCB servers. In addition to this, ambient air quality is regularly monitored at six number of ambient air stations located along plant's boundary. Stack emissions are also monitored regularly. Continuous records are maintained for ambient air quality and stack emissions and necessary corrective actions are taken to contain pollution. The monitoring results are uploaded to SAIL's official Web Site at www.sail.co.in (Web page ➔ Environment Management under Rourkela Steel Plant) (https://www.sail.co.in/index.php/en/plants/about-rourkela-steel-plant)
(ii)	The six monthly monitoring reports as well as the monitored data on various parameters as stipulated in the environment clearance conditions shall be put on the website of the company and also regularly updated. The monitored data shall also be submitted to respective State Pollution Control Board/ UTPCC and the Regional Office of MoEF.	The monitored data as per Env. Clearance conditions are submitted to State Pollution Control Board, Odisha on monthly basis, regularly. This half yearly compliance report for the period April – September., 2025 will be uploaded to SAIL's website before 01/06/2025 (https://www.sail.co.in/index.php/en/plants/about-rourkela-steel-plant)
(iii)	The ambient air quality data as well as the stack emission data will also be displayed in public domain at some prominent place near the main gate of the company and updated in real time.	The ambient air quality data and stack emission data is displayed in the form of two number of Flex Board of 8' x 5' size, in front of Main Gate of RSP. The data is updated on quarterly basis. The environment data is being continuously displayed through LED based electronic display board which was installed at Main gate of RSP.

Annexure-1

Data interpretation of Monitoring results of VOC in Stack & Work zone of Coke Ovens
(April – September., 2025)

SN.	Department	Stack connected to	Apr.,– Sep., 2024	Oct., 2024	Nov., 2024	Dec., 2024	Jan., 2025	Feb., 2025	Mar., 2025	Oct.24-March., 2025	Change w.r.t. Oct.24-March., 2025
1.	Coke Ovens	Battery#1	<1	<1	<1	<1	<1	<1	<1	<1	No change
2.		Battery#2	S/D	S/D	S/D	S/D	S/D	S/D	S/D	S/D	No change
3.		Battery#3	<1	<1	<1	<1	<1	<1	<1	<1	No change
4.		Battery#4	<1	<1	<1	<1	<1	<1	<1	<1	No change
5.		Battery#5	<1	<1	<1	<1	<1	<1	<1	<1	No change
6.		Batery#6	<1	<1	<1	<1	<1	<1	<1	<1	No change
7.	Sinter Plant#1	Process ESP	<1	<1	<1	<1	<1	<1	<1	<1	No change
8.		Addl. ESP	<1	<1	<1	<1	<1	<1	<1	<1	No change
9.		Old ESP	<1	<1	<1	<1	<1	<1	<1	<1	No change
10.	Sinter Plant#2	Process ESP	<1	<1	<1	<1	<1	<1	<1	<1	No change
11.		Space De dusting ESP	<1	<1	<1	<1	<1	<1	<1	<1	No change
12.	Sinter Plant#3	Process ESP-1	<1	<1	<1	<1	<1	<1	<1	<1	No change
13.		Process ESP-2	<1	<1	<1	<1	<1	<1	<1	<1	No change
14.		Plant de-dusting ESP	<1	<1	<1	<1	<1	<1	<1	<1	No change
15.	Silicon Steel Mill	TA Line	<1	<1	<1	<1	<1	<1	<1	<1	No change
16.		Decarb Line	<1	<1	<1	<1	<1	<1	<1	<1	No change
17		Pickling line	<1	<1	<1	<1	<1	<1	<1	<1	No change
18.		Ammonia cracking unit	<1	<1	<1	<1	<1	<1	<1	<1	No change
19.	Captive Power Plant#1	MP Boiler#1	<1	<1	<1	<1	<1	<1	<1	<1	No change
20.		MP Boiler#2	<1	<1	<1	<1	<1	<1	<1	<1	No change
21		MP Boiler#3	BDL	s/d	s/d	s/d	s/d	s/d	s/d	BDL	No change
22.		HP Boiler#1	BDL	<1	<1	<1	<1	s/d	<1	BDL	No change
23.		HP Boiler#2	<1	<1	<1	<1	<1	<1	s/d	<1	No change
24.		HP Boiler#5	<1	<1	<1	<1	<1	s/d	<1	<1	No change
25.		HP Boiler#6	<1	<1	s/d	s/d	<1	<1	<1	<1	No change

Work zone Monitoring :

SN.	Dept	Monitoring Location	Norm (µg/m3)	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
				Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max
1	Coke Ovens	Ram side – at Central control room	4000	0	0	<1	<1	<1	<1	<1	<1	0	0	No change	No change
2		Coke side – at Central control room	4000	7	7.6	7.1	7.4	6.7	7.0	7.3	7.5	6.7	7.5	-4.29%	-1.32%
3		Near Wharf – at Central Control room	4000	7.1	8.1	7.5	7.2	7.4	7.7	7.6	7.1	7.1	7.7	0.00%	-4.94%
4		Near Quenching Tower	4000	7.1	8	7.0	7.5	7.1	7.8	7.4	7.2	7.0	7.8	-1.41%	-2.50%
5		Coke Oven top	4000	7.2	8	7.8	7.4	7.5	7.2	7.3	7.4	7.2	7.8	0.00%	-2.50%

(Units : all are in micrograms/m3)
%Change is calculated for Lower limit and Upper limit of the range.
BDL : Below detectable limit <1 & S/D : Shutdown

Annexure – 2a

Data interpretation of Monitoring results of Ambient Air Quality in Rourkela Steel Plant

(April – September., 2025)

Location	Period	Min./ Max	PM2.5	PM10	SO2	NO2	NH3	CO	C6H6	O3	Pb	As	Ni	BaP	Noise	Noise
	Units		µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	ng/m3	ng/m3	ng/m3	dB(A)	dB(B)
EED Building	Oct., 2024-Mar.,2025	Min	26	77	9	24	44	320	<0.5	21	<0.4	<0.2	<12	<0.1	71.7	62
		Max	29	83	14	28	48	430	<0.5	24	<0.4	<0.2	<12	<0.1	72.6	63
	Apr.,25 - Sept.,25	Min	28	79	10	28	50	400	<0.5	24	<0.4	<0.2	<12	<0.1	60.2	60
		Max	31	87	13	33	52	460	<0.5	27	<0.4	<0.2	<12	<0.1	71.6	62.6
	% change w.r.t. previous Qtr.	Min	8%	3%	11%	17%	14%	25%	No change	14%	No change	No change	No change	No change	-16%	-3%
		Max	7%	5%	-7%	18%	8%	7%	No change	13%	No change	No change	No change	No change	-1%	-0.01
RDCIS Building	Oct., 2024-Mar.,2025	Min	25	73	5	15	48	300	<0.5	20	<0.4	<0.2	<12	<0.1	71.6	61.1
		Max	28	80	15	23	52	480	<0.5	24	<0.4	<0.2	<12	<0.1	72.4	61.8
	Apr.,25 - Sept.,25	Min	27	75	10	24	50	440	<0.5	21	<0.4	<0.2	<12	<0.1	71.8	60.2
		Max	32	84	14	27	54	670	<0.5	23	<0.4	<0.2	<12	<0.1	73	62.2
	% change w.r.t. previous Qtr.	Min	8%	3%	100%	60%	4%	47%	No change	5%	No change	No change	No change	No change	0%	-1%
		Max	14%	5%	-7%	17%	4%	40%	No change	-4%	No change	No change	No change	No change	1%	-3%
PMPH Building	Oct., 2024-Mar.,2025	Min	20	63	9	12	44	380	<0.5	20	<0.4	<0.2	<12	<0.1	72	61.4
		Max	25	71	14	25	54	460	<0.5	24	<0.4	<0.2	<12	<0.1	72.5	61.7
	Apr.,25 - Sept.,25	Min	26	74	11	29	51	420	<0.5	22	<0.4	<0.2	<12	<0.1	71.8	60.2
		Max	30	82	14	33	55	470	<0.5	25	<0.4	<0.2	<12	<0.1	72.5	61.6
	% change w.r.t. previous Qtr.	Min	30%	17%	22%	142%	16%	11%	No change	10%	No change	No change	No change	No change	0%	-2%
		Max	20%	15%	0%	32%	2%	2%	No change	4%	No change	No change	No change	No change	0%	0%
BOD Building	Oct., 2024-Mar.,2025	Min	27	77	12	20	48	520	<0.5	19	<0.4	<0.2	<12	<0.1	71.5	61.9
		Max	30	85	18	29	56	590	<0.5	25	<0.4	<0.2	<12	<0.1	72.5	62.7
	Apr.,25 - Sept.,25	Min	29	65	12	28	55	580	<0.5	24	<0.4	<0.2	<12	<0.1	7.5	61.2
		Max	32	90	16	31	59	660	<0.5	28	<0.4	<0.2	<12	<0.1	72.9	62.7
	% change w.r.t. previous Qtr.	Min	7%	-16%	0%	40%	15%	12%	No change	26%	No change	No change	No change	No change	-90%	-1%
		Max	7%	6%	-11%	7%	5%	12%	No change	12%	No change	No change	No change	No change	1%	0%
	Norm		60	100	80	80	400	4000	5	180	1.0	6	20	1.0	75	70

Units : All are in micro grams/m^3 except BaP which is in ng/m^3

Note: %Change is calculated for Lower limit and Upper limit of the range. PAH (Bap) is done once in a year.

ND : Not detectable; BDL : Below detectable limit <1 & S/D : Shutdown

Location	Period	Min./ Max	PM2.5	PM10	SO2	NO2	NH3	CO	C6H6	O3	Pb	As	Ni	BaP	Noise (day)	Noise (Night)
	Units		µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	ng/m3	ng/m3	ng/m3	dB(A)	dB(A)
TOP-II Building	Oct., 2024-Mar.,2025	Min	21	64	8	15	50	560	<0.5	20	<0.4	<0.2	<12	<0.1	72.3	62.1
		Max	27	80	15	27	55	620	<0.5	26	<0.4	<0.2	<12	<0.1	72.8	62.7
	Apr.,25 - Sept.,25	Min	26	74	14	27	55	440	<0.5	24	<0.4	<0.2	<12	<0.1	70.7	60.2
		Max	31	84	17	30	59	610	<0.5	34	<0.4	<0.2	<12	<0.1	72.4	62.7
	% change w.r.t. previous Qtr.	Min	24%	16%	75%	80%	10%	-21%	No change	20%	No change	No change	No change	No change	-2%	-3%
		Max	15%	5%	13%	11%	7%	-2%	No change	31%	No change	No change	No change	No change	-1%	0%
RMHP Building	Oct., 2024-Mar.,2025	Min	24	72	6	10	48	460	<0.5	19	<0.4	<0.2	<12	<0.1	71.5	61.1
		Max	28	81	16	24	53	570	<0.5	24	<0.4	<0.2	<12	<0.1	72.3	61.7
	Apr.,25 - Sept.,25	Min	26	73	13	24	51	300	<0.5	22	<0.4	<0.2	<12	<0.1	71.2	61.2
		Max	31	86	18	27	58	540	<0.5	24	<0.4	<0.2	<12	<0.1	73.1	62.6
	% change w.r.t. previous Qtr.	Min	8%	1%	117%	140%	6%	-35%	No change	16%	No change	No change	No change	No change	0%	0%
		Max	11%	6%	13%	13%	9%	-5%	No change	0%	No change	No change	No change	No change	1%	1%
	Norm		60	100	80	80	400	4000	5	180	1.0	6	20	1.0	75	70

Units : All are in micro grams/m^3 except BaP which is in ng/m^3

Note: %Change is calculated for Lower limit and Upper limit of the range. PAH (Bap) is done once in a year.

ND : Not detectable; BDL : Below detectable limit <1 & S/D : Shutdown

Annexure – 2b

Monitoring Results of AAQM Stations in RSP & Townships

(April – September., 2025)

SN.	Para-meter	AAQMS Location	Norm (µg/m3)	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
				Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	PM2.5	Sector#2 Rourkela Steel Township (North)	60	33.22	53	37.08	26.35	26.35	39.84	37.08	26.35	26.35	39.84	-20.68%	-24.83%
2		Sector#22 Rourkela Steel Township (South)	60	36.27	57	32.4	38.46	28.23	57	32.4	38.46	28.23	57	-22.17%	0.00%
3		ERWPP Area (West)	60	25.82	59	26.55	50.21	26.55	50.21	26.55	50.21	26.55	50.21	2.83%	-14.90%
4		SSSY Area (East)	60	34.4	52	19.23	30.79	19.08	45.41	19.23	30.79	19.08	45.41	-44.53%	-12.67%
5	PM10	Sector#2 Rourkela Steel Township (North)	100	60.37	89.04	60.36	64.44	60.02	89.04	60.36	64.44	60.02	89.04	-0.58%	0.00%
6		Sector#22 Rourkela Steel Township (South)	100	50.1	92.5	53.96	63.23	53.96	92.5	53.96	63.23	53.96	92.5	7.70%	0.00%
7		ERWPP Area (West)	100	50.28	94	51.44	86.71	51.44	90.13	51.44	86.71	51.44	90.13	2.31%	-4.12%
8		SSSY Area (East)	100	58.63	92	85.44	67.62	41.62	85.44	85.44	67.62	41.62	85.44	-29.01%	-7.13%
9	SO2	Sector#2 Rourkela Steel Township (North)	80	11.53	13.8	11.52	11.51	11.51	11.68	11.52	11.51	11.51	11.68	-0.17%	-15.36%
10		Sector#22 Rourkela Steel Township (South)	80	6.88	48.96	6.93	6.87	6.87	17.95	6.93	6.87	6.87	17.95	-0.15%	-63.34%
11		ERWPP Area (West)	80	17.48	27.96	17	17.55	16.46	21.95	17	17.55	16.46	21.95	-5.84%	-21.49%
12		SSSY Area (East)	80	6.48	30.52	14.15	7.26	6.48	47.4	14.15	7.26	6.48	47.4	No change	55.31%

SN.	Para-meter	AAQMS Location	Norm (µg/m3)	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
				Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
13	NOX	Sector#2 Rourkela Steel Township (North)	80	10.54	24.2	19.36	19.49	19.36	21.85	19.36	19.49	19.36	21.85	83.68%	-9.71%
14		Sector#22 Rourkela Steel Township (South)	80	16.63	44.69	14.32	12.11	12.11	44.43	14.32	12.11	12.11	44.43	-27.18%	-0.58%
15		ERWPP Area (West)	80	15.18	16.85	17.26	17.17	16.64	17.26	17.26	17.17	16.64	17.26	9.62%	2.43%
16		SSSY Area (East)	80	13.17	28.85	14.26	15.47	14.26	26.17	14.26	15.47	14.26	26.17	8.28%	-9.29%
17	CO	Sector#2 Rourkela Steel Township (North)	4000	460	830	500	560	500	680	500	560	500	680	8.70%	-18.07%
18		Sector#22 Rourkela Steel Township (South)	4000	390	530	520	570	490	570	520	570	490	570	25.64%	7.55%
19		ERWPP Area (West)	4000	290	980	350	330	330	1500	350	330	330	1500	13.79%	53.06%
20		SSSY Area (East)	4000	530	1050	760	810	630	1050	760	810	630	1050	18.87%	0.00%

Annexure - 3

Monitoring of Stack Emissions (SPM in mg/NM3)
(April – September., 2025)

SN.	Dept.	Stack Connected to	Norm (mg/Nm3)	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
				Min	MaX	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	CO	Battery#1	50	34	38	38	40	42	44	40	38	38	44	11.76%	15.79%
2	CO	Battery#2	50	0	0	24	28	28	26	22	24	22	28	-	-
3	CO	Battery#3	50	31	36	37	30	36	35	36	35	30	37	-3.23%	2.78%
4	CO	Battery#4	50	44	46	41	47	46	47	48	47	41	48	-6.82%	4.35%
5	CO	Battery#5	50	34	44	34	36	36	32	33	32	32	36	-5.88%	-18.18%
6	CO	Battery#6	50	21	42	24	24	22	24	26	28	22	28	4.76%	-33.33%
7	SP#1	Process ESP	150	37	66	19	20	20	24	20	18	18	24	-51.35%	-63.64%
8	SP#1	Old ESP	150	0	78	21	18	23	24	23	21	18	24	#DIV/0!	-69.23%
9	SP#1	Addl. ESP	150	38	83	42	39	41	39	36	37	36	42	-5.26%	-49.40%
10	SP#2	Process ESP	150	33	88	58	48	49	48	47	51	47	58	42.42%	-34.09%
11	SP#2	Space De-Dusting ESP	150	30	35	38	38	45	44	42	40	38	45	26.67%	28.57%
12	SP#3	Process ESP-1	150	51	68	64	64	66	65	68	71	64	71	25.49%	4.41%
13	SP#3	Process ESP-2	150	16	21	19	20	20	24	20	18	18	24	12.50%	14.29%
14	SP#3	Plant De dusting ESP	150	16	28	21	18	23	24	23	21	18	24	12.50%	-14.29%
15	BF#1	Cast House Defuming	150	37	49	46	46	49	46	45	48	45	49	21.62%	0.00%
16	BF#5	Cast House (North)	150	30	58	33	32	31	33	32	34	31	34	3.33%	-41.38%
17	BF#5	Cast House (South)	150	21	45	41	46	48	46	48	47	41	48	95.24%	6.67%
18	BF#5	Stock House	150	25	46	34	32	35	31	35	38	31	38	24.00%	-17.39%
19	SMS#1	LD#4	150	17	40	28	34	32	25	26	24	24	34	41.18%	-15.00%
20	SMS#1	LD#5	150	39	42	39	42	40	41	40	41	39	42	0.00%	0.00%
21	SMS#2	Dog House	50	33	45	41	43	55	47	61	44	41	61	24.24%	35.56%
22	SMS#2	DE-Sulphurization	50	22	48	20	21	22	21	20	21	20	22	-9.09%	-54.17%
23	SMS#2	LHF#2A	150	24	76	22	21	24	22	25	22	21	25	-12.50%	-67.11%
24	SMS#2	LHF#2B	150	22	38	30	34	36	35	34	32	30	36	36.36%	-5.26%
25	SMS#2	LHF#2C	150	22	38	38	35	56	46	58	47	35	58	59.09%	52.63%

Note: %Change is calculated for Lower limit and Upper limit of the range.
S/d – Under shutdown

SN.	Dept.	Stack Connected to	Norm (mg/Nm3)	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
				Min	MaX	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
26	SMS#2	Normal Time	150	37	43	42	41	43	41	42	41	41	43	10.81%	0.00%
27	SMS#2	During blowing	150	45	48	48	46	47	41	48	47	41	48	-8.89%	0.00%
28	SMS#2	Normal Time	150	30	46	42	39	41	40	39	41	39	42	30.00%	-8.70%
29	SMS#2	During blowing	150	24	48	48	45	47	46	45	47	45	48	87.50%	0.00%
30	SMS#2	Normal Time	150	39	44	38	39	40	41	42	39	38	42	-2.56%	-4.55%
31	SMS#2	During blowing	150	47	50	46	47	46	47	46	45	45	47	-4.26%	-6.00%
32	LDBP	Kiln	150	0	0	0	0	0	0	32	42	0	42	-	-
33	CP#2	Kiln#1	150	17	46	32	35	37	32	31	35	31	37	82.35%	-19.57%
34	CP#2	Kiln#2	150	30	40	37	33	36	34	33	32	32	37	6.67%	-7.50%
35	CP#2	Kiln#3	150	28	36	36	32	33	36	35	31	31	36	10.71%	0.00%
36	CP#2	Kiln#4	150	26	38	28	31	35	34	30	34	28	35	7.69%	-7.89%
37	CP#2	Kiln#5	150	41	48	46	45	48	47	44	40	40	48	-2.44%	0.00%
38	CP#2	Kiln#6	150	0	47	47	0	44	46	46	48	0	48	#DIV/0!	2.13%
39	CPP#1	MP Boiler#1	100	20	40	s/d	s/d	s/d	s/d	s/d	s/d	s/d	s/d	-100.00%	-100.00%
40	CPP#1	MP Boiler#2	100	18	32	14	12	67	26	22	15	12	67	-33.33%	109.38%
42	CPP#1	HP Boiler#1	100	14	20	15	s/d	s/d	16	s/d	s/d	0	16	-100.00%	-20.00%
43	CPP#1	HP Boiler#2	100	10	20	16	14	15	14	18	18	14	18	40.00%	-10.00%
44	CPP#1	HP Boiler#5	100	12	25	s/d	18	17	20	88	s/d	0	88	-100.00%	252.00%
45	CPP#1	HP Boiler#6	100	15	29	16	s/d	s/d	s/d	20	25	0	25	-100.00%	-13.79%

Note: %Change is calculated for Lower limit and Upper limit of the range.
S/d – Under shutdown

Annexure - 4

Solid Waste Utilization in Rourkela Steel Plant

(April – September., 2025)

(Unit : %)

SN.	Parameter	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
		Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	Blast furnace slag	97.67	124.11	87.58	112.16	115.41	104.48	89.78	89.45	87.58	115.41	-10.33%	-7.01%
2	SMS slag	113.52	191.56	149.28	159.8	168	250.95	257.79	265	149.28	265	31.50%	38.34%
3	Lime dust	100	100	100	100	100	100	100	100	100	100	No change	No change
4	Blast Furnace flue dust	100	100	100	100	100	100	100	100	100	100	No change	No change
5	Blast furnace sludge	100	100	100	100	100	100	100	100	100	100	No change	No change
6	SMS Sludge	162.99	333.15	0	0	60.99	17.63	28.39	22.72	0	60.99	-100.00%	-81.69%
7	Broken Refractory/Fire clay bricks	100	100	100	100	100	100	100	100	100	100	No change	No change
8	Mill scale	100	100	100	100	100	100	100	100	100	100	No change	No change
9	Total Solid Waste	107.95	142.81	100.96	117.37	125.5	148.29	127.87	137.31	100.96	148.29	-6.48%	3.84%

Note: %Change is calculated for Lower limit and Upper limit of the range.

Annexure – 5

Benzo alpha Pyrene monitoring in Work Zone & Ambient Air

SN.	Type of Monitoring	Location	BaP in ng/m3	Norm in ng/m3
1.	Work Zone	Coke Oven Battery#6 – Oven Top	179	5000
2.	Work Zone	Coke Oven Battery#6 – Ram side	34.5	2000
3.	Work Zone	Coke Oven Battery#6 – Coke Side	27.4	2000
4.	Work Zone	Coke Oven Battery#6 – Qenching tower	8.31	2000
5.	Ambient Air Quality	Env. Engg. Building Roof Top	<1	1
6.	Ambient Air Quality	RDCIS Building Roof Top	<1	1
7.	Ambient Air Quality	RMHP Building Roof Top	<1	1
8.	Ambient Air Quality	PMPH Building Roof Top	<1	1
9.	Ambient Air Quality	BOD Plan Building Roof Top	<1	1
10.	Ambient Air Quality	TOP#2 Building Roof Top	<1	1
11.	Ambient Air Quality	Steel Township Sector#2	<1	1

Note : For uniformity all the figs. are given in nano grams/m3

Annexure – 6

Quality of final treated effluent going to river Brahmani from RSP
(April – September., 2025)

SN.	Parameter	Norm	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
			Min	MaX	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	pH	5.5 – 9.0	7.25	7.46	7.66	7.59	7.47	7.25	7.3	7.24	7.24	7.66	-0.14%	2.68%
2	Temperature	Shall not exceed 5°Cof input	27	27.6	26.8	28.1	25	25	30	30.2	25	30.2	-7.41%	9.42%
3	Total Suspended Solids (TSS)	100	14.8	15.6	28	14	21	21	18	18	14	28	-5.41%	79.49%
4	Oil & Grease	10	2	2.2	<5	<5	<5	<5	<5	<5	0	0	-100.00%	-100.00%
5	Ammonia as NH_4-N	50	6.72	12.88	11.74	9.54	13	6.8	6	3.8	3.8	13	-43.45%	0.93%
6	Total Kjeldahl Nitrogen	100	7.46	17.92	8.11	12.78	15	11.4	11	<10	8.11	15	8.71%	-16.29%
7	Free Ammonia	5	1.08	1.35	<0.5	1.2	1.14	1.3	1.1	<0.5	1.1	1.3	1.85%	-3.70%
8	Biochemical Oxygen Demand (BOD_3)	30	4	6	8	8	8	16	18	9	8	18	100.00%	200.00%
9	Chemical Oxygen Demand (COD)	250	13.46	19.68	22	23	27	85	65	9	9	85	-33.14%	331.91%
10	Phenol	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	No change	No change
11	Cyanide	0.2	0.01	0.03	0.02	0.02	0.04	0.03	0.04	0.009	0.009	0.04	-10.00%	33.33%
12	Fluoride (as F)	2	1	1.2	1.4	<0.5	1.3	0.6	0.5	0.6	0.5	1.4	-50.00%	16.67%
13	Dissolved Phosphates	5	0.142	0.2	<5	<5	<5	<5	<5	<5	<5	<5	-100.00%	-100.00%
14	Sulphide (as H2S)	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	No change	No change
15	Manganese	2	0.1	0.18	<0.25	<0.25	<0.25	<0.25	0.3	<0.25	0.3	0.3	200.00%	66.67%
16	Nitrate Nitrogen (NO3-N)	10	0.2	0.28	<5	<0.5	<5	<5	<5	<5	0	0	-100.00%	-100.00%
17	Iron (a Fe)	3	1.02	2.11	2.1	1.04	1.24	1.5	1.2	0.68	0.68	2.1	-33.33%	-0.47%

% Change is calculated based on Lower & Upper limits of range -- All units are in mg/lit except pH

Annexure – 7
Ground Water Quality at Waste Disposal Sites
(April – September., 2025)

1) Location of Sampling : Sitalpara Dump yard

SN.	Parameter	Norm	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
			Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	pH	6 – 8.5	6.89	7.26	7.56	7.16	7.2	7.49	7.42	7.31	7.16	7.56	3.92%	4.13%
2	Turbidity (NTU)	5	0.8	1.1	<1	<1	<1	<1	<1	<1	0	0	-100.00%	-100.00%
3	Total Hardness as $CaCO_3$	300	124	136	120	134.28	132	185.6	159	143	120	185.6	-3.23%	36.47%
4	Iron	0.3	0.19	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0	0	-100.00%	-100.00%
5	Chlorides	250	27.99	30.99	25	75.16	28	47.3	41	32	25	75.16	-10.68%	142.53%
6	Fluoride	1	0.2	0.23	<0.1	<0.1	<0.1	<0.1	0.18	0.14	0.14	0.18	-30.00%	-21.74%

(All units are in mg/lit except pH & Turbidity)

2) Location of Sampling : Blast Furnace Dump yard

SN.	Parameter	Norm	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
			Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	pH	6 – 8.5	7.04	7.24	7.6	7.16	7.69	7.42	7.5	7.34	7.16	7.69	1.70%	6.22%
2	Turbidity (NTU)	5	0.7	1	<1	<1	<1	<1	<1	<1	0	0	-100.00%	-100.00%
3	Total Hardness as $CaCO_3$	300	118.78	132	150	122.2	155	164	156	184	122.2	184	2.88%	39.39%
4	Iron	0.3	0.17	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0	0	-100.00%	-100.00%
5	Chlorides	250	27.39	28.99	28	65.14	30	54.2	51	28	28	65.14	2.23%	124.70%
6	Fluoride	1	0.2	0.22	<0.1	<0.1	0.15	<0.1	<0.1	0.18	0.15	0.18	-25.00%	-18.18%

(All units are in mg/lit except pH & Turbidity)

% Change is calculated based on Lower & Upper limits of range

Annexure-7a

Ground Water Table Levels

SN.	Location of bore hole	Direction	Latitude	Longitude	Depth of Water Table from Ground Level (mtr.)	
					Dec,2024	May,2025
1.	Near FMM Old Time Office	North	22°21'9 N	84°85'67 E	2.9	2.96
2.	Near Samskar Gate	North East	22°13'13 N	84°52'1 E	4.13	4.18
3.	SSSY	East	22°13'6 N	84°54'15 E	3.25	3.8
4.	SLF	South East	22°13'6 N	84°54'11 E	5.75	7.92
5.	WT-14	South	22°12'27 N	84°54'13 E	4.4	4.9
6.	FP Gate	South West	22°11'16 N	84°51'56 E	1.5	1.28
7.	Near New Plate Mill	West	22°12'14 N	84°50'15 E	3.23	3.22
8.	SGP Gate	North West	22°11'49 N	84°50'33 E	4.3	4.34

Annexure-8

OFFICE OF THE DIVISIONAL FOREST OFFICER,
ROURKELA FOREST DIVISION.

FAX & Phone No. 0661-2664637, E-mail : dforourkela@yahoo.co.in

No. 724 /4F (Misc.) Dt. 8/2/08

To

The Asst. General Manager (Horticulture),
Steel Authority of India Ltd., Rourkela Steel Plant,
Rourkela – 769 011.

Sub: Your request for authenticating the list of Flora & Fauna (As compiled through field survey and literature survey) within 7 (seven) Km radius of Rourkela Steel Plant. At – Rourkela, Orissa.

Ref: Your Letter No. Hort. – 2007-08 / 835 Dt. 07.04.2007.

Sir,

With reference to the above, the list of Flora & Fauna prepared on the basis of literature and field survey within a radius of 07 Km around the Plant site is authenticated. The list of Flora & Fauna received along with your above letter is enclosed herewith.

Encl: As above.

Yours faithfully,

Divisional Forest Officer,
Rourkela Forest Division.

Annexure - 9

Fugitive emission (SPM) levels monitored inside RSP (Shop Floor)

(April – September., 2025)

SN.	Dept	Monitoring Location	Norm (µg/m3)	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
				Min	Max	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max
1	Blast Furnace#5	Cast House	4000	1760	2053	1903	1920	1953	1896	1990	2026	1896	2026	7.73%	-1.32%
2	Blast Furnace#5	Cast House	4000	1263	1895	2110	2130	1930	1910	1959	1998	1910	2130	51.23%	12.40%
3	Steel Melting Shop#1	Infront of BOF	4000	1622	2036	1910	1887	2060	1980	1986	1990	1887	2060	16.34%	1.18%
4	Steel Melting Shop#2	Infront of BOF	4000	1270	1858	1862	1896	1719	1680	1789	1775	1680	1896	32.28%	2.05%

(Units : µg/m3)

% Change is calculated based on Lower & Upper limits of range

Annexure-10

Rourkela Steel Plant
Status of the Implementation Schedule

SN.	CONDITION	IMPLEMENTATION SCHEDULE
1.	Rebuilding of Coke Oven Batteries	RSP has 6 no. of coke oven batteries. Battery No. 1, 2, 3, 4 & 5 have been rebuilt & commissioned in the years 2007, 2024, 2016, 2010 & 2000 respectively. Battery No. 6 is a new Green field Battery which was commissioned on 01/04/2014, under this Expansion Project.
2.	Monitoring of VOCs, PAH and BaP in stacks and ambient air.	PAH and BaP in the Coke Oven area are being monitored once in a year. VOCs in Coke Oven Stacks, ambient & work zone were monitored and analysis results along with data interpretation are given at Annexure- 1 & 5.
3.	Monthly report covering Stack Emissions, Ambient air quality and Waste utilization	Reports are being sent to SPCB & CPCB since April, 2008 onwards every month, regularly. Six monthly reports are being sent to MoEFCC regularly.
4.	Monitoring of Ground water quality at waste disposal sites – once in six months	Ground water quality at waste disposal sites is being monitored and the six monthly report of ground water quality along with data interpretation is given at Annexure-7.
5.	Enhancement of waste utilization to 90%.	Blast Furnace Slag : In-house Slag granulation facilities have already been installed in all Blast Furnaces viz., BFc No. 1, 4 & 5. The granulated slag is being sent to cement plants for production of slag cement. The present BFc Slag utilization is more than 100% . SMS Slag : State of the art technologies have been adopted in steel making so that the SMS slag generation rate is minimized. The SMS slag is being utilized for Sinter Making through base mix route, charged into Blast Furnaces directly to replace lime stone and also used for pavement making and rail ballast and also used for selling to outside parties and reclaiming low lying areas inside plant premises. Fly Ash : There is no additional fly ash generation after commissioning of this Expansion project as the additional power is being obtained from Top Recovery Turbo Generator of BFc#5, Power Blowing Station of Blast Furnace No. 5 (36 MW), Back Pressure Turbo Generator of Coke Oven Battery No.7 - CDCP and remaining 110 MW power will be purchased from State Grid. As per the present agreement with NTPC, the joint venture power company NSPCL is managing the fly ash generated from captive power plant of RSP. The fly ash will be utilized for dyke height raising of existing Ash Ponds, given to NHAI for road making and utilized for mine void filling. The fly ash is also being offered to local entrepreneurs free of cost.
6.	Development of Green Belt to cover 33% of the total area in and around the plant.	RSP has already developed Greenbelt in 2168.28 Ha. out of total land of 6527.48 Ha. which is coming to 33.22 % of the total area. RSP has planted more than 51 lakh trees so far including 30,508 no. of saplings planted during April – Sept., 2025.
7.	Development of Rain water harvesting systems.	16 no. of Rain Water harvesting systems units have been constructed and put into operation.

Annexure-11

STEEL AUTHORITY OF INDIA LIMITED
Rourkela Steel Plant
Rourkela - 769 011, Orissa, India

MODERNISATION CUM EXPANSION OF ROURKELA STEEL PLANT

PUBLIC NOTICE

Ministry of Environment and Forests (MoEF), Government of India, has accorded Environmental Clearance to Rourkela Steel Plant for its Modernisation cum Expansion Proposal on **29th January 2008**. Copies of the Environment Clearance letter are available with State Pollution Control Board and the same can also be seen at http:/envfor.nic.in.

Date : 04/02/2008
Place : Rourkela

for Rourkela Steel Plant
Sd/- G.M. (Projects)

Registered Office: Ispat Bhawan, Lodi Road, New Delhi 110 003

There's a little bit of SAIL in everybody's life

TIMES OF INDIA, 7th February 2008.
BHUBANESWAR PUBLICATION.

ଭାରତୀୟ ଇସ୍ପାତ ପ୍ରାଧିକରଣ ସଂସ୍ଥା
ରାଉରକେଲା ଇସ୍ପାତ କାରଖାନା
ରାଉରକେଲା - ୭୬୯ ୦୧୧, ଓଡିଶା, ଭାରତ

ରାଉରକେଲା ଇସ୍ପାତ କାରଖାନାର ଆଧୁନିକୀକରଣ ଓ ସମ୍ପ୍ରସାରଣ
ସାଧାରଣ ବିଜ୍ଞପ୍ତି

ଭାରତ ସରକାରଙ୍କ ଜଙ୍ଗଲ ଓ ପରିବେଶ ମନ୍ତ୍ରଣାଳୟ, ୨୦୦୮ ଜାନୁୟାରୀ ୨୯ ତାରିଖରେ ରାଉରକେଲା ଇସ୍ପାତ କାରଖାନାର ଆଧୁନିକୀକରଣ ଓ ସମ୍ପ୍ରସାରଣ ପାଇଁ ପର୍ଯ୍ୟାବରଣଗତ ଅନୁମତି ପ୍ରଦାନ କରିଛନ୍ତି । ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିୟନ୍ତ୍ରଣ ବୋର୍ଡରେ ଏହି ଅନୁମତି ପତ୍ର ଉପଲବ୍ଧ ଏବଂ ଏହାକୁ http:/envfor.nic.inରେ ମଧ୍ୟ ଦେଖାଯାଇ ପାରିବ ।

ତା : ୦୪/୦୨/୨୦୦୮
ସ୍ଥାନ : ରାଉରକେଲା

ରାଉରକେଲା ଇସ୍ପାତ କାରଖାନା ପକ୍ଷରୁ
ସ୍ୱା/- ଜି.ଏମ୍ (ପ୍ରୋଜେକ୍ଟ)

ପଞ୍ଜୀକୃତ କାର୍ଯ୍ୟାଳୟ - ଇସ୍ପାତ ଭବନ, ଲୋଡି ରୋଡ, ନୂଆଦିଲ୍ଲୀ - ୧୧୦୦୦୩

There's a little bit of SAIL in everybody's life

SAMAJ, 7th February 2008
Rourkela Publication.

Annexure-12

GM Env Mgmt

Steel Authority of India Limited
Rourkela Steel Plant
Rourkela

ENVIRONMENTAL ENGG. DEPTT. DY. NO. 1684 DATE 25/6/07 SAIL, RSP

OFFICE OF THE EXECUTIVE DIRECTOR (WORKS)

Ref. No. ED(W)/SO-20 Date: 23.06.2007

In-principle Sanction Order No. 07/1/04/011/0032

Kind approval (In-principle) of the SAIL Board, during its 324th meeting held on 21st May 2007, is hereby conveyed the proposal of **Expansion of Rourkela Steel Plant to 4.2 Mtpa of Crude Steel at an indicative cost of Rs. 7,668 Crores (Rupees Seven Thousand Six Hundred Sixty Eight Crores only)** [net of CENVAT benefit of Rs. 924 Crores] with base date of 1st Qtr. '07 excluding schemes worth Rs. 211 Crores under implementation and Rs. 1066 Crores approved "In-principle" earlier, as per the Capital Cost Estimate enclosed in Annexure-IIA.

Further SAIL Board has approved RSP's proposal for authorizing Managing Director, RSP to incur an expenditure upto Rs. 200 Crores towards Enabling/Preliminary Works.

This issues as per the DO Letter, Ref. No. Proj/04/0300/00, dated 31.05.2007, received from Project Directorate, SAIL Corporate Office.

D.K.Ghosh
23.06.07

(D.K.Ghosh)
Manager (Admn.)
ED(Works)'s Sectt.

DO at
AGM (S&B)
M (VVRao)
BN 24/6

Encl: As above

Distribution:

1. Director I/c (M&HS)
2. ED (Projects)
3. ED (F&A)
4. ED (MM)
5. ED (P&A)
6. ED (MS)
7. All GMs
8. DGM (Tech.) MD's Sectt.
9. DGM (Tech.) ED(W)'s Sectt.
10. DGM I/c (MM) Projects
11. DGM (F&A) Projects
12. AGM (AMR-PMC)
13. SM (F&A) AMR & CB
14. SM (F&A) CA
15. Sanction File

Annexure – 13

Quality of final treated effluent going to river Brahmani from RSP

(April – September., 2025)

SN.	Parameter	Norm	Oct.24 - Mar.,25		Apr. - Sept.,2025						Apr. - Sept.,2025		%Change w.r.t. previous Half	
			Min	MaX	Apr	May	June	July	Aug	Sept	Min	Max	Min	Max.
1	pH	5.5 – 9.0	7.25	7.46	7.66	7.59	7.47	7.25	7.3	7.24	7.24	7.66	-0.14%	2.68%
2	Temperature	Shall not exceed 5°Cof input	27	27.6	26.8	28.1	25	25	30	30.2	25	30.2	-7.41%	9.42%
3	Total Suspended Solids (TSS)	100	14.8	15.6	28	14	21	21	18	18	14	28	-5.41%	79.49%
4	Oil & Grease	10	2	2.2	<5	<5	<5	<5	<5	<5	0	0	-100.00%	-100.00%
5	Ammonia as NH_4-N	50	6.72	12.88	11.74	9.54	13	6.8	6	3.8	3.8	13	-43.45%	0.93%
6	Total Kjeldahl Nitrogen	100	7.46	17.92	8.11	12.78	15	11.4	11	<10	8.11	15	8.71%	-16.29%
7	Free Ammonia	5	1.08	1.35	<0.5	1.2	1.14	1.3	1.1	<0.5	1.1	1.3	1.85%	-3.70%
8	Biochemical Oxygen Demand (BOD_3)	30	4	6	8	8	8	16	18	9	8	18	100.00%	200.00%
9	Chemical Oxygen Demand (COD)	250	13.46	19.68	22	23	27	85	65	9	9	85	-33.14%	331.91%
10	Phenol	1	0	0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	0	No Change	No Change
11	Cyanide	0.2	0.01	0.03	0.02	0.02	0.04	0.03	0.04	0.009	0.009	0.04	-10.00%	33.33%
12	Fluoride (as F)	2	1	1.2	1.4	<0.5	1.3	0.6	0.5	0.6	0.5	1.4	-50.00%	16.67%
13	Dissolved Phosphates	5	0.142	0.2	<5	<5	<5	<5	<5	<5	0	0	-100.00%	-100.00%
14	Sulphide (as H2S)	2	0	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0	0	#DIV/0!	#DIV/0!
15	Manganese	2	0.1	0.18	<0.25	<0.25	<0.25	<0.25	0.3	<0.25	0.3	0.3	200.00%	66.67%
16	Nitrate Nitrogen (NO3-N)	10	0.2	0.28	<5	<0.5	<5	<5	<5	<5	0	0	-100.00%	-100.00%
17	Iron (a Fe)	3	1.02	2.11	2.1	1.04	1.24	1.5	1.2	0.68	0.68	2.1	-33.33%	-0.47%

% Change is calculated based on Lower & Upper limits of range -- All units are in mg/lit except pH

Annexure-14

Rourkela Steel Plant
RSP's CSR Initiatives during 2024-25

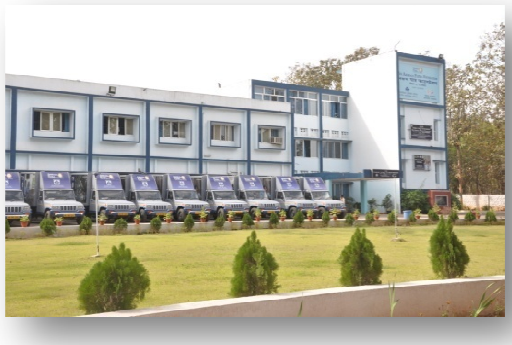
Bringing cheers to the most marginalized local stake holders in and around Steel Plant is the main objective of RSP which is being fulfilled through CSR activities. RSP established a separate department called "CSR" for carrying out various activities under Corporate Social Responsibility. The main focus of CSR activities are on,

A) Education
B) Rural/Infrastructure Development
C) Healthcare
D) Income generation & livelihood
E) Water supply and sanitation
F) Women empowerment
G) SAMVARDHAN (Rural Sports)
H) Synergy(Culture)
I) Awards & Accolades
J) New Initialives
K) Social Security

The different developmental activities taken up under different heads are,

a) EDUCATION:

- **Nutrition & Education : The Akshaya Patra Project, Rourkela, a CSR endeavor of RSP regarding hygienic and nutritious mid-day meals for students, continued to supply good quality mid-day meals to schools in Rourkela Municipality, Bisra Block & Lathikata Block.**



- **Special School: "Deepika Ispat Sikshya Sadan", a special school functioning for underprivileged children of Rourkela and neighboring area (Class-1 to 10) with free education, uniform, educational kits, books & mid-day mid-day-meals. Total students enrolled in AY 2023-24 and continuing is 898.**
- **Scholarships : Underpriviledged Scholarship provided to 200 underprivileged students of peripheral areas of RSP @ Rs,10,800/- p.a. for the classes I-V and @ Rs.12,000/- p.a for the classes VI-XII for the Academic Year 2021-22. Merit based cash awards were given to 463 students of govt schools to encourage them.**
- **Distribution of Professional Scholarship (continuing case) @Rs.30,000/- student (FY 2020-21, 2021-22, 2022-23 & 2023-24) for 32 cases**

- **Multilingual Vocabulary book Over 2085 students from 27 Govt schools of the periphery were supported through equity in educational opportunities to first generation tribal learners through the development of an unique Multilingual Vocabulary book. The book uses a base nodal language Odia to link and connect words in 6 different tribal languages like Ho, Santhali, Munda, Oraon, Sadri and Khadia for hundreds of easy learning of young tribal children**

b) RURAL / INFRASTRUCTURE DEVELOPMENT

- **ESC Jobs related to New HSM Project:**
  - **Construction of concrete drains at Kadamtola (172 mtrs) in Bisra block**
  - **Bituminous road laying at Ushra Colony (Kuarmunda Block) 1.9km (0.6km completed), and at Lindra village (Nuagaon block) for approx 0.75 km, and 500 mtrs at Dalposh (Bisra) and 1.3 km at Jambahal (Nuagaon Block) and 700 mtrs at Jagdishpur (Kuarmunda block)**
  - **Construction of Community Centres at Badmarain (Lathikata Block) and Tangarpali, (Nuagaon Block), Dumerta (block Bisra), Fuljhar village (Block Nuagaon) completed.**
  - **Tubewells constructed at Barkani (2 nos.), 1 no.at Hathidarsha, and 1 no. at Jhareikela**
  - **Pindi constructed at Cinematoli, Barkani**
  - **Classrooms constructed at Manko, Sanbambua and Sandalki.**
  - **Toilets provided at Udusu primary school, and Girijatola.**
  - **Crematorium at Bhalulata constructed.**
  - **193 nos. Solar Street Lights were installed in peripheral villages of RSP i.e. in Khuntgaon, Bagdega, Jhirpani, Jhandapahad etc. and other peripehral areas.**
- **Repair/Renovation of Scout Bhawan, Sector-1 done.**
- **Washroom facilities at Baikuntha Ghat completed.**

c) HEALTHCARE

- **Keeping nutrition as a topmost prerogative for CSR, the MoU for financial support from RSP CSR for operational expenditure to provide Midday Meals has been signed for 3 finanacial years by RSP SAIL and TAPF in Nov 2024. This shall benefit 35000 govet school students of RSP's periphery daily.**

- **Medical Camps & Health centres:**
  - **Free bi-weekly medical aid centres operated in 25 peripheral locations (i.e. 50 camps a week).**
  - **Free health centres operated at Ispat Sanjeevani, Sector-6; Chikatmati MSV & Jalda RS colony six days a week.**
  - **Health promotional activities are continuing in slum areas of township periodically through Deepika Mahila Sanghati.**
  - **Reproductive & Child Health (RCH) and Family Welfare (FW) activities at IGH are being conducted.**
  - **Mobile Medical Unit is in operational in the slum areas of Steel Township, six days a week, providing basic medical facilities to the poor and needy patients.**

- **The Multi disciplinary Health Camps held at revenue blocks were organized jointly by RSP-CSR and IGH. For FY 23-24, a total no. of 1204 beneficieries got treatment from these camps and 207 nos. patients were referred to IGH for further investigation and free treatment. In FY 24-25, 2 nos. of Multi disciplinary**

Health Camps were held so far at peripheral revenue blocks (Bisra & Nuagaon) which was attended by 459 patients and referral cases to IGH were 81 nos.

- **Motorized Tri-Cycles and various other assistive devices were distributed to Persons with disabilities (PwDs) of Bisra, Kuarmunda, Lathikata. Nuagaon Blocks by RSP-CSR in association with ALIMCO. 1631 aids & assistive devices were provided to 691 nos. of poor and needy PwDs & Senior Citizens under this scheme in 2024.**

d) INCOME GENERATION & LIVELIHOOD:

- **Under employability skills enhancement programs in health sector, the training programs conducted at IGH included the followings:**
  - **Medical Attendant Training**
  - **Advanced Specialized Nursing Training**
  - **Advanced Physiotherapy Training**
  - **Hospital administration training**
  - **Anesthesia/OT assistant Training**
  - **Data entry operator/Medical transcription training**
  - **Medical Lab. Technician Training**
  - **Radiographer Training**
  - **Critical Care Nursing Training**
  - **Pharmacist Training.**

- **Financial Support for 7 Vermipits were also provided to 7 SHG groups whose members were trained under the same programme.**

- **Employability Coaching of unemployed youth (Dip & ITI) : Under the Project "SAMARTH" underprivileged unemployed ITI & Diploma passed out students of peripheral areas of RSP & OGoM have been sponsored to KIIT-ITI for 6 months competence enhancement training programme to help them improve their employability skills. Under this scheme 40 students were sponsored for the employability coaching for better job prospects.**

- **Training at NSIC : 16 nos. underprivileged youth (both male & female) of direct impact zones of RSP were sponsored to the National Small Industries Corporation Ltd.(NSIC), Section-15, Rourkela, for Skill Development Training Programme in the trades of Electrician. Another 16 women were trained in Assistant Beautician course and 32 persons in the Asst Computer Operator Course at NSIC.**

- **Sponsoring Techinical Courses: Total 15 nos. underprivileged students (3 nos. from DISS 10th pass out students and 12 nos. KISS matric pass out tribal students of Sundargarh District) have been sponsored to KIIT-ITI, Bhubaneswar, for pursuing 2 years ITI course in various ITI trades.**

- **FTBI: Four nos. of startups in FY 23-24 and Six nos from FY 24-25, were selected and sponsored to FTBI, NIT-Rourkela.**

- **Mushroom Cultivation Training: 10 nos. Mushroom Cultivation Training programs in 2024 were conducted for peripheral villagers to augment their Income Generation Skills. Total 200 beneficiaries benefitted by learning mushroom production**

- **CIPET: 30(Thirty) underprivileged youth from the district of Sundargarh are to be sponsored to CIPET, Bhubaneswar, for a 6 month course in Machine Operator Plastic Processing (MOPP) with assured job placements.**

- **Stocking of fingerlings at Mandira Dam Reservoir area: More than 9.25 Lakh Fingerlings were stocked at Mandira Dam Reservoir for the fisherman community of mostly resettled population. Impact study in 2024 has shown both qualitative and quantitative improvement of catch.**

e) WATER SUPPLY & SANITATION

- **Repair of Tube wells/Dug wells in different slum areas in Rourkela Industrial Town is in progress.**
- **Provision of 8 nos. of RO drinking water kiosks for the public**

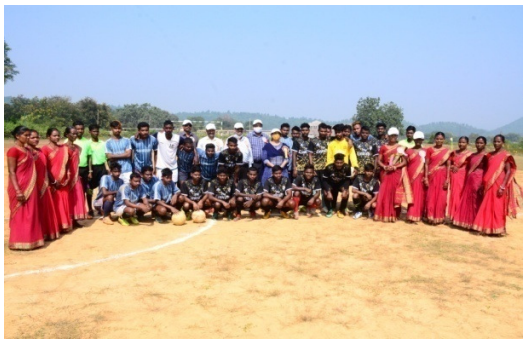
f) WOMEN EMPOWERMENT

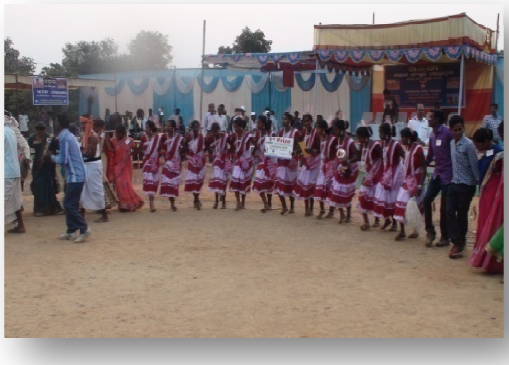
- **Handloom Centre: Handloom training is continuing at the Handloom Centre, Sector-2. The girls from peripheral areas are being trained in identifying yarn, separation of hank, finding & joining loose ends, usage of Chatta & Asari, Bobbin & Charkha, Bobbin machine, Warping Machine, starching, reed joining, sizing, dyeing, weft lining, reed fitting in looms, weaving, vadi preparation, tie & dye, weaving. The trainees are now able to weave handkerchiefs, fabric, and different types of fabrics including sarees. Total 8 trainees have been selected in 2024 to be trained in Handloom training.**
- **Training cum Production Centre (TCPC): 15 underprivileged women of Kuarmunda Block are being trained exclusively in Sewing & stitching and established a TCPC Centre at Baniguni in Kuarmunda Block for their sustainable income generation. The products of the TCPC Centre have been provided market linkages for better sale. Additional training for appliqué has also been provided.**
- **Food Processing Training: 15 underprivileged women of Bisra Blocks were trained in various food processing methods at IPD, through SRI,Ranchi, for a sustainable source of income. The trained beneficiaries have started producing & selling the products in local market.**
- **Mel Millap Programme – an interactive session for trained women SHGs under CSR initiatives from periphery villages. This was to ensure focused interventions at grassroot level and to get a clear feedback from beneficiaries.**

Under ESC: Organic Farming: An MoU has been signed between RSP-CSR & NIT-Rourkela in 2021-22 for a period of 4 years to promote organic farming in the adjoining peripheral villages of RSP. In order to enhance soil quality and increase production and productivity of the agricultural produce. In 2024, so far, 250 women farmers of peripheral villages have been trained in FY 23-24 in 5 training programmes for preparation and use of vermicompost, organic pesticides, irrigation techniques etc. in 2024.

g) SAMVARDHAN (Rural Sports):

Samvardhan Rural Football Tournament Final Meet 2023-24 with 2 teams from each block i.e. Kuarmunda, Nuagaon, Bisra & Lathikata were selected to play the final round at Ispat stadium on 07/02/2024 after mobilizing 128 teams at the rural level from revenue blocks and participation of over 15000 villagers in one complete Samvardhan initiative. The event was successfully organized at Ispat Stadium,Sector-6. The SHG groups helped coordinate the vents at the rural level. For FY 2024 – 25, zonal level Samvardhan have been organized (Sonaparbat-Lathikata Block & Mandap-Nuagaon Block) at the two blocks where 64 teams in total have participated so far.





h) SYNERGY (Culture):

The Lok Samskrutik Mahotsav Final 2023-24 was organized after mobilizing 120 teams and 15000 villagers in four revenue blocks. The top 3 top teams from each Block (i.e Kuarmunda, Bisra, Nuagaon and Lathikata) participate in the final round at Civic Cenre, Sector-19, Rourkela where Senior Officials of RSP and hundreds of villagers along with Zonal Level organizing SHG Groups were present.
For FY 2024-25- 2 zonal level synergies were organized at Baraigada-Nuagaon Block & Teliposh-Kuarmunda Block. Total 60 dance groups participated in the event.

i) Awards & Accolades

- **Golden Peacock Award for CSR initiatives at RSP in Steel Sector (FY 2023-24)**
- **PRCI Award for CSR Schemes for Childcare initiatives at RSP (FY 2023-24)**
- **ASSOCHAM award for CSR Community Impact by RSP (FY 2023-24)**
- **National Media Conclave Award for CSR at RSP (FY 2023-24)**

j) New Initiatives

- **Construction of Crematorium at Bhalulata (completed)**
- **Impact Study of High Value CSR Projects for FY 22-23 & FY 23-24 is in progress**
- **CSR Support has been provided for construction of classrooms at SLS Memorial residential School Mayurbhanj benefitting tribal girls from underprivildged communities.**

k) Social Security:

- **Old Age Home: The Sr.Citizen Care Home, Sector-4, Rourkela, is running successfully.**
- **Midday meals: for three special schools for differently abled and underprivileged children**

Annexure-15

Special Noise Monitoring at Ambient Air Stations at Ground Level

(April – September., 2025)

Location	Period	Min./ Max	Noise	Noise
	Units		dB(A)	dB(B)
EED Building	Oct., 2024- Mar.,2025	Min	71.7	62
		Max	72.6	63
	Apr.,25 - Sept.,25	Min	60.2	60
		Max	71.6	62.6
	% change w.r.t. previous Qtr.	Min	-16%	-3%
		Max	-1%	-0.01
RDCIS Building	Oct., 2024- Mar.,2025	Min	71.6	61.1
		Max	72.4	61.8
	Apr.,25 - Sept.,25	Min	71.8	60.2
		Max	73	62.2
	% change w.r.t. previous Qtr.	Min	0%	-1%
		Max	1%	-3%
PMPH Building	Oct., 2024- Mar.,2025	Min	72	61.4
		Max	72.5	61.7
	Apr.,25 - Sept.,25	Min	71.8	60.2
		Max	72.5	61.6
	% change w.r.t. previous Qtr.	Min	0%	-2%
		Max	0%	0%
BOD Building	Oct., 2024- Mar.,2025	Min	71.5	61.9
		Max	72.5	62.7
	Apr.,25 - Sept.,25	Min	7.5	61.2
		Max	72.9	62.7
	% change w.r.t. previous Qtr.	Min	-90%	-1%
		Max	1%	0%
	Norm		75	70

Location	Period	Min./ Max	Noise	Noise
	Units		dB(A)	dB(B)
TOP-II Building	Oct., 2024- Mar.,2025	Min	72.3	62.1
		Max	72.8	62.7
	Apr.,25 - Sept.,25	Min	70.7	60.2
		Max	72.4	62.7
	% change w.r.t. previous Qtr.	Min	-2%	-3%
		Max	-1%	0%
RMHP Building	Oct., 2024- Mar.,2025	Min	71.5	61.1
		Max	72.3	61.7
	Apr.,25 - Sept.,25	Min	71.2	61.2
		Max	73.1	62.6
	% change w.r.t. previous Qtr.	Min	0%	0%
		Max	1%	1%
	Norm		75	70

Annexure-16

Work zone dust special monitoring

(April – September., 2025)

SN.	Department	Location of monitoring	Date of Monitoring	PM10 Dust concentration in mg/m3	Noise dB(A)
1	SMS#1	GCP ID Fan area	19.04.2025	2.7	88.9
2		Pit side area	19.04.2025	3.1	88.6
3		CCM-1 LHF	19.04.2025	2.5	82.0
4		LD Stage 7.5 mtr	19.04.2025	3.6	89.0
5		SSM Steel area	19.04.2025	3.0	89.3
6	T &RM	CPP#1 Bunker	21.07.2025	8.12	88.2
7		RMPH Track Hopper	21.07.2025	7.99	88.0
8		SP#2 Bunker (Coke Breeze)	21.07.2025	8.10	87.9
9		SP#2 Bunker (Return Fines)	21.07.2025	8.86	88.3
10		Marshaling Yard (Stock Yard)	21.07.2025	8.59	88.8
11	RS(E)	De dusting Blower no-1 at Light fitting section	25.09.2025	1.9	88.2
12		De dusting blower no-2 at heavy fitting section	25.09.2025	2.1	88.5

Annexure-17

Expenditure on various Pollution Control Systems installed in different plant units

SN.	Department	Pollution Control Equipment installed	Expenditure in Rs. Lakhs
1.	Coke Oven Battery#6	Land Based Pushing Emission Control System	34400
2.		Multi Cyclone and Bag Houses for CDCP	
3.		Dust suppression system in Wagon Tippler	
4.		Wet fog dust suppression system in coke handling system	
5.		Zero leak doors	
6.		HPALA system and on main charging	
7.		Door and Door frame cleaning machines	
8.		H_2S recovery system	
9.		Heat recovery in CDCP for power generation through Back Pressure Turbine.	
10.	Sintering Plant#3	Process ESPs – 2 units	4700
11.		Plant De-dusting ESP	
12.		Bag houses for lime unit	
13.		Bag house for granulator	
14.	Blast Furnace#5	Cast House De-fuming systems - 2 no. of Electro Static Precipitators	8000
15.		Stock House de dusting system – ESP	
16.		Wet fog dust suppression system	
17.		Dust catcher	
18.		Wet scrubber	
19.		Clarifiers – 2 nos.	
20.		Belt press systems – 2nos.	
21.	BOF#3 & Caster#3 in Steel Melting Shop#2	Dog House with 2 no. of ESPs	12000
22.		2 no. of Bag Houses for LHF#2A & #2B	
23.		ESP for LHF#3	
24.		Bowl classifier	
25.		Clarifiers	
26.		Belt press systems	

SN.	Department	Pollution Control Equipment installed	Expenditure in Rs. Lakhs
27.	New Plate Mill	Scale pit with Oil skimmers	10
28.		Sedimentation tank with Oil skimmer – 2 sets	
29.		Pressure Filters	
30.		Clarifloculator	
31.		Sludge drying bed – 2 compartments	
32.	Calcining Plant#2 Expansion	Bag Houses – 6 nos.	10
33.	OBBP Expansion	Dry fog dust suppression systems	500
	Total		61600

Annexure-18

List of ESPs installed in different departments and PG Test Status

SN.	ESP located at	PG Test carried out	Efficiency
1)	Sintering Plant#3 – Process ESP	Yes	99.9%
2)	Sintering Plant#3 - Plant Dedusting ESP	Yes	99.8%
3)	Blast Furnace No.5 – Cast House Defuming system – 2 nos.	Yes	99.8%
4)	Blast Furnace No.5 – Stock House	Yes	99.6%
5)	Captive Power Plant#1 – ESP provided to MP Boiler#3	Yes	99.6%
6)	Captive Power Plant#1 – ESP provided to HP Boiler#5	Yes	99.5%
7)	Captive Power Plant#1 – ESP provided to HP Boiler#6	Yes	99.5%

Annexure-19

Microfine dust generation from ESPs of Expansion Project

1)	**SP#3 Process ESPs**	**-- 30 TPD**
2)	**SP#3 Plant de-dusting ESP**	**– 15 TPD**
3)	**BFc Stock House ESP**	**-- 15 TPD**
4)	**BFc Cast House ESPs**	**-- 15 TPD**
5)	**SMS#2 LHF#3 ESP**	**– 5 TPD**
6)	**SMS#2 Dog House ESP**	**– 20 TPD**
	Total dust generation	**-- 100 TPD**

Annexure-20

1. Status of CREP Action Points September.,2025 -- Steel Plant

<table>
<tr><th>SN</th><th>CREP POINT</th><th>STATUS</th></tr>
<tr><td>1.</td><td>To meet the parameters PLD (% leaking doors), PLL (% leaking lids), PLO (% leaking offtake) of the notified standards under EPA within three years (By December 2005).

To rebuild atleast 40% of the coke oven batteries in next 10 years (Dec.,2012)</td><td>Complied. PLD, PLL & PLO levels for this month are;
<table>
<tr><th>BATTERY NO.</th><th>PLD</th><th>PLL</th><th>PLO</th></tr>
<tr><td>Units</td><td>%</td><td>%</td><td>%</td></tr>
<tr><td>Battery # 1</td><td>7.8</td><td>Nil</td><td>NIL</td></tr>
<tr><td>Battery # 2</td><td>Nil</td><td>Nil</td><td>NIL</td></tr>
<tr><td>Battery # 3</td><td>6.8</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Battery # 4</td><td>8.0</td><td>Nil</td><td>NIL</td></tr>
<tr><td>Battery # 5</td><td>7.4</td><td>Nil</td><td>NIL</td></tr>
<tr><td>Battery# 6</td><td>3.4*</td><td>NIL</td><td>NIL</td></tr>
<tr><td>NORM</td><td>10/5*</td><td>1</td><td>4</td></tr>
</table>
Complied. All 6 Coke Oven Batteries have already been rebuilt and COB#6 is a newly built battery. COB#2 has been rebuilt and pushing started on 15/11/2024</td></tr>
<tr><td>2.</td><td>Steel Melting Shop : Fugitive emissions – To reduce 30% within March, 2004 and 100% compliance with norms by March, 2008 (Including installation of secondary de-dusting facilities)</td><td>Being Complied.
The fugitive emission levels for this month ;
<table>
<tr><th>SMS#1</th><th>SMS#2</th><th>Norm</th></tr>
<tr><td>1986</td><td>1907</td><td>4000µg/m3</td></tr>
</table></td></tr>
<tr><td>3.</td><td>Blast Furnaces : Direct injection of reducing agents (CDI) by June, 2013.</td><td>CDI installed in all Blast Furnaces.</td></tr>
<tr><td>4.</td><td>Solid Waste Management :
• Utilization of BFc/SMS slag – 70% by 2004, 80% by 2006 & 100% by 2008.

Hazardous Waste Management :
• Charge of Tar Sludge/ETP sludge to Coke Ovens by June, 2003.
• Inventorisation of H/Waste as per the H/Waste (M&H) Rules, 1989 as amended from time to time and implementation of Rules by Dec., 2003.</td><td>BF’cs slag Utilization for the month of September’25 =99.01%
SMS Slag utilization for the month of September’25 = 265.93%

Complied.

Complied.</td></tr>
<tr><td>5.</td><td>Water Conservation / Water Pollution :
• To reduce Sp. Water consumption to 4.8 m3/TCS for flat product plants.
• To operate CO&BP plant efficiently to achieve the notified effluent discharge standards by July, 2004.</td><td>Complied.
Sp. Water Consumption for September’25 = 2.97 m3/TCS
Working effectively.</td></tr>
</table>

SN	CREP POINT	STATUS
6.	Installation of Online Stack monitoring systems by June, 2005. Installation of Online Ambient Air Quality Monitoring Stations by June, 2005.	Complied. Complied.
7.	To operate the existing pollution control equipment efficiently and to have proper record keeping of pollution control equipment's run hours, failure time and efficiency compliance with immediate effect. Compliance report to be submitted to CPCB/SPCB every three months.	Complied. Quarterly reports are regularly submitted. Qrt#2 report submitted. The next report will be submitted by 01.01.2026.
8.	Implementation of Life Cycle Assessment recommendations.	Complied.
9.	To take necessary steps for adopting the following clean technology measures to improve the performance; • Energy recovery of top Blast Furnace Gas. • Use of tar free runners linings. • Dedusting of cast house at tap holes, runners, skimmers, ladle and charging points. • Suppression of fugitive emissions by nitrogen gas or other inert gas. • To study the possibility of slag and fly ash transportation back to the abandoned mines to fill up the cavities through empty railway wagons when they return and its implementation. • Processing of waste containing flux and ferrous waste through waste recycling plant. • Implementation of rain water harvesting. • Reduction of Green House Gases by, ▪ Reduction in power consumption. ▪ Use of by product gases for power generation. ▪ Promotion of energy optimization technology including energy audit. • Up-gradation of Monitoring and Analysis facilities for Air & Water pollutants and also to impart training to manpower so that realistic data can be obtained. • To improve Housekeeping.	▪ Installed. ▪ Installed. ▪ Installed. ▪ Dust suppression systems installed. ▪ Studied. Not feasible for Rourkela Steel Plant. ▪ Being followed meticulously. ▪ Implemented in different areas. ▪ Regularly been practiced. By product gases are used in CPP#1 & Power Blowing Station for power generation. ▪ Energy audits are carried out regularly by qualified Energy Auditors of EMD. ▪ Environmental Engg. Laboratory has been provided with latest instruments for monitoring & analysis. Training is being provided to personnel on regular basis. ▪ A massive housekeeping drive is going on.

Status of CREP Action Points September 2025 -- Captive Power Plant#1 :

SN	CREP ACTION POINT	STATUS
1.	Implementation of environmental standards (emission and effluent) in non compliant power plants. Installation and commissioning of pollution control equipment by 31st December, 2005	Pollution control equipment has already been installed and the environmental standards are being met.
2.	For existing thermal power plants, a feasibility study shall be carried out by Central Electricity Authority (CEA) to examine possibility to reduce the particulate matter emissions to 100 mg/NM3. The studies shall also suggest the road map to meet 100 mg/NM3 wherever found feasible. CEA shall submit the report by March, 2004.	Not applicable.
3.	New/expansion power projects to be accorded environmental clearance on or after 01/04/2003 shall meet the limit of 100 mg/NM3 for particulate matter.	Not applicable.
4.	Development of SO2 and NOx emission standards for coal based plants by December, 2003; • New /expansion power projects shall meet the limit of SO2 and NOx by w.e.f. 01/01/2005. • Existing power plants shall meet the limit of SO2 and NOx w.e.f. 01/01/2006.	Complied.
5.	Install/active opacity meters/continuous monitoring systems in all the units by December 31st, 2004 with proper calibration system.	Continuous stack monitoring system with calibration arrangement was installed and commissioned in the stacks of HP Boilers & MP Boilers.
6.	Development of guidelines/standards for mercury and other toxic heavy metals emissions by December, 2003.	Not applicable.
7.	Review of stack height requirement and guidelines for power plants based on micro meteorological data by June, 2003	All the stacks are erected based on statutory clearance.
8.	Implementation of use of beneficiated coal as per GOI notification. Power Plants will sign fuel supply agreement (FSA) to meet the requirement as per the matrix prepared by CEA for compliance of the notification as short term measure. Options/mechanisms for setting up of coal washaries as a long term measure; • Coal India will set up its own washery. • State Electricity Board to set up its own washery. • Coal India to ask private entrepreneurs to set up washeries for CIL and taking washing charges. SEBs to select a private entrepreneur to set up a washery near pit head installation of coal beneficiation plant.	The matter was taken up with Coal India Limited who is our supplier.
9.	Power Plants will indicate their requirement of abandoned coal mines for ash disposal and Coal India/MOC shall provide the list of abandoned mines by June,2003 to CEA	Not feasible as the mines are too far from Rourkela.

SN	CREP ACTION POINT	STATUS
10.	Power plants will provide dry ash to the users outside the premises or uninterrupted access to the users within six months.	Dry fly ash loading systems are provided at Boilers. Fly ash is being given to the fly ash brick manufactures free of cost. Actions are being taken to encourage outsiders to take the fly ash.
11.	Power Plants should provide dry fly ash free of cost to the users.	Dry fly ash is being given free of cost.
12.	State PWDs/construction and development agencies shall also adhere to the specifications/schedules of CPWD for ash/ash based products utilization. MoEF will take up the matter with State Government.	Not applicable.
13.	i) New Plants to be accorded environmental clearance on or after 01/04/2003 shall adopt dry fly ash extraction or dry disposal system or medium (35 – 40 %) ash concentration slurry disposal system or lean phase with hundred percent ash water recirculation system depending upon site specific environmental situation. ii) Existing plants shall adopt any of the systems mentioned in 13(i) by December, 2004.	The treated water from ash ponds is being re-circulated.
14.	Fly ash mission shall prepare guidelines/manuals for fly ash utilization by March, 2004	Not applicable, however CPP#1 of RSP is utilizing fly ash for construction of dykes of ash pond and giving to the outside parties free of cost.
15.	New plants shall promote adoption of clean coal and clean power generation technologies.	Not applicable.