ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environment Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The General Manager I/C
SAIL ROURKELA STEEL PLANT
Environmental Engg. Deaprtment,
Rourkela Steel Plant
Rourkela - 769011.,,Sundargarh,Sikkim-769011

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/OR/IND/75723/2018 dated 08 Feb 2022. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC22A008OR110441**
2.	**File No.**	J-11011/66/2014-IA-II(I)
3.	**Project Type**	Modernization
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	3(a) Metallurgical industries (ferrous & non ferrous)
6.	**Name of Project**	Modernisation Cum Expansion of Sail - Rourkela Steel Plant for Enhancing Hot Metal Production from 4.500 MTPA to 4.855 MTPA, Crude Steel Production from 4.200 MTPA to 4.850 MTPA and Saleable Steel Production from 3.880 MTPA to 4.325 MTPA by Installing Coke Oven Battery#7, Steel Melting Shop#3, New Normalizing Furnace in New Plate Mill, New Oxygen Plant and Natural Gas Pipe Line Network Inside the Existing Plant Premises and Adopting Technological Measures in Existing Blast Furnaces for Enhancing
7.	**Name of Company/Organization**	SAIL ROURKELA STEEL PLANT
8.	**Location of Project**	Orissa
9.	**TOR Date**	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 30/03/2022

(e-signed)
Sundar Ramanathan
Scientist E
IA - (Industrial Projects - 1 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

This is a computer generated cover page.

This refers to your proposal no. IA/OR/IND/75723/2018 dated 08/02/2022 submitted through PARIVESH Portal seeking grant of **Environment Clearance (EC)** for the project mentioned above.

2. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is covered under category **'A'** of item **3(a) Metallurgical industries (ferrous & non-ferrous), 4 (b) Coke Oven Plants, and 2(b) Iron Ore Beneficiation,** and appraised at **Central level**.

3. Accordingly, the above-mentioned proposal has been considered in **1st meeting of Expert Appraisal Committee (Industry-1 Sector) held on 5 – 6th March, 2022**. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at https://parivesh.nic.in/.

4. The details of the proposal are as per the EIA report submitted by the proponent. The salient features of the proposal as presented during the above-mentioned meetings of EAC (Industry 1) are as under: -

<table>
<tr><th>S No</th><th>Particulars</th><th>Details</th></tr>
<tr><td>a.</td><td>Terms of Reference for undertaking EIA study</td><td>08/02/2021</td></tr>
<tr><td>b.</td><td>Period of baseline data collection</td><td>17th December, 2019 to 14th March, 2020</td></tr>
<tr><td>c.</td><td>Date of Public Consultation</td><td>13/09/2021</td></tr>
<tr><td>d.</td><td>Action plan to address the PH issues</td><td>An amount of Rs. 1939 lakhs have been earmarked to address the issues raised during public hearing. Detail of activities proposed attached as annexure 1.</td></tr>
<tr><td>e.</td><td>Location of the project</td><td>Rourkela, District Sundergarh, Odisha</td></tr>
<tr><td>f.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th>Point</th><th>Direc-tion</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>NE</td><td>22°13'8.5" N</td><td>84°54'40.4" E</td></tr>
<tr><td>2</td><td>NE</td><td>22°13'0.6" N</td><td>84°54'35.1" E</td></tr>
<tr><td>3</td><td>E</td><td>22°13'27" N</td><td>84°54'24" E</td></tr>
<tr><td>4</td><td>S</td><td>22°12'14" N</td><td>84°52'55" E</td></tr>
<tr><td>5</td><td>S</td><td>22°11'33" N</td><td>84°50'59" E</td></tr>
<tr><td>6</td><td>W</td><td>22°12'19" N</td><td>84°50'01" E</td></tr>
<tr><td>7</td><td>NW</td><td>22°13'9.5" N</td><td>84°48'47.6" E</td></tr>
<tr><td>8</td><td>NW</td><td>22°13'25.6" N</td><td>84°48'52.6" E</td></tr>
<tr><td>9</td><td>N</td><td>22°13'12" N</td><td>84°50'54" E</td></tr>
</table>
</td></tr>
<tr><td>g.</td><td>Total land</td><td>1714.73 ha</td></tr>
<tr><td>h.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>The expansion project is proposed within existing plant area of 1714.73 ha. Total 1714.73 ha is under the possession of SAIL. No additional land is required for proposed expansion.</td></tr>
<tr><td>i.</td><td>Existence of habitation & involvement of R&R, if any</td><td>Project Site – NIL

Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Rourkela Town</td><td>~0.05 km</td><td>North and South</td></tr>
</table>
</td></tr>
</table>

S No	Particulars	Details
		Bondamunda ~0.5 km East Balughat 0.2 km SW
j.	Elevation of the project site	219 m AMSL
k.	Involvement of Forest land if any.	NIL
l.	Water body exists within the project site as well as study area	**Project Site:** NIL **Study Area** **Water Body** / **Distance** / **Direction** Brahmani River / 0.2 km / SW Sankh River / 3.0 km / NNW Koel River / 3.0 km / NNW
m.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil. However, following Forests are located in study area: Durgapur RF (1.8 N), Reun RF (8.0 N), Ramnipaharh RF (7.5 NNW), Kacharu PF (7.5 N), Mudra RF (9.0 NNW), Kamarpaharh RF (8.0 NW), Balanda PF (8.0 WSW), Butukupiri RF (5.0 SW), Hatnibandha RF (4.0 S), Lathikata PF (8.5 SSE), Karalakhaman PF (8.0 SE), Ergerha RF (9.0 SE), Sonaparbat RF (3.5 E), South Chiroberha RF (7.5 SE), North Chiroberha RF (6.5 ESE
n.	Project cost	INR 5766.12 Crores (for proposed expansion)
o.	EMP cost	INR 523.39 Crores
p.	Employment opportunity	2,615 persons (both direct and indirect)
q.	Water and Power requirement	Water – 250929.6 m^3/day, Power – 335.81 MW

Unit configuration and capacity:

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 15/12/2016 and 6/11/2019		Proposed Units		Final (Existing + Proposed)		Remarks
		Config-uration	Capacity	Config-uration	Capacity	Config-uration	Capacity	
1	Coke Ovens and By-products Recovery Plant (COBP)	6 Coke Batteries 437 no. of Ovens	2.17 MTPA Capacity 6.4 MW from CDCP 's BPTG By Product Plant	1 New Battery (COB#7) 92 Ovens New By Product Plant	0.77 MTPA Capacity 5 MW from CDCP's BPTG New By Product Plant	7 Coke Batteries. 529 no. of Ovens	2.94 MTPA 11.4 MW from CDCP's BPTG. New By Product	--

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 15/12/2016 and 6/11/2019		Proposed Units		Final (Existing + Proposed)		Remarks
		Config-uration	Capacity	Config-uration	Capacity	Config-uration	Capacity	
			Tar @ 97000 TPA Sulphur @1220 TPA		Tar @ 37000 TPA Sulphur @1220 TPA		Plant Tar @134000 Sulphur@ 2440 TPA	
2	Ore bedding and blending plant	--	12 MTPA	--	--	--	12 MTPA	
3	Sinter Plant	--	#1 (1.5 MTPA) + #2 (1.57 MTPA) + #3 (3.706 MTPA)	6.776 MTPA	--	--	#1 (1.5 MTPA) + #2(1.57 MTPA) + #3 (3.706 MTPA)	--
4	Beneficiation Plant	--	3.3 MTPA	--	--	--	3.3 MTPA	--
5	Pellet Plant	--	2.0 MTPA	--	--	--	2.0 MTPA	--
6	Blast Furnace	BF#1, #4 #5	4.5 MTPA	--	Upgradation to 4.855 MTPA	BF#1, #4 #5	4.855 MTPA	--
	Gran Shot for HM granulation	--	--	--	300 TPH	--	300 TPH	New
	Stove	9 Nos.	--	1 No. (Stove- 4)	--	10 Nos.	--	1 new stove.
7	BOF Converters	--	2x60/66 T + 3x150 T	--	1x150 T and decomm-issioning of 2x60/66 T	4x150 T	4.85 MTPA	--
8	Ladle Furnace	--	1x60/66 T + 4x150 T	--	1x150 T and decommissioning of 1x60/66 T	5x150 T	--	
9	RH-OB	--	150 T	--	150 T	2 x 150 T	300 T	
10	Hot Metal Desulphurization	2 nos.	--	1 in place of old	--	2 nos.	--	
11	Continuous Slab Casters	4 x Single strand	4.2 MTPA	1x Single Strand	1 MTPA	4 x Single strand + 1x Single Strand	4.85 MTPA	
12	Hot Strip Mill	--	3.0 MTPA	--	--	--	3.0 MTPA	
13	Plate Mill Normalising Furnace	--	2.135 MTPA	--	--	--	2.135 MTPA	
14	Cold Rolling Mill CR coils CR sheets Galv. Sheets Tin Plates	--	0.345 MTPA 0.025 MTPA 0.196 MTPA 0.075 MTPA	--	---	--	0.641 MTPA	
15	ERW Pipe Plant	--	0.075 MTPA	--	--	--	0.075 MTPA	
16	Spiral Welded Pipe Plant	--	0.055 MTPA	--	--	--	0.055 MTPA	
17	Silicon Steel Complex	--	0.255 MTPA	--	--	--	0.255 MTPA	
18	Special Plate Plant	--	0.015 MTPA	--	--	--	0.015 MTPA	
19	Lime and Dolo Plant Lime Dolo	7 VSKs	0.4149 MTPA 0.13 MTPA	Lime: 1x300 TPD Dolo: 1x150 TPD	0.1051 MTPA 0.05 MTPA	8 VSKs	Lime = 0.52 MTPA Dolo =	

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 15/12/2016 and 6/11/2019		Proposed Units		Final (Existing + Proposed)		Remarks
		Config-uration	Capacity	Config-uration	Capacity	Config-uration	Capacity	
				(One old VSK will be phased out)			0.18 MTPA	
20	Oxygen Plant	2x180 T + 1x700 T	1060 T		1000 T	2x180 T + 1x700 T + 1x1000 T	2060 T	
21	Sulphuric Acid Plant	--	125 TPD		--	--	125 TPD	
22	Micro pelletisation facility for ferruginous wastes	--			0.18 MTPA	--	0.18 MTPA	
23	Natural Gas grid	-	- -		32,100 Nm^3/Hr	-	32,100 Nm^3/Hr	

5. The EAC, in its 1st meeting of Expert Appraisal Committee (Industry-1 Sector) held on 5 – 6th March, 2022, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance subject to stipulation of specific and general conditions as detailed in the point below.

6. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1) hereby decided to grant Environment Clearance for instant proposal of **M/s. SAIL – Rourkela Steel Plant** under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions:

A. Specific Condition:

i. Tailings from Iron Ore beneficiation plant shall be dewatered in filter press and no slime /tailing pond shall be permitted.

ii. Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.

iii. Solid waste utilization

- PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
- PP shall recycle/reuse 100 % solid waste generated in the plant.
- Used refractories shall be recycled as far as possible.

iv. Coke oven plant shall be equipped with coke dry quenching facility.

v. Coke Oven Gas shall be desulfurized.

vi. Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

vii. Secondary fume extraction system shall be installed on converters of Steel Melting Shop.

viii. Basic Oxygen Furnace (BOF) gas shall be cleaned dry.

ix. 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas.
x. Cold Rolling Mill (CRM) shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.
xi. Dust emission from Steel Plant stacks shall be up to 30 mg/Nm^3.
xii. 250929 KLD water shall be drawn from Brahmani River. No GW abstraction is permitted.
xiii. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
xiv. The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
xv. Three tier Green Belt shall be developed in a time frame of one year covering 600.16 ha area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC. In addition, Block plantation shall be done on vacant land within the premises of the plant.
xvi. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
xvii. Zero Liquid Discharge (ZLD) scheme for the entire complex shall be implemented by March, 2023 as committed.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
vi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
vii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
viii. The project proponent shall be use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
ix. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).
x. Land-based APC system shall be installed to control coke pushing emissions.
xi. Monitor CO, HC and O_2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
xii. Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.
xiii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
xiv. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March, 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May, 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December, 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31st March, 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May, 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December, 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;
v. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
vi. Tyre washing facilities shall be provided at the exit and entrance of the plant gates.
vii. Water meters shall be provided at the inlet to all unit processes in the steel plants.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

V. Energy Conservation measures

i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
ii. Restrict Gas flaring to < 1%.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
iv. Provide LED lights in their offices and residential areas.
v. Ensure installation of regenerative/recuperative type burners on all reheating furnaces.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
ii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
ii. Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage after offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

7. This issues with the approval of the Competent Authority.

30/3/22

(Sundar Ramanathan)
Scientist 'E'

Copy to: -

1. Secretary, Department of Environment, Government of Odisha, Secretariat, Bhubaneswar.
2. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, A/3, Chandersekharpur, Bhubaneswar – 751023.
4. Chairman, Odisha State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneshwar-751012.
5. Chief Wildlife Warden, Govt. of Odisha, 5th Floor, BDA Apartments, Prakruti Bhawan, Nilakantha Nagar, Nayapalli, Bhubaneshwar-751012
6. Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
7. District Collector, Sundargarh District, Odisha.
8. Guard File/Record File/Monitoring File.
9. MoEF&CC Website.

30/3/22

(Sundar Ramanathan)
Scientist 'E'

Annexure- 1

Action plan as per MoEF&CC O.M. dated 30/09/2020

Major Issue Raised	Action Plans	Physical Measurable Target	Total Budget &Time	Time Period / Measurable Target/ Budget		
				Year-1	Year-2	Year-3
Developmental Activities in Peripheral Villages	Construction of Community Centers in Peripheral areas – of Bisra, Lathikata, Nuagaon & Kauramunda blocks.	18 no.	270 lakhs (3 yr.)	6 no. 90 Lakh	6 no. 90 Lakh	6 no. 90 Lakh
	Construction of community toilets with water facilities in Peripheral areas – of Bisra&Lathikata blocks.	6 no.	96 lakhs (2 yr.)	-	3 no. 48 Lakh	3 no. 48 Lakh
	Solar Street Lights in Peripheral areas – of Bisra, Lathikata & Nuagaon blocks.	291 nos. in 20 Locations	150 Lakh (3 yr.)	97 Locations 50 Lakh	97 Locations 50 Lakh	97 Locations 50 Lakh
	Installation of Borewells in Peripheral areas – of Bisra, Lathikata, Nuagaon & Kauramunda blocks.	10 no.	103.50 lakh (3 yr.)	3 no. 31.05 Lakh	3 no. 31.05 Lakh	4 no. 41.40 Lakh
	Augmentation of drinking water facility in the resettlement colonies Jolda of Lathikata Block.	10 no.	100 Lakh (2 yr.)	6 no. 60 Lakh	4 no. 40 Lakh	-
	Programme for educational coaching and vocational training drop out students in areas - of Bisra & Lathikata blocks.	45 Students	22 Lakh (3 yr.)	15 Students 7.4 Lakh	15 Students 7.3 Lakh	15 Students 7.3 Lakh
Developmental Activities in Slums areas	Construction of RCC and Bituminous Roads in slums in the vicinity of Rourkela Steel Plant and Steel Township.	RCC Roads - 6 km Bituminous Roads – 2 Km.	519.7 lakh (3 yr.)	173.3 lakh	173.2 lakh	173.2 lakh
	Construction of Drains in slums in the vicinity of Rourkela Steel Plant and Steel Township.	5 km.				
	Street Solar/LED Lighting - Supply, Installation, testing and commissioning of Solar Street Lighting System in slums in the vicinity of Rourkela Steel Plant and Township.	100 no.	69.00 Lakh (3 yr.)	23.0 Lakh	23.0 Lakh	23.0 Lakh
	Providing Solar drinking water facility in slums in the vicinity of Rourkela Steel Plant and Steel Township.	5 nos.	51.9 Lakh (3 yr.)	17.3 Lakh	17.3 Lakh	17.3 Lakh
	Construction of Community Toilets in slums in the vicinity of Rourkela Steel Plant and Steel Township.	8 no.	128.0 Lakh (3 yr.)	42.7 Lakh	42.7 Lakh	42.6 Lakh

Major Issue Raised	Action Plans	Physical Measurable Target	Total Budget &Time	Time Period / Measurable Target/ Budget		
				Year-1	Year-2	Year-3
	Repair/Renovation Works for Community centers, School building, Boundary Wall in slums in the vicinity of Rourkela Steel Plant and Steel Township	Community Centers-3 no. School Buildings – 3 nos. Boundary wall – 2000 mtr.	141.6 Lakh (3 yr.)	47.2 Lakh	47.2 Lakh	47.2 Lakh
	Livelihood projects: Development of Vending Zones, Rest Sheds at market places, Type A – With CC flooring Type B – Shed with CC flooring	Type A: 4 Type B: 4	49.6 Lakh (3 yr.)	16.5 Lakh	16.5 Lakh	16.6 Lakh
	Development of Play grounds/parks for children in slums in the vicinity of Rourkela Steel Plant and Steel Township. Development works in Ispat autonomous college – Provision of high mast light & development of approach road	2 no. 1 no.	70.8 Lakh (3 yr.) 31.9 Lakh (2 yr.)	23.6 Lakh -	23.6 Lakh 12.8 Lakh	23.6 Lakh 19.1 Lakh
	Development of Play grounds/parks for children in slums in the vicinity of Rourkela Steel Plant and Steel Township.	2 no.	70.8 Lakh (3 yr.)	23.6 Lakh	23.6 Lakh	23.6 Lakh
Installation of air pollution control systems & emission levels shall be within the norms	Coke Oven Battery#7: Dust extraction systems with ESP/Bag hours for Pushing emission control, CDCP heat recovery area & Coal/coke transportation areas	All these are inbuilt in the project and will be installed along with the project units costing ~ 10% of the total project cost.		-	-	-
	Steel Melting Shop#3: Secondary Emission Control System (Dog House) for Converters. Dust Extraction System with ESP/Bag House for Ladle Heating Furnace/RHOB, Lime & Dolomite Kilns.			-	-	-
	Dust Extraction system with ESP/Bag House in Blast Furnace#5 Gran Shot.			-	-	-
RSP to install Water pollution	Installation of dedicated Waste Water Treatment System in Steel Melting	All these are inbuilt in the project and will be installed along with the				

Major Issue Raised	Action Plans	Physical Measurable Target	Total Budget &Time	Time Period / Measurable Target/ Budget		
				Year-1	Year-2	Year-3
control systems & emission levels shall be within the norms	Shop#3 based on ZLD concepts	project units costing ~ 10% of the total project cost.				
	Installation of Biological Oxidation and de phenolisation plant for COB#7 with 100% recycling					
	No fresh water drawl from river/ground water for the project. The water requirements of the project are met by treating RSP's present effluent and its use in the new projects.					
	No effluent discharge to environment as all the projects are designed based on ZLD.					
Impact of Hexavalent Chromium on Environment	The presence of hexavalent chromium in water has been studied during field monitoring.	The Hexavalent chromium levels in ground water is <0.02 mg/lt and in surface water is <0.1; both are within norms.				
RSP to install waste management systems to prevent land pollution	All the wastes are converted into micro pellets for recycling back through sintering route for hot metal making	All these are inbuilt in the project and will be installed along with the project units costing ~ 10% of the total project cost.				
	SMS Slag is crushed, segregated and used back in steel making and used for rural road making					
Promoting Culture	Infrastructure development and support to Socio Cultural Organizations in and around Rourkela	90 Lakh	90 Lakh (3 yr.)	30 Lakh	30 Lakh	30 Lakh
	Development of erstwhile oldage-home, Sector-3 and named as Sanskruti Bhawan for use by cultural trusts in and around Rourkela	1	45 Lakh (1 yr.)	45 Lakh	-	-
Other Issues	Location of new project	RSP clarified that the proposed new project will be established within the existing plant boundary wall of Rourkela Steel Plant				
	Welfare of ex-employees	Shall be examined within the frame-work of Corporate Policy				
	Employment to the displaced families	RSP is providing employment to the identified Local Displaced Persons on recommendation by the Local Govt. Authority. At present 89 such persons are undergoing training for their eventual employment in RSP				
	Rehabilitation of displaced persons	no displacement of people is envisaged in the proposed project location as the proposed units are coming within the existing RSP Plant complex				
	Rehabilitation of displaced shall be expedited as committed during initial	shall be addressed on merit with due discussions with State Government				

Major Issue Raised	Action Plans	Physical Measurable Target	Total Budget &Time	Time Period / Measurable Target/ Budget		
				Year-1	Year-2	Year-3
	phase of land acquisition in early 50's					
	Resettled colonies shall not be displaced further for expansion of plant	RSP confirmed that there will be no land acquisition and displacement for the proposed project expansion				
	Study shall be carried out to access the impact of pollution on human health and accordingly mitigative measures shall be adopted	• The impact of pollution on human health was studied during EIA report preparation • RSP is operating a 675 bedded Ispat General Hospital in Rourkela. • RSP has recently established a Super Specialty Hospital with the support of Central Govt. and State Government.				
Total Budget Provision for addressing Public Consultation Issues		**Year-1: Rs. 657.05 Lakh Year-2: Rs. 652.65 Lakh Year-3: Rs. 629.30 Lakh Total: Rs. 1939 Lakh.**				

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