ENVIRONMENTAL CLEARANCE

PARIVESH

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

Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), JHARKHAND)

To,

The -1
RAMKRISHNA FORGINGS LIMITED
23, Circus Avenue -700017

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 SEIAA vide proposal number SIA/JH/IND1/447334/2023 dated 13 Oct 2023. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC23B008JH125384**
2.	**File No.**	EC/SEIAA/2023-24/2809/2023
3.	**Project Type**	Expansion
4.	**Category**	B
5.	**Project/Activity including Schedule No.**	3(a) Metallurgical industries (ferrous & non ferrous)
6.	**Name of Project**	Expansion of Forging Unit of M/s Ramkrishna Forgings Limited (Unit – VII) from 18,600 to 100,000TPA and Fabrication & Assembly capacity 13,130TPA at Plot No. 1988, Industrial Area, Village- Dugni, Block- Seraikela, District- Seraikela Kharsawan, State- Jharkhand
7.	**Name of Company/Organization**	RAMKRISHNA FORGINGS LIMITED
8.	**Location of Project**	JHARKHAND
9.	**TOR Date**	N/A

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

Date: 29/11/2023

(e-signed)
Ashok Kumar, IFS
Member Secretary
SEIAA - (JHARKHAND)

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.

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State Level Environment Impact Assessment Authority, Jharkhand.
Nursery Complex, Near Dhurwa Bus Stand, Dhurwa, Ranchi, Jharkhand-834 004.
E-mail: msseiaa.jhk@gmail.com/chr-seiaajhr@gov.in
website: www.jseiaa.org

सत्यमेव जयते

Letter No.- **EC/SEIAA/2023-24/2809/2023/** Ranchi, Date:

To: **M/s Ramkrishna Forgings Limited,**
Shri Mahabir Prasad Jalan,
SHRISTI, Flat No. - F2, First Floor,
H. No. – 25, C H Area (Old) Bistupur,
Jamshedpur Mayfair Appartment, Baluchela,
Sonari, Jamshedpur

Sub.: Environmental Clearance for the project **"Expansion of Forging Unit from 18,600 to 1,00,000 TPA and Fabrication & Assembly capacity 13,130 TPA of M/s Ramkrishna Forgings Limited (Unit - VII) at Industrial Area, Village : Dugni, Block : Seraikela, Distt. : Seraikela-Kharsawan, Jharkhand" (Proposal No. : SIA/JH/IND1/447334/2023) – regarding.**

Ref: Your application no. Nil, dated - 12.10.2023.

Sir,

It is in reference to the project **"Expansion of Forging Unit from 18,600 to 1,00,000 TPA and Fabrication & Assembly capacity 13,130 TPA of M/s Ramkrishna Forgings Limited (Unit - VII) at Industrial Area, Village : Dugni, Block : Seraikela, Distt. : Seraikela-Kharsawan, Jharkhand"**, Jharkhand submitted by you for seeking prior Environmental Clearances (EC).

This is an expansion project which has been taken for appraisal on 17.10.2023.

Project Category : B1 – The State Expert Appraisal Committee, Jharkhand deliberated the project during its 104th meeting held on 22-26.05.2023 and SEIAA, Jharkhand has approved the ToRs in 105th meeting held on 28th & 29th May, 2023. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2023-24/2809/2023/118, dated 09.06.2023. The final EIA / EMP submitted by PP to SEIAA on 12.10.2023 and which was forwarded to SEAC on 12.10.2023.

M/s Ramkrishna Forging Limited (Unit-VII) has made an online application vide proposal no. SIA/JH/IND1/447334/2023 dated 13.10.2023along with copy of EIA/EMP report, Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at 3(a) Metallurgical Industries under Category "B" of the schedule of EIA Notification, 2006 and appraised at State Level.

The project is of M/s Ramkrishna Forgings Limited (Unit VII) to obtain environmental clearance for expansion of Forging Unit production capacity from 18,600TPA to 100,000TPA and Fabrication & Assembly capacity 13,130TPA at Plot No. 1988, Industrial Area, Village- Dugni, Block- Gamharia, District- Seraikela Kharsawan, State- Jharkhand

Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>9.71 Ha [Private: 9.71 Ha]</td><td>Land Use: Industrial</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Total area – 9.71 Ha
[Acquired Land: 9.71 Ha]
No additional land required for the project. Land documents have been submitted.</td><td>The land was allotted by JIADA, Adityapur</td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td>R & R is not applicable
Existence of Habitation
Project Site – Nil
Study Area: Nearest Habitation
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Dugni Village</td><td>0.3</td><td>NW</td></tr>
</table></td><td>--</td></tr>
<tr><td>4</td><td>Land details</td><td>Plot No. 1988</td><td>--</td></tr>
<tr><td></td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>Points</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>22°45'37.58"N</td><td>86° 0'16.44"E</td></tr>
<tr><td>B</td><td>22°45'34.85"N</td><td>86° 0'6.50"E</td></tr>
<tr><td>C</td><td>22°45'34.79"N</td><td>85°59'57.14"E</td></tr>
<tr><td>D</td><td>22°45'37.52"N</td><td>85°59'57.30"E</td></tr>
<tr><td>E</td><td>22°45'41.81"N</td><td>85°59'58.74"E</td></tr>
<tr><td>F</td><td>22°45'48.70"N</td><td>86° 0'1.50"E</td></tr>
<tr><td>G</td><td>22°45'47.38"N</td><td>86° 0'4.35"E</td></tr>
<tr><td>H</td><td>22°45'42.07"N</td><td>86° 0'7.75"E</td></tr>
<tr><td>I</td><td>22°45'43.52"N</td><td>86° 0'11.65"E</td></tr>
</table></td><td>--</td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>154 m above mean sea level</td><td>--</td></tr>
<tr><td>6</td><td>Involvement of Forest land, if any</td><td>No involvement of Forest Land</td><td>--</td></tr>
<tr><td>7</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the</td><td>Project Site: No water bodies within the project site.
Study area</td><td>--</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	project site as well as study area	Water Body: Sanjay River, Distance: 0.03km, Direction: S Water Body: Kharkai River, Distance: 5.2km, Direction: S	
8	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	No National Park/ ESZ/ ESA/Wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve/ Reserve Forest within 10km radius of the project site. Only few protected forests present within 10 km radius of the project.	--

Land Details :

Khata no.	Plot no.
529	1988

M/s RKFL established its Unit-VII after obtaining Consent to Establish (CTE) having ref no. JSPCB/HO/RNC/CTE-6642309/2019/678 dated 16.12.2019 from Jharkhand State Pollution Control Board (JSPCB) for the production of 28.300 TPA Forged Items and 13.130 TPA Fabrication & Assembly. Company obtained Consent to Operate (CTO) having ref no. JSPCB/HO/RNC/CTO-7556246/2020/1181 dated 28.07.2020 from JSPCB for the Assembly of Railway Parts – 13.130 TPA capacity. The company has obtained CTO valid till 31.03.2024 from JSPCB vide lt. no. JSPCB/HO/RNC/CTO-14964503/2023/1186 dt. 01.07.2023 for the production of 18.600TPA Forged Items and 13.130TPA Fabrication & Assembly.

The unit configuration and capacity of existing and proposed project is given as below:

Sl. No	Plant Facilities	Existing Production (TPA)	Proposed New Production (TPA)	Final Production (TPA)
	Forging Unit			
1.	2.000T Kurimoto Line	13.400	-	13.400
2.	3.000T Ajax Press Line	5.200	-	5.200
3.	Enomoto 630T Press	-	4500	4.500
4.	6.000T Press Line	-	13.700	13.700
5.	RA Shaft – Press Line	-	13.700	13.700
6.	Upsetter 5" (2 Nos.)	-	20.200	20.200
7.	Upsetter 2.5" (1 Nos.)	-	4.200	4.200
8.	Cold Forging Press 900T	-	11.400	11.400

Sl. No	Plant Facilities	Existing Production (TPA)	Proposed New Production (TPA)	Final Production (TPA)
9.	Cold Forging Press 1600T	-	13,700	13,700
Total		**18,600**	**81,400**	**100,000**
Fabrication & Assembly Unit				
Fabrication & Assembly		**13,130**	**---**	**13,130**

Existing & Additional Supporting Facilities:

All facilities and utilities will be upgraded as per requirement and matching with the production capacity of Forgings – 100,000 TPA, after expansion

- Heat Treatment Furnace –1x2 TPH & 1x4TPH (proposed)
- Heat Treatment Furnace (SQF), heating media Electricity (Propane is used as enrich gas): 3 x 1.5 Ton (Existing), Additional 12x1.5 Ton
- CNC machining and finishing line production capacity shall be enhanced to 175 Ton/day from existing 50 Ton /day
- Phosphating Line Production Capacity shall be enhanced to 100 Ton/day from existing 45 Ton /day
- Shot Blasting M/c Production Capacity shall be enhanced to 250 Ton/day from existing 120 Ton /day

The details of the raw material requirement for the proposed expansion project along with its source and mode of transportation is given as below:

Sl. No	Raw Material	Quantity required per annum (TPA)			Source	Distance from the Site (km.)	Mode of Transportation
		Existing	Proposed	Total			
1.	Steel Billet/ rounds/ various grade steel	37,813	101,883	139,696	Jharkhand	100	Trucks
2.	Propane Gas	930	5,700	7,030	Kolkata	350	Trucks
3.	Oil for Quenching	3 kL/ annum	13 kL/ annum	16 kL/ annum	Gurugram	1400	Trucks
4.	Nitrogen Gas	3180 m^3	4200 m^3	7380 m^3	Jamshedpur	30	Trucks
5.	Oxygen Gas	34740 m^3	70000 m^3	104740 m^3	Jamshedpur	30	Trucks
6.	Corgan 18	47,153 m^3	95,000 m^3	142,153 m^3	Jamshedpur	30	Trucks
7.	Cutting Oil	7125 L	9000 L	16125 L	Jamshedpur	30	Trucks

The total requirement of makeup water for industrial and domestic purpose after the proposed expansion will be 370 KLD. The company will meet the water requirement from groundwater through bore well. Company has obtained NOC from Central Groundwater Authority (CGWA) having no. CGWA/NOC/IND/ORIG/2021/12728 dated 30.07.2021 and is valid till 29.07.2024.

Power requirement for the operation of the existing plant is 10 MW. At present, the power is sourced from Jamshedpur Utilities & Services Company Limited (JUSCO). The total power requirement for the proposed expansion is 14MW which will also be sourced from JUSCO. DG Sets of 1x1000 KVA and 1x500 KVA has already been installed in the plant.

Baseline Environmental Studies: 1st March 2023 to 31st May 2023

Parameters	Description	Permissible Level
Air Quality	• $PM_{2.5}$ 28.7 to 57.3µg/m^3 • PM_{10} 52.4 to 86.5 µg/m^3 • SO2 9.6 to 25.6 µg/m^3 • NO2 16.2 to 39.1 µg/m^3 • CO 0.53 to 1.19 mg/m^3	60 µg/ m^3 100 µg/ m^3 80 µg/ m^3 80 µg/ m^3 2 mg/m^3
Ground Water Quality	• pH varies from 7.42 to 7.87 • Total Hardness varies from 235.76 to 263.98 mg/l • Total Dissolved Solids varies from 404 to 463 mg/l • Chlorides varies from 92.85 to 112.01 mg/l • Fluoride varies from 0.27 to 0.46 mg/l	6.5-8.5 200-600 mg/L 500-2000 mg/L 250-1000 mg/L 1.0-1.5 mg/L
Surface Water Quality	• pH varies from 7.55 to 7.93 • Dissolved Oxygen varies from 5.6 to 7.0 mg/l • BOD varies from 6.46 to 31.0 mg/l • COD varies from 21.09 to 75.0 mg/l	IS:2296 Class C Norms
Soil Quality	• pH varies from 7.25 to 7.48 • EC varies from 0.243 to 0.609 mS/cm • Available nitrogen N 138.04 to 206.32 Kg/ha • Organic matter 0.37 to 0.67%	----
Noise Level	Day Time (6:00 a.m. to 10:00 p.m.) 71.5Leq dB(A) Night Time (10:00 p.m. to 6:00 a.m.) 65.8Leq dB(A)	75 Leq dB (A) 70 Leq dB (A)
	Day Time (6:00 a.m. to 10:00 p.m.) 40.6 Leq dB(A) to 53.1Leq dB(A) Night Time (10:00 p.m. to 6:00 a.m.) 30.9 Leq dB(A) and 42.5 Leq dB(A)	55 Leq dB (A) 45 Leq dB (A)
Traffic assessment study findings	The traffic study was carried at NH-43 (Adityapur – Chaibasa Road) by pucca road of 0.43kms in North Direction Transportation of Raw material, Fuel and Finished product will be done by Road. Existing PCU is 4390 PCU/Day on NH-43 existing level of service (LOS) is:	

Road	V (Volume	C (Capacity	Existing V/C	LOS

Parameters	Description	Permissible Level
	<table><tr><th></th><th>in PCU/day)</th><th>in PCU/day)</th><th>Ratio</th><th></th></tr><tr><td>NH-43</td><td>4390</td><td>15000</td><td>0.29</td><td>B</td></tr></table> • PCU load after proposed project will be 4924 PCU/Day (Existing 4390 + 534) for SH-13 and level of service (LOS) will be: <table><tr><th>Road</th><th>V (Volume in PCU/day)</th><th>C (Capacity in PCU/day)</th><th>V/C Ratio</th><th>LOS</th></tr><tr><td>NH-43</td><td>4924</td><td>15000</td><td>0.33</td><td>B</td></tr></table> *Conclusion: Level of Service will be "B" i.e. Very Good for NH-43 including additional traffic due to proposed project.* *Note: Capacity as per IRC 64:1990 Guideline for capacity for roads in Rural Areas.*	
Flora and fauna	There are 12 Numbers of Schedule – I species (*Ratufa indica, Viverricula indica, Hystrix indica, Felis chaus, Cuon alpinus, Pteropus giganteus, Hyaena hyaena, Vulpus benghalensis, Daboia siamensis, Naja naja, Ptyas mucosus, Chameleon zeylanicus, Bubo bubo*) are found within the 10 km study area. The Wildlife Conservation Plan is prepared and a budget of Rs. 119.883 Lakhs has been allocated for implementation of activities proposed under WLCP.	

The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Units	Qty In TPA		Disposal practice
	Existing	Total after the Proposed Expansion	
Solid Wastes			
Rejects/boring scrap/ end cuts/ trimming/ Cutting Saw dust/ Scales from Descaler generated at Forging stage	2,800	23,383	Reject during initial inspection of raw materials will be returned to the suppliers. Other rejects will be sold to the outside Induction Furnace Plant
Turnings from Machine shop	4,650	24,975	Stored in covered shed and sold for recycle to supplier/other steel making industries
Shot Blasting Dust	30	1,000	Sold to Ferrous Sulphate Plant
Scrap Generation (fabrication /assembly unit)	3,283	3,283	Sold for recycle to supplier/ other steel making industries

Units	Qty In TPA		Disposal practice
	Existing	Total after the Proposed Expansion	
Hazardous Wastes			
Sludge from Phosphating Process	6.5	20	Will be dried in sludge bed and packed in HDPE bags in secured room. Will be given to the Cement company for co-processing in their kiln/TSDF after obtaining permission from JSPCB as per Sec. 9 of Hazardous and Other Wastes (Management & Transboundary). Rules. 2016
Sludge from Spray Painting Booth	30	70	
ETP Sludge	16	90	
Quenching Waste Oil	1 kl	10 kl	Will be given to the registered recycler
Recovered Coolant from ETP	8 kl	50 kl	It will be either used in-house for open gear lubrication or will be sold to register recycler.
Used Oil	0.8 kl	3.5 kl	

Public Consultation

Details of advertisement given	"Prabhat Khabar" and "The Times of India" on 29.08.2023
Date of public consultation	04.10.2023
Venue	'Dugni Panchayat Bhawan. Bajranbali Chowk. School Mod. Village: Dugni. P.O.: Kolabira. District: Seraikela-Kharsawan. Jharkhand
Presiding Officer	Shri Subodh Kumar. ADC Seriakela Kharsawan. Jharkhand
No. of Attendees	90
Major issues raised	The issues raised in the public hearing were Employment for the local people. Prevention of Pollution. Development of Schools & Roads and providing water. power. education and health care facilities

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

Sl. No	Activities	Physical Targets
1.0	**Adoption of village Dungi for Socio-economic development**	
1.1	Road Development	Construction of Pucca road (Paver Blocks) in total of approx. 2km along with need based pucca drain for the internal road connecting village up to main road
1.2	Installation of Solar Street Lights	Installation of Fifty (50) nos. of solar lights in the in the village along the internal roads and at major locations. *(Solar light with GI pipe and installation)*

Sl. No	Activities	Physical Targets
1.3	Renovation of pond	First time shaping with excavation and slide slope stabilization, Construction of Bathing Ghat on one side with changing area, pair of toilets with septic tank and Beautification of pond by plantation of 100 tress along boundary of pond along with Yearly Cleaning/Desilting of Pond
1.4	Installation of Bore-well	Installation 1 no. of bore well with 1no. of hand pump with water cum purifier system at Hanuman Temple
1.5	Waste Management	Construction of community dustbins at four locations in village
1.6		Distribution of household dustbin baskets in each house
1.7	Plantation	Plantation of 1500 no. of trees in total at different locations in village (School, Temple, Approach road sides, etc)
1.8	Providing Medical Facility	Organizing medical check-up camp yearly in the village and will provide free of cost medicine in the camp
1.9		Providing an ambulance equipped with specific medical equipments (Defibrillator, Oxygen cylinder, Resuscitation kit, Medicines, Surgical items, stretcher etc.) for medical help of Village
1.10	Road Safety Measures	Installation of 10 no. of Wheel Mounted Foldable Barricades at different locations on road passing through the village
1.11		Construction of speed breakers at three locations on the road stretch passing through the village along with installation of sign boards of speed limit, etc
1.12	Development of High School	Development of Utkramit High School in village *(construction of one (1) classroom & along with maintenance of other classrooms, providing furniture & white boards in all classrooms, construction of separate Two (2) pair of toilets for boys & girls, development of playground in the school and installation of drinking water system (submersible pump and Water Cooler) in school)*
2.0	**Adoption of village Jambahal for Socio-economic development**	
2.1	Road Development	Construction of Pucca road (Paver Blocks) for the internal road connecting village up to Nadi
2.2	Installation of Solar Street Lights	Installation of Twenty (20) nos. of solar lights in the village. *(Solar light with GI pipe and installation)*
2.3	Installation of Hand Pumps	Installation of Five (5) nos. of Mark-2 Hand Pumps
3.0	Installation of Hand Pumps	Installation of Five (5) of Mark-2 Hand Pumps each in village Gonda and Badakachada
4.0	Providing Medical Facility	Organizing medical check-up camp along with free of cost medicine in the village Gonda and Trildih

Sl. No	Activities	Physical Targets
5.0	Road Safety Measures	Installation of 20 no. of Wheel Mounted Foldable Barricades for road safety on the road stretch of Kandra to Seraikela (7.5km distance)

Year of Implementation and Cost (in Rs Lakhs)			Total Expenditure (Rs. In Lakhs)
1st Year	2nd Year	3rd Year	
Adoption of village Dungi for Socio-economic development			
60.0	--	--	60.0
--	20.0	--	20.0
18.0	1.0	1.0	20.0
--	1.5	--	1.5
--	--	12.0	12.0
--	--	5.0	5.0
--	--	7.50	7.50
3.0	3.0	3.0	9.0
--	12.0	--	12.0
1.5	--	--	1.5
2.0	--	--	2.0
--	--	60.0	60.0
Adoption of village Jambahal for Socio-economic development			
20.0	--	--	20.0
--	8.0	--	8.0
--	2.25	--	2.25
5.0	--	--	5.0
6.0	6.0	6.0	18.0
3.0	--	--	3.0

Sl. No	Activities		Physical Targets
118.5	53.75	94.5	266.75

Existing Capital Cost of the project was Rs. 219.99 Crs. The Capital cost of the proposed expansion is envisaged as Rs. 575.31Crs. and the Capital cost of the environmental protection measures (EMP) is proposed as Rs. 417.0 Lakhs. The annual recurring cost towards the environmental protection measured as proposed as Rs. 93.11 Lakhs.

The employment generation from the proposed expansion is 1100.

The details of cost for environmental protection measures are as follows:

Sl. No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year
1.	**Air Pollution Measures**		
a.	*Water Sprinkling System*	14.0	2.4
2.	**Water Pollution Control Measures and Rainwater Harvesting**		
a.	*Sewage Treatment Plant*	74.0	14.4
b.	*Effluent Treatment Plant*	128.0	21.6
c.	*Rainwater Harvesting*	6.0	0.6
d.	*Rainwater Harvesting Tank*	100.0	3.6
3.	**Noise Pollution Control Measures**	5.0	0.75
4.	**Storage and Solid Waste Management**	12.0	27.0
5.	**Environmental Monitoring Program**	--	6.76
6.	**Occupational Health and Safety**	45.0	13.0

The greenbelt development will be carried out in 33% of the total plant area i.e. 3.20Ha. M/s RKFL (Unit-VII) has already developed 0.607Ha (6.25%) of the total plant area as greenbelt with1125 number of trees planted till date. The company is now proposing to plant additional 8250 trees to maintain a tree density of 2500 trees/ ha. A budget of Rs. 33.0 Lakhs will be spent towards the development of greenbelt and a budget of Rs. 3.0 Lakhs will be spent yearly for maintenance.

There is no violation under EIA, 2006/court case/show cause/direction, related to the project under consideration.

STATUTORY CLEARANCES:

1	LOI/Lease docs	:	Land lease deed from JIADA dated 09.10.2018.
2	CO	:	The CO, Seraikela vide letter no. 123, dated 01.02.2019 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.

3	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 1166, dated 19.11.2019 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Seraikela Forest Division vide letter no. 2278, dated 03.11.2018 certified that the distance of notified forest is 500 meters from project site.
5	Consent to Establish (CTE)	:	**CTE** issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-6642309 /2019/678, dated 16.12.2019.
6	Consent to Operate (CTO)	:	**CTO** granted by JSPCB vide : i. Ref. no. JSPCB/HO/RNC/CTO-7556246/2020/1181, dated 28.07.2020. ii. Ref. no. JSPCB/HO/RNC/CTO-9770828/2021/1252, dated 07.10.2021. iii. Ref. no. JSPCB/HO/RNC/CTO-14964503/2023/1186, dated 01.07.2023.
7	CGWA	:	No Objection Certificate (NOC) for Ground Water Abstraction vide NOC No. : CGWA/NOC/IND/ORIG/2021/12728, dated 30.07.2021.
8	Public Hearing	:	Public Hearing conducted on 04.10.2023.

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its **110th** meeting held on **17th, 18th, 19th, 20th and 21st October, 2023**.

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its **110th** meeting held on **27th, 28th & 29th October, 2023** discussed the project proposal along with recommendations made by SEAC and decided to grant EC to the project.

Following the decision of SEIAA, as mentioned above, Environmental Clearance is hereby issued to the **"Expansion of Forging Unit from 18,600 to 1,00,000 TPA and Fabrication & Assembly capacity 13,130 TPA of M/s Ramkrishna Forgings Limited (Unit - VII) at Industrial Area, Village : Dugni, Block : Seraikela, Distt. : Seraikela-Kharsawan, Jharkhand"** alongwith the following specific conditions as recommended by SEAC.

I. Specific Conditions :

1. This Environmental Clearance is valid subject to the following condition below – That this project has-
   a. Obtained all legal rights to operate at concerned place.
   b. Complied with all existing concerned laws of the land and
   c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.

2. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.
3. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
4. All raw material to be stored only under covered shed.
5. PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
6. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
7. Trees should be developed & maintained not less than 33% of project area.
8. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
9. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
10. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
11. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.

II. Statutory Compliance :

1. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act. 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
2. The project proponent shall obtain clearance from the National Board for Wildlife if applicable.
3. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).
4. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to".

5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.

6. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

7. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

8. No mining/activity shall be undertake in the forest land or deemed forest without obtaining requisite prior forestry clearance.

9. This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT, MoEF & CC and any other Court of Law, if any, as may be applicable to this project.

10. Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from standing committee of NBWL, as may be applicable to this project (in case any fauna occurs / is found in the Project area or if the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger reserve etc. and or located with in 10 km. of protected area).

11. The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.

III. Air quality monitoring and preservation :

1. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) 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.

2. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

3. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PMlO and PM25 in reference to PM emission, and S02 and NOx in reference to S02 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual: Large plants: Continuous)

4. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of

MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

5. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.

6. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.

7. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

8. 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 *briquettingl* agglomeration.

9. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

10. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.

11. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.

12. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

IV. Water quality monitoring and preservation:

1. 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 20 12 (applicable to IF / EAF) 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous).

2. 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

3. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

4. Adhere to 'Zero Liquid Discharge'.

5. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

6. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

7. 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

8. The project proponent shall practice rainwater harvesting to maximum possible extent.

9. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

V. Noise monitoring and prevention:

1. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
2. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

VI. Energy Conservations measures:

1. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
2. Practice hot charging of slabs and billets/blooms as far as possible.
3. Ensure installation of regenerative type burners on all reheating furnaces.
4. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
5. Provide the project proponent for LED lights in their offices and residential areas.

VII. Waste Management:

1. Used refractories shall be recycled as far as possible.
2. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
3. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

4. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
5. Kitchen waste shall be composted or converted to biogas for further *use.(to be decided on case to case basis depending on type and size of plant).*

VIII. Green Belt:

1. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
2. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.

IX. Public Hearing and Human Health issues:

1. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
2. 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 of Factory Act.
3. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

X. Corporate Environment Responsibility:

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. 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.
3. 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.

4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.

5. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

6. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

7. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

XI. Miscellaneous:

1. 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.

2. 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.

3. 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.

4. The project proponent shall monitor the criteria pollutants level namely; PMIO, S02, 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.

5. 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.

6. 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.

7. 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.

8. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

9. 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.

10. 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).

11. 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.

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

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

14. 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.

15. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

16. 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.

XII. Other Conditions:

1. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.

2. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF & CC, Govt. of India.

3. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.

Sd/-
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Memo No.- **EC/SEIAA/2023-24/2809/2023/**381

Dated: 02/11/2023

Copy to:

1. Additional Chief Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand.
2. Deputy Commissioner, District – Saraikela- Kharsawan, Jharkhand.
3. Divisional Forest Officer, Saraikela Forest Division, Saraikela, Jharkhand.
4. Deputy Conservator of Forest & Field Director Elephant Project, Jamshedpur, Jharkhand.
5. Director IA Division, Monitoring Cell, MoEF and Climate Change, Indira Paryavaran Bhavan, Jorbag Road, Aliganj, New Delhi – 110003.
6. Integrated Regional Office, Ranchi, Ministry of Environment, Forest and Climate Change, 2nd Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand – 834002.
7. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
8. Secretary, Jharkhand State Expert Appraisal Committee, Ranchi.
9. Website.
10. Guard file.

01/11/2023

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand

Signature Not Verified
Digitally signed by: Shri Ashok Kumar, IFS
Designation: Member Secretary
Date and Time: 11/29/2023 3:21:41 PM