



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

To,

The chief

THE TINPLATE COMPANY OF INDIA LIMITED

Golmuri Works, Village - Golmuri, Jamshedpur, District - East Singhbhum,  
Jharkhand - 831003. -831003

**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/IND1/412634/2022 dated 06 Jan 2023. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	EC23B000JH119202
2. File No.	EC/SEIAA/2022-23/2480/2023
3. Project Type	Expansion
4. Category	B
5. Project/Activity including Schedule No.	N/A
6. Name of Project	Operation of current plant of capacity 415,000 TPA and proposed phase-wise expansion to 1,015,000 TPA capacity of Electrolytic Tinplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand
7. Name of Company/Organization	THE TINPLATE COMPANY OF INDIA 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.

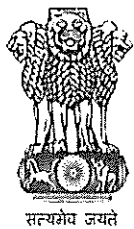
Date: 08/02/2023

(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.

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website: [www.jseiaa.org](http://www.jseiaa.org)

Letter No.- EC/ SEIAA/2020-21/2480/2021/

Ranchi, Date:

To: M/s The Tinsplate Company of India Limited,  
Sri Somenath Bose,  
Chief (Safety, Project & BE),  
Golmuri Works, Village - Golmuri,  
Jamshedpur, District – East Singhbhum,  
Jharkhand – 831003.

Sub.: Environmental Clearance for the project “Operation of current plant of capacity 4,15,000 TPA and proposed phase-wise expansion to 1015,000 TPA capacity of Electrolytic Tinsplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinsplate Company of India Limited at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand” (Proposal No. : SIA/JH/IND1/412634/2022)

Ref: Your letter no. TCIL/SEIAA/2023/01 dated : 04.01.2023.

Sir,

It is in reference to the project “Operation of current plant of capacity 4,15,000 TPA and proposed phase-wise expansion to 1015,000 TPA capacity of Electrolytic Tinsplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinsplate Company of India Limited at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand” submitted by you for seeking prior Environmental Clearances (EC).

This is a an expansion project which has been taken for appraisal on 12.01.2023.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94<sup>th</sup> meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the ToRs in 95<sup>th</sup> meeting held on 14<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2021-22/2480/2021/163, date 18.06.2022. The final EIA / EMP submitted by PP to SEIAA on 04.01.2023 and which was forwarded to SEAC on 04.01.2023.

M/s The Tinsplate Company of India Limited (TCIL) located at Golmuri, Jamshedpur installed an Electrolytic Tinning Line (ETL-1) coupled with a shearing line in the year 1979 to produce Tinsplate (TP) and Tin-free steel (TFS) with imported Tin Mill Black Plate (TMBP) coils. It continued to produce ETP and TFS in various coating weight,

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thickness and width. A captive upstream Cold Rolling Mill Complex (CRMC) was added by TCIL in its premises in 1996 to produce the TMBP coils as required for its ETL to do away with the import of costly TMBP coils as a cost saving measure.

The installed capacity of 90,000 TPA of ETL -I was enhanced to 180,000 TPA through operational excellence, debottlenecking and balancing of facilities. Tinplating capacity has been expanded to 380,000 TPA in 2008 through installation of 200,000 TPA ETL-2. For feeding TMBP subsequently in 2010-11, CRM complex was expanded to rated capacity of 380,000 TPA through installation of CRM-2 facilities. The capacity achieved was 355,784 TPA which is almost 94% of the rated production capacity of 380,000 Ton / year. The major reason for achieving the rated production capacity is by streamlining the flow of Raw material in the form of Hot Rolled coils from Tata Steel our parent company and focus on the equipment availability and performance rate. In view of the above and improvement in operational efficiencies & better product mix, the existing infrastructure and facilities is capable to produce around 415,000 TPA for which we have Consent to Operate.

There is a proposal for expansion by 300,000 TPA in Phase 1 & 300,000 TPA in Phase 2, (additional about 600,000 TPA capacity). The total capacity post expansion would be 1,015,000 TPA of Electrolytic Tinplate and Tin-Free Steel.

#### Executive Summary:

1.	Name of the Company	<b>M/s The Tinplate Company of India Limited.</b>
2.	Address of the Registered Office	4, Bankshall Street, Kolkata, West Bengal - 700001.
3.	Address of Factory	Golmuri Works, Village: Golmuri, Jamshedpur, District: East Singhbhum Jharkhand – 831003.
4.	Present Business	Manufacturer of Electrolytic Tinplate and Tin-Free Steel Sheets
5.	Area of the Plant	Total Plant area is 53.94 Ha inclusive of 8.50 Ha of land to be used for expansion.
6.	Topo Sheet No	73 J/I
7.	Latitude	22° 47' 22.77" N - 22° 47' 50.57" N
8.	Longitude	86° 13' 33.09" E - 86° 14' 15.67" E
9.	Elevation	561 ft.
10.	Existing Production	Electrolytic Tinplate and Tin Free Steel - 4,15,000 TPA including Lacquered sheets and Printed Sheets – 28,000 TPA
11.	Proposed Expansion	Electrolytic Tinplate and Tin Free Steel - 6,00,000 TPA (Phase 1 : 300,000 TPA & Phase 2 : 300,000 TPA)

		Total Capacity :- Existing Production + Proposed expansion : 1,015,000 TPA
12.	Cost of the Project	Existing – Rs. 1408.78 Crores Estimated cost for Expansion – Rs. 1787 Crores (Net) for Phase 1 and Rs. 950 Crores (Net) for proposed Phase 2 expansion. The total estimated cost is Rs.2737 Crores including 100 Crores for EMP. Cost (Existing + Expansion) – Rs. 4145.78 Crores
13.	Man Power Requirement	<b>Existing Manpower</b> Existing Man Power (Direct) - 1380 persons. Existing Man Power (Indirect) - 800 persons.Total Existing Manpower – 2180  <b>Proposed Expansion (Estimated)</b> Construction phase (Proposed expansion) Direct – 100, Indirect - 2300 Operation phase (Proposed expansion)Man Power (Direct) - 761 persons Man Power (Indirect) - 200 personsTotal Manpower – 961 ( Inclusive of Phase 1 & 2)  <b>Total Manpower post expansion –3141</b>
14.	Power Requirement & DG Sets	<b>Power Requirement</b> – Existing – 24 MVA Estimated for Expansion:55 MVA <b>Total – 79 MVA</b> DG Sets - Existing : 3.0 MVA DG Set for Expansion shall be at 415 V level for individual unitsFuel – HSD for D.G Sets  Presently TCIL is receiving power from Tata Steel at 33 kV level from Golmuri Sub- Station through buried cables. Present power requirement at TCIL is approx. 24 MVA which is fed through both feeders from Golmuri Sub Station. In case of outage of one of the feeders, the remaining feeder feeds the total power requirement. Considering the additional power demand of around 55 MVA, the power distribution scheme has been planned in accordance.

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15.	Water Requirement	Existing Makeup Water – 6600 KLD from JUSCO Estimated for Expansion – 5400 KLD (Inclusive of Phase 1 & 2)  Total Water Requirement post expansion- 12000 KLD
16.	Waste Water Generation	<p><b>Domestic Waste Water (Sewage)</b> About 96 KLD Sewage is generated in the Existing Plant. This sewage is sent to Bara STP. After Expansion about 142 KLD Sewage will be generated in the Plant. It will also be sent to Bara STP.</p> <p><b>Industrial Effluent after expansion</b> From ETL Total Wastewater Generation will be 5880 KLD. From CRM Total Wastewater Generation will be 2160 KLD. From Boiler Wastewater Generation will be 120 KLD. From Water Treatment Plant &amp; Other Generation will be 132 KLD.</p> <p>Total Industrial effluent generation after expansion will be 8292 KLD. Currently the waste water is treated in Effluent Treatment Plant and part of the treated water is recycled into the system and balance is discharged as per norms. It is proposed to treat the entire water in ETP with RO System and the treated Water will be recycled within the process (ZLD).</p>

#### Solid Waste Generation and Disposal

##### Non Hazardous Solid Waste (TPA)

Sr. No.	Type of Waste	Source	Existing	Proposed expansion	Total	Utilization
1	Red Oxide (by product of ARP)	ARP	1826	2640	4466	Sold to Competent Party
2	Steel Scrap	CRM & ETL	52416	75782	128198	Sold to Competent Party
3	Tin sludge	ETL	30	42	72	To be sold out

	and dross					
4	Fly ash	AFBC boiler	19857	0	19857	Handed over to Fly ash Brick Manufacturers
5	Bottom Ash	AFBC boiler	2920	4867	7787	Partly used in boiler bed and remaining part is handed over to Brick Manufacturers
6	CRM Sludge	CRM WWTP	3180	4597	7777	Dumped in designated yard within the plant

#### Hazardous Solid Waste( Annual generation)

Sr. No.	Type of Waste	Source	Existing	Proposed expansion	Total	Utilization
1.	Waste Emulsion Oil	Plants & CRM WWTPs	500 MT	600 MT	1110 MT	Disposal to authorized vendor.
2.	ETL Sludge	ETL ETP	753MT	1088MT	1841 MT	Disposal through CHWTSDf (M/s Adityapur Waste Management Pvt. Ltd.)
3.	Waste Pickle Liquor (WPL)	Pickling unit	18000 KL	20000 KL	38000 KL	Regenerated at ARP and Reused in Pickling
4.	Process residue	Solution Centre	12 MT	-	12 MT	Disposal to authorized vendor
5.	Alkali residue	CRM plant	4380 KL	6332 KL	10712KL	Treatment at CRM WWTPs

#### Land use (Area) break-up :

The Plant area is 53.94 Ha and within the land around 8.50 Ha of the land will to be used for expansion. Further Plan is in place and area identified for extending Green Coverage

by 4.75 Ha post expansion of Phase 2. Proposal for developing Water body post Phase 2 expansion is also in place.

Sr. No.	Particular	Existing land utilization (Ha.)	Land utilization post expansion (Ha.)
1.	Plant area	19.95	28.45
2.	Green belt	15	18.1
3.	Water body	0.6	0.6
4.	Open area	18.39	6.79
	<b>Total</b>	<b>53.94</b>	<b>53.94</b>

Khata no. & Plot no. of the project:

SN	Ward No	Khata No	Plot No	Area in Hect
1	12	61	4208 (P)	22.151
2	12	61	4209	0.842
3	12	61	4211 (P)	0.025
4	12	61	4212 (P)	0.001
5	12	61	4213	0.258
6	12	61	4336	0.115
7	12	61	4338	0.052
8	12	61	4339	0.075
9	12	61	4340	0.049
10	12	61	4341	0.014
11	12	61	4342	0.01
12	12	61	4343	0.015
13	12	61	4344	0.01
14	12	61	4345	0.013
15	12	61	4346	0.01
16	12	61	4347	0.013
17	12	61	4348	0.01
18	12	61	4349	0.013
19	12	61	4350	0.01
20	12	61	4351	0.013
21	12	61	4352	0.01
22	12	61	4353	0.012
23	12	61	4354	0.01

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24	12	61	4355	0.012
25	12	61	4356	0.01
26	12	61	4357	0.012
27	12	61	4358	0.012
28	12	61	4359	0.012
29	12	61	4360	0.114
30	12	61	4361	0.068
31	12	61	4362	0.013
32	12	61	4363	0.017
33	12	61	4364	0.002
34	12	61	4365	0.018
35	12	61	4366	0.03
36	12	61	4367	0.02
37	12	61	4368	0.006
38	12	61	4369	0.017
39	12	61	4370	0.006
40	12	61	4371	0.015
41	12	61	4372	0.005
42	12	61	4373	0.015
43	12	61	4374	0.007
44	12	61	4375	0.017
45	12	61	4376	0.005
46	12	61	4377	0.017
47	12	61	4378	0.005
48	12	61	4379	0.017
49	12	61	4380	0.007
50	12	61	4381	0.017
51	12	61	4382	0.006
52	12	61	4383	0.015
53	12	61	4384	0.005
54	12	61	4385	0.017
55	12	61	4386	0.088
56	12	61	4387	0.048
57	12	61	4388	0.075
58	12	61	4389	0.072
59	12	61	4390 (P)	0.26
60	12	61	4391	0.05
61	12	61	4392	0.133
62	12	61	4393	0.014
63	12	61	4394	0.014
64	12	61	4395	0.1
65	12	61	4396	0.047
66	12	61	4397	0.006
67	12	61	4398	0.049
68	12	61	4399	0.006
69	12	61	4400	0.049

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70	12	61	4401	0.006
71	12	61	4402	0.046
72	12	61	4403	0.018
73	12	61	4404	0.058
74	12	61	4405	0.38
75	12	61	4406	0.123
76	12	61	4407	2.579
77	12	61	4408 (P)	1.817
78	12	61	4414	0.118
79	12	61	4415	0.12
80	12	61	4416	0.094
81	12	61	4417	0.012
82	12	61	4418	0.06
83	12	61	4419	0.012
84	12	61	4420	0.056
85	12	61	4421	0.012
86	12	61	4422	0.056
87	12	61	4423	0.012
88	12	61	4424	0.116
89	12	61	4425	0.061
90	12	61	4426	0.009
91	12	61	4427	0.065
92	12	61	4428	0.011
93	12	61	4429	0.063
94	12	61	4430	0.011
95	12	61	4431	0.092
96	12	61	4432	0.01
97	12	61	4433	0.044
98	12	61	4434	0.085
99	12	61	4435	0.01
100	12	61	4436	0.056
101	12	61	4437	0.01
102	12	61	4438	0.056
103	12	61	4439	0.011
104	12	61	4440	0.058
105	12	61	4441	0.011
106	12	61	4442	0.056
107	12	61	4443	0.128
108	12	61	4444	0.006
109	12	61	4445	0.09
110	12	61	4446	0.012
111	12	61	4447	0.06
112	12	61	4448	0.011
113	12	61	4449	0.06
114	12	61	4450	0.011
115	12	61	4451	0.059

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116	12	61	4452	0.011
117	12	61	4453	0.06
118	12	61	4454	0.152
119	12	61	4455	0.14
120	12	61	4456	0.071
121	12	61	4457	0.223
122	12	61	4458	0.043
123	12	61	4459	0.013
124	12	61	4460	0.27
125	12	61	4461	1.842
126	12	61	4462	0.096
127	12	61	4463	0.065
128	12	61	4464	0.042
129	12	61	4465	0.057
130	12	61	4466	0.09
131	12	61	4467	0.104
132	12	61	4468 (P)	0.232
133	12	61	4469 (P)	0.138
134	12	61	4474	0.018
135	12	61	4730 (P)	9.34
136	12	61	4731 (P)	0.216
137	12	61	4732 (P)	0.013
138	12	61	4733	0.004
139	12	61	4734	0.106
140	12	61	4735	0.013
141	12	61	4738	0.52
142	12	61	4739	0.057
143	12	61	4767	0.23
144	12	61	5243	0.482
145	12	61	6210 (P)	0.893
146	12	61	6233 (P)	0.17
147	12	61	6234	0.044
148	12	61	6235	0.005
149	12	61	6236	0.044
150	12	61	6237	0.005
151	12	61	6238	0.044
152	12	61	6239	0.005
153	12	61	6240	0.044
154	12	61	6241	0.11
155	12	61	6242	0.057
156	12	61	6243	0.005
157	12	61	6244	0.044
158	12	61	6245	0.004
159	12	61	6246	0.045
160	12	61	6247	0.173
161	12	61	6248	0.009

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162	12	61	6249	0.197
163	12	61	6250	0.046
164	12	61	6251	0.005
165	12	61	6252	0.046
166	12	61	6253	0.004
167	12	61	6254	0.046
168	12	61	6255	0.081
169	12	61	6256	0.062
170	12	61	6257	0.005
171	12	61	6258	0.041
172	12	61	6259	0.099
173	12	61	6260	0.069
174	12	61	6261	0.322
175	12	61	6262	1.35
176	12	61	6263	0.162
177	12	61	6264	0.069
178	12	61	6265	0.127
179	12	61	6266	0.112
180	12	61	6267	0.246
181	12	61	6268	0.118
182	12	61	6269	0.047
183	12	61	6270	0.009
184	12	61	6271	0.036
185	12	61	6272	0.008
186	12	61	6273	0.063
187	12	61	6274	0.009
188	12	61	6275	0.064
189	12	61	6276	0.009
190	12	61	6277	0.113
191	12	61	6278	0.01
192	12	61	6279	0.056
193	12	61	6280	0.011
194	12	61	6281	0.092
195	12	61	6282	0.01
196	12	61	6283	0.047
197	12	61	6284	0.052
198	12	61	6285	0.109
199	12	61	6286	0.093
200	12	61	6287	0.01
201	12	61	6288	0.097
202	12	61	6289	0.01
203	12	61	6290	0.061
204	12	61	6291	0.011
205	12	61	6292	0.063
206	12	61	6293	0.117
207	12	61	6294	0.063

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208	12	61	6295	0.014
209	12	61	6296	0.067
210	12	61	6297	0.014
211	12	61	6298	0.095
212	12	61	6299	0.014
213	12	61	6300	0.098
214	12	61	6301	0.109
215	12	61	6304 (P)	0.267
216	12	61	6305	0.005
217	12	61	6306	0.018
218	12	61	6307	0.104
219	12	61	6308	0.014
220	12	61	6309	0.015
221	12	61	6310	0.01
222	12	61	6311	0.015
223	12	61	6312	0.03
224	12	61	6313	0.015
225	12	61	6314 (P)	0.078

#### STATUTORY CLEARANCES:

1	DC, Jamshedpur	:	In absence of non availability of Khatiyan / Revenue record DC, Jamshedpur has given a certificate vide memo no. 270/TL, dated 30.07.2021 that if any part of land belongs to forest land / jangal jhari in future the project proponent is bound to follow the direction of Forest (Conservation) Act, 1980. This certificate was based on the directives of Revenue, Registration and Land Reforms Deptt., Govt. of Jharkand issued vide letter no. 05/संभू० लातेहार (विविध)-181/2018(छाया संचिका)4792/रा०रांची, दिनांक 04.12.2018.
2	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 1977, dated 20.12.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 3231 dated 11.12.2021 certified that the distance from the nearest Reserved Forest / Protected Forest from the project site is more than 250 m.
4	Public Hearing	:	JSPCB vide Ref. no. PC/PH/JSR/59-08/2022/B-2289, dated 03.11.2022 has informed that Public Hearing conducted on 22.09.2022.
5	Consent to Operate (CTO)	:	CTO granted by JSPCB vide : i. Ref. no. JSPCB/HO/RNC/CTO-8681379/2021/77, dated

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		18.01.2021.
		ii. Ref. no. JSPCB/HO/RNC/CTO-13999247/2022/1581, dated 10.11.2022.
5	Certified CTO Compliance Report	: CTO Compliance Report certified by JSPCB vide memo no. B-2493, dated 28.11.2022.

**During the presentation the following documents were sought:**

- Pollution load due to emissions from the stack is to be provided for controlled and uncontrolled conditions. Pollution load also to be provided after the existing coal fired boiler is replaced by natural gas as fuel.
- Details of Air Pollution control devices to be revised to include type of scrubbing system.
- Details of waste water generation from different process units of the plant alongwith the corresponding effluent treatment system is to be provided.
- Details of Air Emissions from different process units of the plant alongwith the corresponding Air Pollution Control system is to be provided.
- Details of Hazardous waste generation from different process units of the plant alongwith the corresponding handling & management system is to be provided.
- The EMP table is to be revised to include budget for addressing the issues raised during the public hearing, addressing the budget to meet the socio economic needs and also to include contingency fund.
- Copy of the test report of ground water sample taken from within the premises is to be submitted.
- An undertaking that the proposed ETP will be designed for a capacity of 9600 KLD, which is 20 - 25% above the effluent generation capacity to be provided.
- An undertaking stating that all necessary pollution control measures shall be implemented so as to maintain the AAQ within the prescribed limit at all time to be provided.

**The Project Authorities have submitted the above mentioned documents.**

The proposal was appraised by State Level Expert Appraisal Committee (SEAC) and recommended for grant of Environmental Clearance in its 100<sup>th</sup> meeting held on 09<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup> January, 2023.

State Level Environment Impact Assessment Authority (SEIAA), Jharkhand in its 101<sup>st</sup> meeting held on 23<sup>rd</sup> & 24<sup>th</sup> January, 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 **“Operation of current plant of capacity 4,15,000 TPA and proposed phase-wise expansion to 1015,000 TPA capacity of Electrolytic Tinplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinplate Company of**





India Limited at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand” alongwith the following conditions as recommended by SEAC.

**I. Specific Conditions:**

- i. 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.
- ii. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continuous Improvement and periodical management review.
- iii. All raw material to be stored only under covered shed.
- iv. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- v. 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.
- vi. Trees should be planted & maintained not less than 15% of project area.
- vii. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is used as compost manure.
- viii. Developers/Company to install STP of sufficient capacity such that all the sewage generated is treated and reused.
- ix. 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.
- x. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- xi. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging conditions in vicinity.
- xii. Sufficient number of EV fast charging point to be installed.
- xiii. No mining/activity shall be undertaken in the forest land or deemed forest without obtaining requisite prior forestry clearance.
- xiv. 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.

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- xv. 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).
- xvi. 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.
- ii. As proposed, only propane gas will be used as fuel to reduce particulate emissions.
- iii. Efforts shall be made to reduce PM levels in the ambient air. Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration of PM are anticipated in consultation with the State Pollution Control Board (SPCB). Data on ambient air, stack and fugitive emissions shall be submitted to the SEIAA Office JSPCB and CPCB.
- iv. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided. The emissions of particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time.
- v. The company shall monitor the raw and treated wastewater quality for trace metals and air quality at sources and ambient including routine parameters and the reports shall be submitted regularly with six monthly compliance report.
- vi. The company shall connect the pollution control equipment to DG set to ensure operation of these equipments during power failure. The company shall also provide interlocking system with the process equipment so that the plant automatically stops in case the pollution load exceeds the guaranteed limits.
- vii. The industry shall ensure that the treated effluent and stack emissions in the unit are within the norms stipulated under the EP Rules or JSPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipments adopted in the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- viii. In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Dust suppression and dust extraction systems shall be provided to control fugitive emissions at material handling points. Fugitive emissions shall be controlled by providing closed storages, water sprinkling system, etc. to arrest the suspended particles.
- ix. Secondary fugitive emissions from all the sources 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. The emission standards issued by the Ministry in May, 2008 shall be followed.

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- x. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- xi. Total water requirement from ground water source shall not exceed 495 m<sup>3</sup>/day. All the wastewater generated from the process shall be treated in the effluent treatment plant (ETP) and recycled and reused in the process and/or used for dust suppression, green belt development and for various activities at the project site. No effluent shall be discharged outside the premises. 'Zero' discharge shall be strictly adopted.
- xii. Prior permission' for the drawl of 150 m<sup>3</sup>/day water from ground water source shall be obtained from the concerned department and a copy of the letter shall be submitted to this office within 6 months of issue of the environment clearance.
- xiii. As proposed, all the metal scrap, iron oxide and dust shall be disposed for recycle / reuse in furnaces. The domestic waste including sewage sludge shall be treated biologically and used as manure for green belt. Used/spent oil shall be sold to authorized recyclers as per the Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2016 and subsequent amendments.
- xiv. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xv. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding end use of solid/hazardous waste shall be submitted to the SEIAA, JSPCB and CPCB.
- xvi. Plantation should be done over an area equal to 33% of plant area including Green Belt inside and Plantation outside the premises. Local species trees should be planted as per the CPCB guidelines.
- xvii. Proper care shall be taken in structural design to protect against earthquake if the site falls under earthquake zone and implemented during construction phase.
- xviii. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP/Soak Pit, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

## II. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. 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

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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. (incase of the presence of schedule-I species in the study area).

- iv. 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".
- v. 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.
- vi. 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.
- vii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- viii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi/SEIAA/CPCB.
- ix. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The SEIAA, Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further condition in the interest of Environment Protection.

### III. Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31<sup>st</sup> 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

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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. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 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)
- iv. 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.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. 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.
- ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii. 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:

- 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 (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).

- 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. 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.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31<sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. 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.
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. 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:**

- i. 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.
- ii. 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 Conservation measures:**

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.







- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.
- iv. 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.
- v. Provide the project proponent for LED lights in their offices and residential areas.

**VII. Waste management:**

- i. Used refractories shall be recycled as far as possible.
- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces.
- iii. 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.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the
- v. Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- vi. 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:**

- i. 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.
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

**IX. 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 of Factory Act.
- iii. 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

*At*

*By*

*[Signature]*

**X. Corporate Environment Responsibility:**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved 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.
- iv. 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.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

**XI. 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; PM10, SO2, 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 authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. 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.
- x. 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).
- xi. 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.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. 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.
- xv. 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.

- xvi. Any appeal against this Environmental Clearance 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 :**

- i. 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.
- ii. In view of MoEF & CC O.M. No.- 22-27/2015-IA-III, dated- 12.04.2016 The Environmental Clearance accorded shall be valid for a period of Seven (07) years. The PP shall not increase production rate and make modifications in process during the validity of Environmental Clearance.
- iii. 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/2020-21/2480/2021/ 367

Dated: 30/01/2023

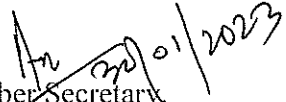
Copy to:

1. Additional Chief Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand.
2. Deputy Commissioner, East Singhbhum, Jamshedpur, Jharkhand.
3. Divisional Forest Officer, Jamshedpur Forest Division, Jamshedpur, 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, 2<sup>nd</sup> 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.

  
Member Secretary  
State Level Environment Impact  
Assessment Authority, Jharkhand







