F. No. J-11011/281/2007-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division – Industry I sector)
***

Indira Paryavaran Bhawan
Vayu Wing, 3rd Floor
Jor Bagh Road, Aliganj
New Delhi – 110003

Dated: 16th June, 2023

To

M/s JSL FERROUS LIMITED (JSLFL)
c/o Jindal Stainless (Hisar) Ltd. OP Jindal Marg Hisar, Jajpur
Odisha- 755026
Email: shashi@jindalstainless.com

Project: Expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill from 1.6 MTPA to 2.6 MTPA – Partial transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from M/s Jindal Stainless Limited to JSL Ferrous Limited located at Kalinganagar Industrial Complex, Jajpur, Odisha– Partial transfer of Environment Clearance – regarding.

Sir,

This refers to your proposal no. **IA/OR/IND/285473/2022 dated 23.09.2022** received through PARIVESH Portal along with Form 7 and sought for part transfer of said Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) at Kalinganagar Industrial Complex, Jajpur, Odisha.

2. The proposals were considered in the 16th meeting EAC(Industry-I) held on 3rd November, 2022 ,18th meeting of the EAC (Industry-I) held on 28-29th November, 2022. Further considered in the 19th meeting of the EAC for Industry-I sector held on 16th & 19th December, 2022 for correction in the minutes of the 18th EAC meeting. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at https://parivesh.nic.in.

Details submitted by the project proponent

3. M/s. Jindal Stainless Limited (JSL) was originally accorded environmental clearance vide letter No. IA-J-11011/281/2007- IA.II(I), dated 01.06.2022 for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from 1.6 MTPA to 2.6 MTPA within the existing Steel Plant at Kalinga Nagar Industrial Complex, Jajpur Road, Odisha. As per the said EC following is the product capacities of various process units.

S. No.	Plant Equipment/ Facility	Final	
		Configuration	Capacity
	Iron Making	-	**2.35 MTPA**
1	Blast Furnace	1x720 m^3 1x1680 m^3	2.35 MTPA
2	Sinter Plant	1x120 m^2 1x240 m^2	3.64 MTPA
SMS			**4.5 MTPA**
3	EAF	2x150 T	-

S. No.	Plant Equipment/ Facility	Final	
		Configuration	Capacity
4	Induction Furnace	3x30 T + 2x6 T + 1x200 kg	-
5	Cr Converter	1x70 T	-
6	BOF	1x110 T 1x150 T	-
	AOD	3x150 T	-
	LF	4x150 T	-
7	Caster Shop	4x1 Strand	-
CRM		-	**2.6 MTPA**
8	HAPL	3 lines	2 x 0.8 MTPA + 1 x 1.0 MTPA
9	CAPL	3 lines	2 x 0.45 MTPA + 1 x 0.5 MTPA
10	Tandem mill	1 mill	1 x 1.0 MTPA
11	Z mill	2 mills	2 x 0.15 MTPA
12	Bright annealing	2 lines	2 x 0.075 MTPA
13	Finishing lines (Slitting, cut to length, Skin pass mill etc.)	20 lines	-
Ferro Alloy Complex		-	**0.33 MTPA**
14	Pelletisation & Sintering of Cr ore	1 unit	0.7 MTPA
15	SAF –Ferro Chrome	2x60 MVA + 3x27.6 MVA	0.25 MTPA Increase in Fe-Cr production by change of feed from briquette to palletized sinter)
16	WHRB	2x28.5 TPH	13 MW
17	AFBC	50 TPH	
18	Briquette Plant	180 TPH	180 TPH
19	Jigging Plant	150 TPH	150 TPH
20	Thermal Power Plant	2x125 MW	250 MW
21	TRT (BF)	14 MW	14 MW
Flux Complex		-	**0.74 MTPA**
22	Lime –Dolo Calcining Plant	3 x 600 TPD + 1x450 TPD	-
23	Hydrated Lime Plant	200 TPD	-
24	Air Separation Plant	2x425 TPD + 1x900 TPD	2 x 425 TPD + 1 x 900 TPD
25	Metal Recovery	2x50 TPH + 3x80 TPH	340 TPH
26	Railway siding with wagon tippler	3nos. wagon tippler with 12 nos. line including ICD facility	-

4. Detail of Consent to Establishment/ Consent to Operate:

	Date	**Details**
CTE	16.09.2022	Consent to Establish for said expansion project was accorded by SPCB, Odisha vide letter No. 16913/IND-II-CTE-6660; dated : 16.09.2022.
CTO	19/03/2021	Latest Consent to Operate for the units prior to expansion was accorded by Odisha State Pollution Control Board vide lr. No. 4558/ IND-I-CON-5136 dated 19/03/2021. The validity of CTO is up to 31/03/2023.

5. The implementation status of the EC dated 01.06.2022 is furnished as below.

S. No.	**Plant Equipment/ Facility**	**Final**		**Implementation Status (Proposed facilities yet to install)**
		Configuration	**Capacity**	
	Iron Making	-	**2.35 MTPA**	**2.35 MTPA**
1	Blast Furnace	1x720 m^3 1x1680 m^3	2.35 MTPA	1 x 720 m^3 1 x 1680 m^3
2	Sinter Plant	1x120 m^2 1x240 m^2	3.64 MTPA	1 x 120 m^2 1 x 240 m^2 (3.64 MTPA)
SMS			**4.5 MTPA**	**2.3 MTPA**
3	EAF	2x150 T	-	-
4	Induction Furnace	3x30 T + 2x6 T + 1x200 kg	-	2 x 30T
5	Cr Converter	1x70 T	-	1 x 70 T
6	BOF	1x110 T 1x150 T	-	1 x 110 T 1 x 150 T
	AOD	3x150 T	-	1 x 150 T
	LF	4x150 T	-	2 x 150 T
7	Caster Shop	4x1 Strand	-	2 x 1 Strand
CRM		-	**2.6 MTPA**	**1.0 MTPA**
8	HAPL	3 lines	2 x 0.8 MTPA + 1 x 1.0 MTPA	1 x 1.0 MTPA
9	CAPL	3 lines	2 x 0.45 MTPA + 1 x 0.5 MTPA	1 x 0.5 MTPA
10	Tandem mill	1 mill	1 x 1.0 MTPA	1 x 1.0 MTPA
11	Z mill	2 mills	2 x 0.15 MTPA	2 x 0.15 MTPA
12	Bright annealing	2 lines	2 x 0.075 MTPA	2 x 0.075 MTPA
13	Finishing lines (Slitting, cut to length, Skin pass mill etc.)	20 lines	-	10 lines
Ferro Alloy Complex		-	**0.33 MTPA**	**0.08 MTPA**
14	Pelletisation & Sintering of Cr ore	1 unit	0.7 MTPA	0.7 MTPA
15	SAF –Ferro Chrome	2x60 MVA +	0.25 MTPA	

S. No.	Plant Equipment/ Facility	Final		Implementation Status (Proposed facilities yet to install)
		Configuration	Capacity	
		3x27.6 MVA	Increase in Fe-Cr production by change of feed from briquette to palletized sinter)	
16	WHRB	2x28.5 TPH	13 MW	-
17	AFBC	50 TPH		-
18	Briquette Plant	180 TPH	180 TPH	-
19	Jigging Plant	150 TPH	150 TPH	50 TPH
20	Thermal Power Plant	2x125 MW	250 MW	-
21	TRT (BF)	14 MW	14 MW	14 MW
Flux Complex		**-**	**0.74 MTPA**	**0.39 MTPA**
22	Lime –Dolo Calcining Plant	3 x 600 TPD + 1x450 TPD	-	2 x 600 TPD
23	Hydrated Lime Plant	200 TPD	-	
24	Air Separation Plant	2x425 TPD + 1x900 TPD	2 x 425 TPD + 1 x 900 TPD	**1 X 900 TPD**
25	Metal Recovery	2x50 TPH + 3x80 TPH	340 TPH	**1 x 50 TPH + 2 x 80 TPH**
26	Railway siding with wagon tippler	3nos. wagon tippler with 12 nos. line including ICD facility	-	**2 nos. Wagon Tippler with 7nos. Line from Jakhapura/ Sukinda Road Station and ICD facilities**

6. The instant proposal is for part transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) (EC letter no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022) to JSL Ferrous Limited (JSLFL). The reasons for part transfer of the said facilities is that M/s. JSL as a group company intends to enter into the Carbon Steel business as a separate entity.

S No.	Plant Equipment/ Facility	Existing as per EC dated 01.06.2022		Details after amendment/transfer				Submitted by the PP
				Jindal Stainless Limited (JSL)		JSL Ferrous Limited (JSLFL)		
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
	Iron Making	**-**	**2.35 MTPA**	**-**	**-**	**-**	**2.35 MTPA**	
1	Blast Furnace	1x720 m^3 1x1680 m^3	2.35 MTPA	-	-	1x720 m^3 1x1680 m^3	2.35 MTPA	In JSLFL, BF facility to be amended to 1 x 2,307 m^3

S No.	Plant Equipment/ Facility	Existing as per EC dated 01.06.2022		Details after amendment/transfer				Submitted by the PP
				Jindal Stainless Limited (JSL)		JSL Ferrous Limited (JSLFL)		
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
								instead of 1 x 720 m^3 + 1 x 1680 m^3
2	Sinter Plant	1x120 m^2 1x240 m^2	3.64 MTPA	-	-	1x120 m^2 1x240 m^2	3.64 MTPA	In JSLFL, SP facility to be amended to 1 x 120 m^2 + 1 x 248 m^2 instead of 1 x 120 m^2 + 1 x 240 m^2 with no change of final production capacity
SMS			**4.5 MTPA**		**2.2 MTPA**		**2.3 MTPA**	
3	EAF	2x150 T	-	2x150 T	-	-	-	
4	Induction Furnace	3x30 T + 2x6 T + 1x200 kg	-	3x30 T + 2x6 T + 1x200 kg	-	-	-	
5	Cr Converter	1x70 T	-	1x70 T	-	-	-	
6	BOF	1x110 T 1x150 T	-	-	-	1x110 T 1x150 T	-	
	AOD	3x150 T	-	3x150 T	-	-	-	
	LF	4x150 T	-	2x150 T	-	2x150 T	-	Partial Transfer
7	Caster Shop	4x1 Strand	-	2x1 Strand	-	2x1 Strand	-	Partial Transfer
CRM		-	**2.6 MTPA**	-	**2.6 MTPA**	-	-	
8	HAPL	3 lines	2 x 0.8 MTPA + 1 x 1.0 MTPA	3 lines	2 x 0.8 MTPA + 1 x 1.0 MTPA	-	-	
9	CAPL	3 lines	2 x 0.45 MTPA + 1 x 0.5 MTPA	3 lines	2 x 0.45 MTPA + 1 x 0.5 MTPA	-	-	
10	Tandem mill	1 mill	1 x 1.0 MTPA	1 mill	1 x 1.0 MTPA	-	-	
11	Z mill	2 mills	2 x 0.15 MTPA	2 mills	2 x 0.15 MTPA	-	-	

S No.	Plant Equipment/ Facility	Existing as per EC dated 01.06.2022		Details after amendment/transfer				Submitted by the PP
				Jindal Stainless Limited (JSL)		JSL Ferrous Limited (JSLFL)		
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
12	Bright annealing	2 lines	2 x 0.075 MTPA	2 lines	2 x 0.075 MTPA	-	-	
13	Finishing lines (Slitting, cut to length, Skin pass mill etc.)	20 lines	-	20 lines	-	-	-	
Ferro Alloy Complex		**-**	**0.33 MTPA**	**-**	**0.33 MTPA**	-	-	
14	Pelletisation & Sintering of Cr ore	1 unit	0.7 MTPA	1 unit	0.7 MTPA	-	-	
15	SAF –Ferro Chrome	2x60 MVA + 3x27.6 MVA	0.25 MTPA Increase in Fe-Cr production by change of feed from briquette to palletized sinter)	2x60 MVA + 3x27.6 MVA	0.25 MTPA Increase in Fe-Cr production by change of feed from briquette to palletized sinter)	-	-	
16	WHRB	2x28.5 TPH	13 MW	2x28.5 TPH	13 MW	-	-	
17	AFBC	50 TPH		50 TPH		-	-	
18	Briquette Plant	180 TPH	180 TPH	180 TPH	180 TPH	-	-	
19	Jigging Plant	150 TPH	150 TPH	150 TPH	150 TPH	-	-	
20	Thermal Power Plant	2x125 MW	250 MW	2x125 MW	250 MW	-	-	
21	TRT (BF)	14 MW	14 MW	14 MW	14 MW	-	-	
Flux Complex		**-**	**0.74 MTPA**	**-**	**0.74 MTPA**	-	-	
22	Lime –Dolo Calcining Plant	3 x 600 TPD + 1x450 TPD	-	3 x 600 TPD + 1x450 TPD	-	-	-	
23	Hydrated Lime Plant	200 TPD	-	200 TPD	-	-	-	
24	*Air Separation	2x425 TPD +	2 x 425 TPD + 1 x	2x425 TPD + 1x900	1 x 425 TPD +	-	-	Amendment in

S No.	Plant Equipment/ Facility	Existing as per EC dated 01.06.2022		Details after amendment/transfer				Submitted by the PP
				Jindal Stainless Limited (JSL)		JSL Ferrous Limited (JSLFL)		
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
	Plant	1x900 TPD	900 TPD	TPD	1x1450 TPD			configuration of one no. Air Separation Plant from 900 TPD to 1450 TPD
25	Metal Recovery	2x50 TPH + 3x80 TPH	340 TPH	2x50 TPH + 3x80 TPH	340 TPH	-	-	
26	Railway siding with wagon tippler	3nos. wagon tippler with 12 nos. line including ICD facility	-	3nos. wagon tippler with 12 nos. line including ICD facility	-	-	-	

7. With respect to the EC amendment and part transfer, the project proponent submitted following documents.

- Form 4 for amendment in EC and Form 7 for transfer of Environment Clearance.
- No objection Certificate from M/s. Jindal Stainless Limited by way of affidavit in an India non-judicial stamp dated 17.06.2022 for partial transfer of Environment clearance dated 01.06.2022 to M/s. JSL Ferrous Limited.
- Undertaking from M/s. JSL Ferrous Limited by way of affidavit in an India non-judicial stamp dated 17.06.2022 stating that they will be comply with all the applicable conditions as stipulated in the Environment Clearance dated 01.06.2022.
- Copy of the board resolution passed by the Board of Directors of Jindal Stainless Limited at their meeting held on 25.07.2022, wherein decision has been taken for such arrangements pertaining to transfer of firm from M/s. Jindal Stainless Limited to M/s. JSL Ferrous Limited.
- Certificate of Incorporation of M/s. JSL Ferrous Limited from ROC, Ministry of Corporate Affairs dated 21.11.2019 bearing CIN Number U27200HR2019PLC083764.
- Certificate of Incorporation of M/s. Jindal Stainless Limited from ROC, Ministry of Corporate Affairs dated 07.12.2011 bearing CIN Number L26922HR1980PLC010901.
- Facility matrix showing devolution of production facilities between JSL and JSLFL.
- Project Information Matrix between JSL and JSLFL
- Matrix of applicability of stipulations of EC and subsequent amendments between JSL and JSLFL.
- The addendum EIA report inter-alia including process details, emission levels, solid and hazardous waste management, raw material and fuel requirement, the Environmental Management Plan (EMP), etc. for the project.

S No	Name of Company	CIN No	Change of Ownership
1	M/s. Jindal Stainless Limited	L26922HR1980PLC010901	As per Sl. No 1 (f) of Form -7, the project proponent has submitted that

S No	Name of Company	CIN No	Change of Ownership
2	M/s. JSL Ferrous Limited	U27200HR2019PLC083764	the proposal involves change in ownership between M/s. Jindal Stainless Limited and M/s. JSL Ferrous Limited. Further the CIN numbers of the both companies are found different. In view of the same the proposal involves transfer of Environment Clearance from M/s. Jindal Stainless Limited to M/s. JSL Ferrous Limited.

8. The EAC examined the aforementioned documents and noted that following are the changes may be arising out of the EC amendment followed by the part transfer of the facilities:

I. <u>Project Information Matrix</u>

<table>
<tr><th>Sl. No.</th><th>Parameter</th><th>JSL</th><th>JSLFL</th></tr>
<tr><td>1</td><td>Project Name</td><td>Amendment of EC of Jindal Stainless Limited for Crude Steel production of 2.2 MTPA and Cold Rolling Mill of 2.6 MTPA in the existing Plant post transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA located at Kalinganagar Industrial Complex, Jajpur, Odisha.</td><td>Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA located at Kalinganagar Industrial Complex, Jajpur, Odisha.</td></tr>
<tr><td>2</td><td>Location</td><td>Kalinga Nagar Industrial Complex
Village - Danagadi
Tehsil – Danagadi
District – Jajpur
State - Odisha</td><td>Kalinga Nagar Industrial Complex
Village - Danagadi
Tehsil – Danagadi
District – Jajpur
State - Odisha</td></tr>
<tr><td>3</td><td>Coordinates</td><td><table><tr><th>Point</th><th>Direc-tion</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>N</td><td>20°58'10"N</td><td>86°02'34"E</td></tr><tr><td>B</td><td>NE</td><td>20°57'22"N</td><td>86°01'53"E</td></tr><tr><td>C</td><td>E</td><td>20°56'23"N</td><td>86°02'21"E</td></tr><tr><td>D</td><td>SE</td><td>20°56'59"N</td><td>86°03'43"E</td></tr><tr><td>E</td><td>NE</td><td>20°57'59"N</td><td>86°03'26"E</td></tr></table></td><td><table><tr><th>Point</th><th>Direc-tion</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>NW</td><td>20°56'56"N</td><td>86°02'15"E</td></tr><tr><td>B</td><td>NNW</td><td>20°57'14"N</td><td>86°02'32"E</td></tr><tr><td>C</td><td>NNE</td><td>20°57'22"N</td><td>86°02'55"E</td></tr><tr><td>D</td><td>SSE</td><td>20°56'48"N</td><td>86°02'51"E</td></tr><tr><td>E</td><td>SW</td><td>20°56'35"N</td><td>86°02'28"E</td></tr></table></td></tr>
<tr><td>4</td><td>Land Area</td><td>348 ha
(860.18 acre)</td><td>89.03 ha
(220 acre)</td></tr>
<tr><td>5</td><td>Greenbelt</td><td>127.07 ha
(314 Acre)</td><td>29.4 ha
(73 Acre)</td></tr>
<tr><td>6</td><td>Utilities</td><td>Water: 1391 m3/hr
Power: 333 MW</td><td>Water: 350 m3/hr
Power: 126 MW</td></tr>
<tr><td>7</td><td>Manpower</td><td>Construction phase: 1080
Operation phase: 1300</td><td>Construction phase: 1100
Operation phase: 940</td></tr>
<tr><td>8</td><td>Project Cost</td><td>INR 11955 crore</td><td>INR 3249 crore</td></tr>
</table>

9	EMP Cost	INR 1088 crore	INR 324.2
10	CER and PH raised issues implementation Cost	INR 34.41 crore	INR 20 crore

II. Raw Material Requirement

Sl. No.	Raw Material	JSL	JSLFL
1	Lime stone	1.94 MTPA	-
2	Dolomite	0.20 MTPA	-
3	Pyroxenite	0.03 MTPA	-
4	Quartz	0.03 MTPA	-
5	Ferro alloy	0.07 MTPA	-
6	Hot Rolled Coil	0.97 MTPA	-
7	Coke	-	1.11 MTPA
8	PCI Coal	-	0.25 MTPA
9	Coke Breeze	-	0.19 MTPA
10	Lump Iron Ore	-	0.35 MTPA
11	Iron Ore Fines	-	3.15 MTPA

III. Risk Matrix

Sl. No.	Event	Likelihood of occurrence	Likelihood of detection	Severity of consequence	Risk potential
M/s. Jindal Stainless Limited					
i	Fuel gas leaks from the pipe line/valves/gas holders	High (4)	Low (4)	High (10)	80
ii	Propane storage and handling	Very low (1)	High (2)	High (10)	30
iii	Unsafe disposal of oily wastes of Rolling Mills	Moderate (3)	Low (4)	Moderate (8)	56
iv	Occurrence of static electricity/electric spark in the Mill Cellar Room	Very low (1)	Very low (5)	High (10)	60
v	Leakage of acids/alkalis	Low (2)	Very low (5)	Moderate (8)	56
vi	Uncontrolled dust emissions/failure of emission control system	High (4)	Moderate (3)	Moderate (8)	56
vii	Oil wastes/oil sludge handling	Low (2)	High (2)	Moderate (8)	32
viii	Release of untreated wastewater	Low (2)	Very High (1)	High (10)	30

Sl. No.	Event	Likelihood of occurrence	Likelihood of detection	Severity of consequence	Risk potential
ix	Collapsing of acid/alkali storage tanks	Very low (1)	High (2)	High (10)	30
M/s. JSL Ferrous Limited					
i	Fuel gas leaks from the pipe line/valves/gas holders	High (4)	Low (4)	High (10)	80
ii	Propane storage and handling	Very low (1)	High (2)	High (10)	30
iii	Unsafe disposal of oily wastes of Rolling Mills	Moderate (3)	Low (4)	Moderate (8)	56
iv	Occurrence of static electricity/electric spark in the Mill Cellar Room	Very low (1)	Very low (5)	High (10)	60
v	Leakage of acids/alkalis	Low (2)	Very low (5)	Moderate (8)	56
vi	Failure of emission control system	High (4)	Moderate (3)	Moderate (8)	56
vii	Oil wastes/oil sludge handling	Low (2)	High (2)	Moderate (8)	32
viii	Release of untreated wastewater	Low (2)	Very High (1)	High (10)	30
ix	Collapsing of acid/alkali storage tanks	Very low (1)	High (2)	High (10)	30
x	Failure of Gas Cleaning Plant/ Fume Extraction System	Moderate (3)	High (2)	High (10)	50
xi	Wet scrubbers running dry	Low (2)	Moderate (3)	High (10)	50
xii	Collapsing of Gas holder	Very low (1)	High (2)	High (10)	30
xiii	Splashing of molten metal and slag	Low (2)	Very High (1)	High (10)	30

IV. EC conditions compliance matrix

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
Specific Conditions:			
i	Three tier Green Belt shall be developed in a time frame of one year covering 35% of total area (as committed by PP) 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	Three tier Green Belt shall be developed in a time frame of one year covering 35% of total area (as committed by PP) 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.	Three tier Green Belt shall be developed in a time frame of one year covering 35% of total area (as committed by PP) 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.

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	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 concern Regional Office of the MoEF&CC.	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 concern Regional Office of the MoEF&CC. **Compliance:** JSL as a group company has planted 343374 nos. of trees covering an area of 194.04 Ha (about 38.7 % of the total area) of green belt inside the plant premises till August' 2022. Further Avenue Plantation of about 159180 nos. samplings have been made outside the plant & 95999 nos. samplings have been distributed at free of cost to the nearby villages and educational institutions till March' 2022.	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 concern Regional Office of the MoEF&CC. **Compliance:** Out of 220 Acre of total plant area, around 73 Acres of land has been earmarked for green belt development.
ii	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface. **Compliance:** At present, Greening and Paving has been implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface. The same shall be adopted in the said expansion project.	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface. **Compliance:** Noted and agreed
iii	41,784 m3 /day of water requirement after the proposed expansion shall be met from Brahmani River and by Internal recycling after prior approval of the Competent Authority. No ground water	33,384 m3 /day of water requirement after the proposed expansion shall be met from Brahmani River and by Internal recycling after prior approval of the Competent Authority. No ground water	8,400 m3 /day of water requirement after the proposed expansion shall be met from Brahmani River and by Internal recycling after prior approval of the Competent Authority. No ground water

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	abstraction is permitted.	abstraction is permitted. **Compliance:** Post expansion of JSL, 33,384 m3/day water shall be met from Brahmani River and by Internal recycling with the approval of the Competent Authority. No ground water abstraction is permitted.	abstraction is permitted. **Compliance:** Noted and agreed.
iv	Cold Rolling Mill shall have its independent ETP. Hazardous waste generated in CRM shall be sent to TSDF and oily waste shall be sent to registered recyclers. Acid Recovery Plant shall be provided in CRM.	Cold Rolling Mill shall have its independent ETP. Hazardous waste generated in CRM shall be sent to TSDF and oily waste shall be sent to registered recyclers. Acid Recovery Plant shall be provided in CRM. Compliance: At present an independent ETP has been installed and the ETP sludge (hazardous waste) generated is being sent to SPCB approved CHWTSDF, Ramky at Sukinda. The same practice will be adopted in the expansion project.	Not Applicable.
v	Covered sheds and toe walls shall be provided for raw material storage to check any attrition of raw materials. Storage sheds shall have garland drains, material traps and shall be built on concrete platforms.	Covered sheds and toe walls shall be provided for raw material storage to check any attrition of raw materials. Storage sheds shall have garland drains, material traps and shall be built on concrete platforms. **Compliance:** At present Covered sheds with concrete flooring, toe walls, garland drains and settling pits have been made for storage of raw materials. The same practice will be adopted in the expansion project.	Covered sheds and toe walls shall be provided for raw material storage to check any attrition of raw materials. Storage sheds shall have garland drains, material traps and shall be built on concrete platforms. **Compliance:** Noted and agreed
vi	Top Recovery Turbine, Dry Gas Cleaning and Stove gas	Compliance:	Top Recovery Turbine, Dry Gas Cleaning and Stove gas

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	waste heat recovery systems shall be installed in BF.	Not Applicable	waste heat recovery systems shall be installed in BF. **Compliance:** Noted and agreed
vii	Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.	Compliance: Not Applicable	Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant. **Compliance:** Noted and agreed
viii	TCLP analysis of the AOD slag shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, AOD slag shall be utilized at project site for brick manufacturing and construction work after the recovery of metal.	TCLP analysis of the AOD slag shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, AOD slag shall be utilized at project site for brick manufacturing and construction work after the recovery of metal. Compliance: At present, TCLP analysis of AOD slag is being carried out by IMMT(CSIR – Institute of Minerals and Materials Technology), Bhubaneswar and the AOD slag is found to be non hazardous in nature. The slag after metal recovery is being used as low laying area filling and road construction at NHAI. The same practice will be adopted in the expansion project.	Compliance: Not Applicable
ix	The Oil scum and oily waste from CRM shall be sent to registered recyclers	The Oil scum and oily waste from CRM shall be sent to registered recyclers. **Compliance:** At present, the Oil scum and oily waste generated from	Compliance: Not Applicable

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		CRM is being sent to authorized recyclers. The same practice will be adopted in the expansion project.	
x	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. b. Proper covered vehicle shall be used while transport of materials. EC Identification No. - EC22A008OR182825 File No. - IA-J-11011/281/2007-IA.II(I) Date of Issue EC - 01/06/2022 Page 6 of 13 c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. **Compliance:** At present, Dry fog systems have been installed at conveyors points and gun sprinklers were also installed at raw material storage yard to control fugitive emission. The same practice shall be followed in the said expansion project. b. Proper covered vehicle shall be used while transport of materials. EC Identification No. - EC22A008OR182825 File No. - IA-J-11011/281/2007-IA.II(I) Date of Issue EC - 01/06/2022 Page 6 of 13 **Compliance:** At present, all the raw materials are transporting through rail and covered vehicles and the same shall be followed in the said expansion project. c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.	Following additional arrangements to control fugitive dust shall be provided: a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. **Compliance:** Noted and agreed b. Proper covered vehicle shall be used while transport of materials. EC Identification No. - EC22A008OR182825 File No. - IA-J-11011/281/2007-IA.II(I) Date of Issue EC - 01/06/2022 Page 6 of 13 **Compliance:** Noted and agreed c.Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system. **Compliance:** Noted and agreed

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		Compliance: Wheel washing system with complete recirculation system has been installed.	
xi	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project. **Compliance:** At present, all the internal roads and connecting road from project site to main highway are made with RCC/PCC and the same shall be followed in the said expansion project.	All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project. **Compliance:** Noted and agreed
xii	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC. **Compliance:** Performance test will be conducted on all pollution control systems every year and report will be submitted to Regional Office of the MoEF&CC.	Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC. **Compliance:** Noted and agreed
xiii	Particulate matter emission from stacks shall be less than 30 mg/Nm3.	Particulate matter emission from stacks shall be less than 30 mg/Nm3. Compliance: Suitable Pollution Control equipments will be installed to confirm the Particulate Matter emission from stacks less than 30 mg/Nm3.	Particulate matter emission from stacks shall be less than 30 mg/Nm3. Compliance: Noted and agreed
xi	85-90 % of billets shall be	85-90 % of billets shall be	Compliance:

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
v	rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel.	rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel. Compliance: Slabs from SMS are being rolled directly in hot stage. RHF is operating using only Light Diesel Oil as a fuel.	Not Applicable
xv	Submerged Arc Furnace and Electric Arc Furnace shall be of closed type with 4th hole extraction system.	Submerged Arc Furnace and Electric Arc Furnace shall be of closed type with 4th hole extraction system.	**Compliance:** Not Applicable
xvi	The progress made in CER shall be submitted along with six monthly compliance report to the IRO and also upload on the company web site.	The progress made in CER shall be submitted along with six monthly compliance report to the IRO and also upload on the company web site. **Compliance:** CER compliance status is being given in Half Yearly EC Compliance report and submitted to RO, SPCB.	The progress made in CER shall be submitted along with six monthly compliance report to the IRO and also upload on the company web site. **Compliance:** Noted and agreed.
B. General Conditions:			
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.	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. Compliance: Agreed	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. Compliance: Noted and agreed

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
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 four 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as four 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Compliance: At present, CEMS have been installed at all major process stacks and connected to SPCB/CPCB servers and the same practice shall be followed in the said expansion project. Four numbers of continuous on-line ambient air quality monitoring systems (CAAQMS) have been installed in consultation with SPCB and the data is continuously transmitted to both SPCB & CPCB server.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as four 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Compliance: Noted and agreed
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,	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act,	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act,

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	1986 or NABL accredited laboratories.	1986 or NABL accredited laboratories. Compliance: At present, fugitive emission monitoring at various locations is being carried out through NABL accredited laboratory on monthly basis. The same practice shall be followed in the said expansion project.	1986 or NABL accredited laboratories. Compliance: Noted and agreed
iii	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.	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. Compliance: At present, appropriate Air Pollution Control (APC) system have been provided for all the dust generating points including fugitive dust from all vulnerable sources to comply with prescribed stack emission and fugitive emission standards. The same practice shall be followed in the said expansion project.	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. Compliance: Noted and agreed
iv	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags. **Compliance:** Leakage detection and mechanized bag cleaning facilities will be provided for better maintenance of bags.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags. **Compliance:** Noted and agreed
v	Recycle and reuse iron ore fines, coal and coke fines,	Recycle and reuse iron ore fines, coal and coke fines,	Recycle and reuse iron ore fines, coal and coke fines,

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration. **Compliance:** At present, the fines collected from Pollution Control Equipments are being reused in the process after briquetting. The same practice shall be followed in the said expansion project.	lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration. **Compliance:** Noted and agreed
vi	The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.	The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation. **Compliance:** At present, all the raw materials are transporting through rail and covered vehicles to prevent spillage/dust generation and the same shall be followed in the said expansion project.	The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation. **Compliance**: Noted and agreed
vii	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces. **Compliance:** Primary and secondary fume extraction system will be provided at all melting furnaces.	The project proponent shall provide primary and secondary fume extraction system at all melting furnaces. **Compliance:** Noted and agreed
viii	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars. **Compliance:**	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars. **Compliance:**

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		At present, all the ventilation system for adequate air changes has been designed as per ACGIH document for all tunnels, motor houses and shop floors.	Noted and agreed
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 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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. Compliance: At present, Continuous Effluent Monitoring System has been installed at ETP of Cold Rolling Mill and connected to SPCB/CPCB server. The same shall be followed in the said expansion project.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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. Compliance: Noted and agreed
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	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	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

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.	through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories. Compliance: At present, ground water quality is being monitored twice in a year (pre- and post-monsoon) through NABL accredited laboratory. The same shall be followed in the said expansion project.	through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories. Compliance: Noted and agreed
iii	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. Compliance: At present, Three nos. of Sewage Treatment have been installed for treatment of domestic waste water to meet the prescribed standards.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. Compliance: Noted and agreed
iv	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.	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. Compliance: At present, Continuous Effluent Monitoring System has been installed at ETP of Cold Rolling Mill and connected to SPCB/CPCB server. The same shall be followed in the said expansion project.	Compliance: Not applicable
v	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff	Compliance: Noted and agreed

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	in the event of heavy rains and to check the water pollution due to surface run off.	in the event of heavy rains and to check the water pollution due to surface run off. Compliance: At present, Garland drains and collection pits have been provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off. . The same shall be followed in the said expansion project	
vi	Tyre washing facilities shall be provided at the entrance/exit of the plant gates.	Tyre washing facilities shall be provided at the entrance/exit of the plant gates. Compliance: Wheel washing system with complete recirculation system has been installed.	Tyre washing facilities shall be provided at the entrance/exit of the plant gates. Compliance: Noted and agreed
Noise monitoring and prevention			
i	Noise quality 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.	Noise quality 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. Compliance: Noise quality is being monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report is being submitted to Regional Officer of the Ministry as a part of six-monthly compliance report. The same shall be followed in the said expansion project.	Noise quality 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. Compliance: Noted and agreed

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
Energy Conservation measures			
i	conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.	Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc. to minimize the energy consumption. Compliance: At present, LED lights are provided where ever possible and same shall be followed in the said expansion project. Floating solar project is being installed at water reservoir of JSL for generation of 7.3 MW power as RE power.	Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc. to minimize the energy consumption. Compliance: Noted and agreed
Waste management			
i	Used refractories shall be recycled.	Used refractories shall be recycled. Compliance: At present, Used refractories generated from SMS are being recycled in process and same shall be followed in the said expansion project.	Used refractories shall be recycled. Compliance: Noted and agreed
ii	Kitchen waste shall be composted or converted to biogas for further use.	Kitchen waste shall be composted or converted to biogas for further use. Compliance: At present, An organic Waste Converter of capacity 100 kg/day has been installed and the compost produced is used for greenbelt development.	Kitchen waste shall be composted or converted to biogas for further use. Compliance: Noted and agreed
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 including plantation.	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.	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.

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		Compliance: Noted and agreed	Compliance: Noted and agreed
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 and 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.	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 and 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. Compliance: Noted and agreed	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 and 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. Compliance: Noted and agreed
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.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. Compliance: Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan will be implemented.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. Compliance: Noted and agreed
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)	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)	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)

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	as per the norms of Factory Act.	as per the norms of Factory Act. Compliance: Presently, Heat stress analysis for the workmen who work in high temperature work zone is being carried out and Personal Protection Equipment (PPE) as per the norms of Factory Act is being provided to the workman. The same shall be followed in the said expansion project.	as per the norms of Factory Act. Compliance: Noted and agreed
iii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained. Compliance: Presently, Annual health check up of workers is being carried out and records are maintained. The same shall be followed in the said expansion project.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained. Compliance: Noted and agreed
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, PP has committed to adopt 20 nearby villages for development activities. Out of 20 villages PP has already identified six villages namely Tikar, Kumbhiragadia, Manpur, Balungabandhi, Marurtikar and Khurunti villages.	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, PP has committed to adopt 15 nearby villages for development activities. Out of 15 villages PP has already identified six villages namely Tikar, Kumbhiragadia, Manpur, Balungabandhi, Marurtikar and Khurunti villages. Compliance : Noted and Agreed.	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, PP has committed to adopt 5 nearby villages for development activities. Compliance: Noted and agreed

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
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.	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. Compliance: JSL already has framed Environmental Policy as a part of the QEOHS (Quality, Environment, Occupational Health & Safety) policy framework and is committed to maintain environment friendly, safe, healthy and sustainable working condition in all its operations. The same shall be followed in the said expansion project.	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. Compliance: Noted and agreed
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	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 Compliance: At present, JSL already has a	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. Compliance:

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		well-constituted Environment, Horticulture & Safety (EHS) department with qualified and experienced officers under the administrative control of Head EHS and Head EHS directly report to the Plant Head.	Noted and agreed
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.	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. Compliance: Advertisement on grant of Environment Clearance have been published in newspapers namely ORISSA POST (English) and PRAMEYA (Odia) on 07.06.2022 respectively. Environment Clearance is displayed in the website of the company permanently.	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. Compliance: Noted and agreed
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.	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.	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.

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		Compliance: The copies of the environmental clearance has been submitted to the Heads of local bodies, Panchayats.	Compliance: Noted and agreed
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.	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. Compliance: Presently, six-monthly reports on the status of the compliance of the stipulated environmental conditions uploaded on company website and same shall be continued.	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. Compliance: Noted and agreed
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.	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. Compliance: Both online and manual Stack Monitoring is being carried out and the data are displayed on the display board installed at main gate for public view. The same shall be continued in the said expansion project.	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. Compliance: Noted and agreed
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,	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,	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,

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
	Forest and Climate Change at environment clearance portal.	Forest and Climate Change at environment clearance portal. Compliance: Presently, six-monthly reports on the status of the compliance of the stipulated environmental conditions is being submitted to MOEF&CC and also uploaded on MoEF&CC website.	Forest and Climate Change at environment clearance portal. Compliance: Noted and agreed
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	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. Compliance: Presently, environmental statement for each financial year in Form-V is being submitted to SPCB, Odisha in due time and also display on company website. The same shall be continued in the said expansion project.	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. Compliance: Noted and agreed
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.	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. Compliance: Noted and agreed	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. Compliance: A Noted and agreed

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
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.	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. **Compliance:** Noted and agreed	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. **Compliance:** Noted and agreed
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).	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). **Compliance:** Noted and agreed	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). **Compliance:** Noted and agreed
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	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 **Compliance:** Noted and agreed	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 **Compliance:** Noted and agreed
xi	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. **Compliance:** Noted and agreed	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. **Compliance:** Noted and agreed
xii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

Sl. No.	Present Conditions of JSL as per EC	Conditions remain with JSL	Condition transferred to JSLFL
		Compliance: Noted and agreed	**Compliance:** Noted and agreed
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.	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. **Compliance:** Noted and agreed	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. **Compliance:** Noted and agreed
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.	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. **Compliance:** Noted and agreed	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. **Compliance:** Noted and agreed

V. Environmental Monitoring Plan Matrix

Sl. No.	Parameter	Location	Schedule of monitoring	Under the scope of
1.	Meteorology: Dry bulb temp, wet bulb temp, relative humidity, wind speed, wind direction and rainfall	Meteorology data would be recorded at one (1) permanent station which is already installed in the plant premises near Security barracks.	Online continuous monitoring	JSL (Common for all group companies)
2.	Air Quality Monitoring Parameters: PM2.5, PM10, SO2, NOx & CO.	Four (4) monitoring stations already installed by JSL Group Company covering all four directions which will be common for JSLFL. The details of the location as follows: NE - Nursery South - Rohit Gate East -Security Barrack West -Tata Corner	Continuous ambient air quality monitoring stations (CAAQMS)	JSL (Common for all group companies)
3	Stack Emission Monitoring: PM, SO2, NOx, CO	All major stacks as per stack schedule. (For DE stacks only	Online continuous monitoring system	JSLFL and JSL

Sl. No.	Parameter	Location	Schedule of monitoring	Under the scope of
		PM would be monitored)	(CEMS) as per OSPCB's guidance	
4	Water Quality - effluents water quality, surface and ground as per CPCB standard.	Ground water quality Surface water - One location River - Brahmani Wastewater quality	Ground water quality analysis- Half Yearly Surface water quality - Monthly once Surface & ground water - in pre & post monsoon Waste water - All parameters monthly once and weekly monitoring of common parameters	JSL (Common for all group companies) JSLFL and JSL
5	Ambient noise level	Noise levels are monitored at the boundary of JSL group and will be continued for expansion project	Monthly once for each location	JSL
6	Fugitive dust emission and work zone dust monitoring	Near stock yard and other fugitive dust emitting sources like SMS building, BF Stock house, Sinter Discharge Section, CRM etc.	Monthly once	JSLFL and JSL
7	Work zone noise level	Existing locations of work zone noise monitoring will be continued with new locations in the proposed project	Monthly once for each location	JSL and JSLFL
8	Soil quality	Two locations within the plant (raw material storage area, solid waste storage area) and two from outside plant area.	As per soil nutrient cycle by NABL/MoEFCC approved agency	Inside plant (JSLFL and JSL) Outside plant (JSL)
9	TCLP test for solid wastes	One location for hazardous waste storage	Once in six (6) months or as directed by OSPCB	JSLFL and JSL
10	Inventory of solid Waste	Within plant premises	Monthly once or as directed by OSPCB	JSLFL and JSL
11	Water Consumption	Water meter at pump house	Continuous	JSL and JSLFL (At inlet from common water reservoir)
12	Energy Consumption	All consumer points through energy meter	Continuous	JSL and JSLFL

VI. Implementation of Mitigation Measures

Discipline	Potential impacts	Mitigation measures		Administrative Authority
		JSL	**JSLFL**	
Construction Phase				
Air	Emission of dust	Water sprinkling to	Water sprinkling to	Project - I/C

Discipline	**Potential impacts**	Mitigation measures		Administrative Authority
		JSL	**JSLFL**	
environment	due to construction activities leading to adverse health & environmental impacts	arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust emission. Logistics would be designed to minimize movement of trucks transporting construction materials and optimize storage of construction materials at site	arrest fugitive dust emission. Wind barrier screen provided to reduce the wind speed and consequently, reduce the fugitive dust emission. Logistics would be designed to minimize movement of trucks transporting construction materials and optimize storage of construction materials at site	
Water quality	Discharge of construction wastewater including sanitary and kitchen wastewater causing adverse health & ecological impacts	Labour hutments would be provided with proper sanitation facilities. The stockpiles would be protected with toe wall of adequate height along with concrete garland drain & catch pits to prevent uncontrolled discharge of runoffs during monsoon.	Labour hutments would be provided with proper sanitation facilities. The stockpiles would be protected with toe wall of adequate height along with concrete garland drain & catch pits to prevent uncontrolled discharge of runoffs during monsoon.	Project - I/C
Noise	Increase in noise level due to construction activities causing health effects	Provision of Personal Protective Equipment (PPE) like ear muffs, ear plugs etc. Noise prone construction activities such as piling, drilling, excavation, cutting, etc. would be done during daytime only	Provision of Personal Protective Equipment (PPE) like ear muffs, ear plugs etc. Noise prone construction activities such as piling, drilling, excavation, cutting, etc. would be done during daytime only	Project - I/C
Land environ-ment	Adverse impact on land due to dumping of solid waste C & D waste, Plastic waste and MSW like construction & demolition debris, excess	Proper segregation of the wastes and use of recyclable materials within the plant/ sell to external agencies for secondary use Handling & disposal of wastes by	Proper segregation of the wastes and use of recyclable materials within the plant/ sell to external agencies for secondary use Handling & disposal of wastes by authorized agencies as per prevalent	Head - Stores

Discipline	Potential impacts	Mitigation measures		Administrative Authority
		JSL	**JSLFL**	
	concrete & Cement, rejected components, packing & shipping materials and domestic waste	authorized agencies as per prevalent regulations	regulations	
Socio-Economics	Continued opportunities of contractual work with low payments Continued levels of local underemployment due to lack of technical and vocational training amongst youth and women groups – Dhanurjoya Pur, Dhuligarh, Sarangapur, Duburi, Dhapanki and Kacherigan Influx of migrants in the region due to the proposed expansion Continued employment of migrant workers (with required skill set) by JSL. Contractors also provide economic opportunities to migrants due to non-availability of technically competent local candidates	During the Construction phase, peak work force to be employed would be around 1080 The work force to be employed under direct and indirect employment during the phase of operation would be around 1300 respectively The employment opportunities are primarily based on the prevailing guidelines of wage structure, notified by the Government of Odisha in the official gazette Support towards vocational and industrial training of local population (having basic qualification) is being provided for up-gradation of skill and will be continued	During the Construction phase, peak work force to be employed would be around 1080 comprising both direct and indirect. The work force to be employed under direct and indirect employment during the phase of operation would be around 1300 comprising both direct and indirect. The employment opportunities are primarily based on the prevailing guidelines of wage structure, notified by the Government of Odisha in the official gazette Support towards vocational and industrial training of local population (having basic qualification) is being provided for up-gradation of skill and will be continued	Head - HR/IR & Project - I/C
	Waste water discharge may increase in	Strict adherence to mitigation measures as mentioned in	Strict adherence to mitigation measures as mentioned in	Project - I/C

Discipline	Potential impacts	Mitigation measures		Administrative Authority
		JSL	**JSLFL**	
	Ganda Nala and Kanar Nala by industry, with continued contamination of surface water bodies, impacting human & aquatic health of Balunga Bandi & Kacherigan Dust Pollution may increase in the industrial zone, with continued negative impact on the air and surface water quality, agricultural yield and human health (TB & Allergies) - Kacherigan	Chapter 2 & 4 (Air & Water Pollution Control Measures) and adoption of Zero Liquid Discharge (ZLD) Augmentation of existing Rain Water Harvesting programmes	Chapter 2 & 4 (Air & Water Pollution Control Measures) and adoption of Zero Liquid Discharge (ZLD) Augmentation of existing Rain Water Harvesting programmes	
Ecology	Adverse effect on the ecology of the plant area not envisaged since there would be no removal of vegetation as plant premises already has built up areas	Strengthening of greenbelt & peripheral plantation	-	Head - EHS
Operation Phase				
Land environment	No impact on the land environment in terms of loss of agricultural land or loss of vegetation Potential negative impact due to temporary storage of raw materials and solid waste	All stockpiles would be on top of a concreted area to avoid leaching of materials during monsoon. Maximum reuse/recycling of the solid wastes through practicable ventures. Monitoring of ground water quality to detect contamination due to	All stockpiles would be on top of a concreted area to avoid leaching of materials during monsoon. Maximum reuse/recycling of the solid wastes through practicable ventures. Monitoring of ground water quality to detect contamination due to leaching	Head-Operations

Discipline	Potential impacts	Mitigation measures		Administrative Authority
		JSL	**JSLFL**	
		leaching		
Surface Water Resource & quality	Marginal negative impact on surface water resource due to additional water requirement for expansion Plant designed on ZLD, no impact on surface water quality	Optimization of water requirement by recycling treated wastewater to the maximum extent and implementation of ZLD Collection & storage of rainwater for reuse, especially during lean months	Optimization of water requirement by recycling treated wastewater to the maximum extent and implementation of ZLD Collection & storage of rainwater for reuse, especially during lean months	Head - Utility
Ground water	- No impact on resource as groundwater extraction not envisaged - Minimal impact on groundwater quality due to seepage and leaching	concrete box drains to prevent seepage and ground water contamination. temporary solid wastes storage yard to be lined with suitable liner to avoid leaching through soil bed leading to contamination of ground water.	concrete box drains to prevent seepage and ground water contamination. temporary solid wastes storage yard to be lined with suitable liner to avoid leaching through soil bed leading to contamination of ground water.	Head - Civil
Air Environment	Adverse impacts on health & environment due to emission of PM, SOx, NOx.	Selection & maintenance of APC equipment for fugitive & point source emissions Process optimization to control emission Interlocking of APC equipment to shut down plant units in case of APC failure Pneumatic or covered conveying of raw material Maintenance of Plant roads and use of industrial vacuum cleaners & water sprinkling at regular intervals. Operation & maintenance of tyre washing system at the strategic locations of	Selection & maintenance of APC equipment for fugitive & point source emissions Process optimization to control emission Interlocking of APC equipment to shut down plant units in case of APC failure Pneumatic or covered conveying of raw material Maintenance of Plant roads and use of industrial vacuum cleaners & water sprinkling at regular intervals. Operation & maintenance of tyre washing system at the strategic locations of the plant	Head – Operations

Discipline	Potential impacts	Mitigation measures		Administrative Authority
		JSL	**JSLFL**	
		the plant		
Noise	Detrimental impact on the health of working personnel in and around the plant premises.	Noise levels for the new equipment and machineries to be fixed at 85 dB(A) Leq within 3 m distance from the noise prone equipment. Highly noise prone equipment having Leq above 90 dB(A) would either be housed separately or the attending personnel need to be housed in a noise-shielded cubicle. Noise prone rotating/ vibrating equipment provided with vibration dampening anchoring. Use of appropriate PPEs	Noise levels for the new equipment and machineries to be fixed at 85 dB(A) Leq within 3 m distance from the noise prone equipment. Highly noise prone equipment having Leq above 90 dB(A) would either be housed separately or the attending personnel need to be housed in a noise-shielded cubicle. Noise prone rotating/vibrating equipment provided with vibration dampening anchoring. Use of appropriate PPEs	Project-I/C
Socio-Economics		Employment of 1300		
Ecology	Insignificant impact on ecology of the study area No adverse impact on aquatic ecology as plant is based on 'ZLD' concept	Strengthening of greenbelt within plant premises	Strengthening of greenbelt within plant premises	Head - EHS

Deliberations by the Committee

9. The Committee noted the following:

i. M/s. Jindal Stainless Limited (JSL) was originally accorded environmental clearance vide letter No. IA-J-11011/281/2007- IA. II(I), dated 01.06.2022 for expansion of Crude Steel Production from 2.2 MTPA to 4.5 MTPA and Cold Rolling Mill Production from 1.6 MTPA to 2.6 MTPA within the existing Steel Plant at Kalinga Nagar Industrial Complex, Jajpur Road, Odisha.

ii. PP has not implemented the complete facilities as envisaged in the EC dated 01.06.2022 as detailed at para 5 above. Consent to Establish for said expansion project was accorded by

SPCB, Odisha vide letter No. 16913/IND-II-CTE-6660 dated 16.09.2022.

iii. Instant proposal is for amendment in Environmental Clearance letter no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 following the transfer of Iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited (JSL) to JSL Ferrous Limited (JSLFL) and further amendment in existing Blast Furnaces facilities of 1 x 720 m^3 + 1 x 1,680 m^3 (total volume 2,400 m^3) to 1 x 2,307 m^3 and Sinter Plant of 1 x 240 m^2 to 1 x 248 m^2 with no change in production capacity under JSL Ferrous Limited at Kalinganagar Industrial Complex, Jajpur, Odisha. The reasons for part transfer of the said facilities is that M/s. JSL as a group company intends to enter into the Carbon Steel business as a separate entity.

iv. The EAC also deliberated the provisions of Para 2 (modernization/amendments) and Para 11 (Transfer of EC) of the EIA Notification, 2006 and found that the proposal is in order.

v. The EAC deliberated on the reply submitted by the project proponent on the issues raised by EAC and found it satisfactory

Recommendations of the Committee

10. The EAC, in its 18th meeting of Expert Appraisal Committee (Industry-1 Sector) held on 28-29th November, 2022, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the instant proposal for Part transfer of facilities of aforesaid EC dated 01.06.2022 namely iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited to JSL Ferrous Limited as detailed in para 6 above by issuing a part transfer EC letter along with prescribing the other parameters including project specific information, raw material requirement, risk matrix, specific as well as general conditions as per the EC compliance matrix, Environmental Monitoring Plan, implementation of mitigation measures etc. given above at para no. 8. All the other terms and conditions stipulated in environmental clearance vide letter no. IA-J-11011/281/2007-IA.II(I) dated 01.06.2022 shall remain unchanged.

11. The proposal was further considered in the 19th meeting of the EAC for Industry-I sector held 16th & 19th December, 2022, wherein EAC based on the submission of PP, noted that the request of PP may be accepted and recommended for the incorporation of the corrections/modifications in the minutes of the 18th EAC meeting. Accordingly, coordinates of JSL and JSLFL in [I. Project Information Matrix (Point 3 of the table)] stands modified in the minutes of 18th EAC (Industry-1) meeting as in para 8 above.

12. 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 Sector) hereby decided to grant Part transfer of facilities of aforesaid EC dated 01.06.2022 namely iron making facilities of 2.35 MTPA and Steel making facilities of 2.3 MTPA from Jindal Stainless Limited to JSL Ferrous Limited under the provisions of EIA Notification, 2006.

13. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

14. 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 the Environment (Protection) Act, 1986.

This issues with approval of the competent authority.

(Dr. M. Ramesh)
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Copy to:

1. The Principal Secretary, Department of Forest and Environment, Government of Odisha, Bhubaneswar, Odisha
2. Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi
3. Principal Chief Conservator of Forests & HoFF, Aranya Bhawan, Chandrasekharpur, Bhubaneswar - 751 023, Odisha
4. The Regional Officer, Ministry of Environment, Forest And Climate Change, Integrated Regional Office, A/3, Chandersekharpur, Bhubaneswar – 751023 ODISHA
5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
6. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
7. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VIII, Bhubaneswar -12 Odisha.
8. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
9. District Collector, Jajpur, Odisha.
10. Guard File/Monitoring File/ PARIVESH

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