

F. No. J-11011/489/2009- IA-II(I)

Government of India

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

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Dated: 29th May, 2018

To

M/s JSW Steel Limited
Village Tornagallu,
District Bellary,
Karnataka.

Subject: Integrated Steel Plant (16 MTPA) along with Captive Power Plant (600 MW) of M/s JSW Steel Limited located at Village Tornagallu, District Bellary in Karnataka.- Amendment in Environmental Clearance Regarding.

Sir,

This has reference to your online application vide proposal no. IA/KA/IND/31502/2010 dated 21th February 2018 seeking amendment in EC issued vide J-11011/489/2009-IA. II(I) dated 1st October, 2015.

2.0 M/s JSW Steel Ltd was granted Environmental Clearance for expansion vide letter F.No.J-11011/489/2009 -IA.II(I) dated 1st October 2015 and subsequently amendments to the Environmental Clearance vide dated 9th June 2016 and 22nd January 2018 were issued.

3.0 The PP mentioned that there has been a consistent downturn in the domestic steel market due to large scale cheaper imports and increased input costs and hence the PP has proposed to change the approved configuration marginally in the production facilities. The rationale for the proposed change are given below.

- Sinter Plant - The approved capacity of 7.5 MTPA is split into two sinter plants of 5.75 and 1.75 MTPA. These will cater to the two blast furnaces which are located physically at different locations.
- Blast Furnace - The up gradation of BF-1 has been completed. The existing BF-3 has come for rebuilding. This opportunity is being utilised to enhance the capacity of the furnace to from 3.0 MTPA to 4.4 MTPA. The new blast furnace BF-5 will be of 3.0 MTPA capacity.
- Steel Melting Shop(SMS)- Under the expansion, it was proposed to install 3X300 t BOF converters and 1X150 t EAF furnace. This is being changed to 2X300 t BOF and 2X150 T EAF. The first EAF has already been commissioned in the 12MTPA stage of expansion.

- Hot Strip Mills- A new HSM of 3.6 MTPA has been approved in the expansion. However, it is proposed to carry out improvements in operational practices (innovation) by way of coil weight increase, Better welder performance, Reduction in roll gap time & reduced roll change time, which will result in increase in capacity of HSM-1 from 3.2 to 4.0 MTPA and of HSM-2 from 5.0 to 5.2 MTPA.
- Cold Rolling Mill (CRM) - The existing cold rolling mill CRM-1 is being upgraded by replacing the existing batch type rolling mill to continuous type, resulting in an increase in capacity by 0.8 MTPA. Further with improved operational practices using the Line speed optimisation model, the capacity of CRM-2 is being increased from 2.0 MTPA to 2.3 MTPA.
- Galvanizing Line (CGL) - In view of the increased production from CRM-1, it is proposed to install two new galvanising lines of 0.95 MTPA each (2x 0.25+0.45)
- Captive Power Plant (CPP) -The existing CPP 3 & 4 utilise imported coal and gases for power generation. However, due to difficulties in getting imported coal, it is proposed to blend domestic coal with imported coal so that the blended ash content is max 25%. ((50% imported coal+50% Indian Coal)+Gas))
- Township For Project Workers - In order to accommodate the construction workers, it is proposed to build a township of 500 dwellings.
- Use of petroleum coke for use in coke ovens: Petroleum Coke is used as a raw material in coke making only. NGT has recently ruled that Petroleum Coke shall not be used as a fuel.

4.0 The details of existing configuration and changes proposed by PP are as follows:

S. No	Unit Name	Existing configuration			Total (MTPA)	Changes proposed	New Total (MTPA)	Increase (MTPA)
		0-4 MTPA	4-10 MTPA	10-16 MTPA				
1	Sinter Plant	SP1 - 2.3 MTPA	SP2 - 2.3 MTPA SP3 - 5.75 MTPA Total - 8.05 MTPA	SP4 - 2.3 MTPA SP5 - 7.5 MTPA Total - 9.8 MTPA	20.15	SP4 - 2.3 MTPA SP5 - 5.75 MTPA SP6 - 1.75 MTPA Total - 9.8 MTPA	20.15	0
2	Hot Metal BF	BF1- 0.9 MTPA BF2-	BF3- 3 MTPA BF4- 3	BF1- 2.5 MTPA BF5- 4.4	15.07	BF1- 2.5 MTPA BF3- 4.4	15.07	0

		2.17 MTPA Total- 3.07 MTPA	MTPA Total- 6.0 MTPA	MTPA Total- 6.9 MTPA		MTPA BF5- 3.0 MTPA Total- 6.9 MTPA		
3	BOF	SMS1 - 3.8 MTPA	SMS2- 6 MTPA	SMS2-6.4 MTPA SMS3- 5.6 MTPA (3X 200 T BOF + 1.2 MTPA EAF) Total - 6 MTPA	15.8	SMS2- 6.4 MTPA SMS3- 5.6 MTPA (2X 200 T BOF + 2X1.2MTP A EAF) Total - 6 MTPA	15.8	0
4	HSM	HSM1- 2 MTPA	HSM1 -3.2 MTPA HSM2 - 5 MTPA Total- 8.2 MTPA	HSM3 - 3.6 MTPA	11.8	HSM1 - 4 MTPA HSM 2 - 5.2 MTPA HSM-3: 3.6 MTPA Total - 12.8 MTPA	12.8	1.0
5	CRM	0	CRM1 - 1 MTPA CRM2 - 2 MTPA Total- 3 MTPA	0	3	CRM1 - 1.8 MTPA CRM2 - 2.3 MTPA Total - 4.1 MTPA	4.1	1.1
6	Galvani zing	0	4 X 0.25 MTPA	0	1.0	4 X 0.25 and 2 X 0.45	1.9	0.9
7	CPP(M W)	100 MW + 130 MW	2 X 300 MW (100% imported coal)	660 MW	1490	Amendme nt in fuel type in 2 x 300MW Gas + Coal (50% imported coal + 50% Indian coal)	1490	0
8	Townsh ip				5 Nos	1 with 500 dwellings	6 Nos	1 with 500 dwellings

5.0 The proposal was considered during the 29th meeting of Expert Appraisal Committee [EAC] (Industry-I) held on 12th to 14th March, 2018. After detailed deliberations, the committee sought additional information with respect to disposal of additional chrome sludge from new galvanising


line, fly ash utilisation and changes in the raw material requirement, water, power, emissions, discharges and solid waste due to the proposed amendments in the Environmental Clearance granted for (10 to 16 MTPA) expansion dated 1st October 2015. The project proponent has submitted the above details as sought by the committee during the meeting. Based on the details furnished, the committee recommended the amendment to the Environmental Clearance as proposed at para (4) above.

6.0 The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry-I) and hereby decided to amend the Environmental Clearance dated 1st October 2015 as proposed in para (4) above.

7.0 This amendment to Environmental Clearance dated 1st October 2015 should be read with the amendment vide letter F.No. J-11011/489/2009- IA-II(I) dated 9th June 2016 and amendment with respect to demerger of the integrated steel plant vide letter F.No. J-11011/489/2009- IA-II(I) dated 22nd January 2018.

8.0 All other terms and conditions in the Environmental Clearance dated 1st October, 2015 shall remain the same.

This issues with the approval of competent authority


(Sharath Kumar Pallerla)
Scientist 'F' / Director

Copy to:-

1. **The Secretary**, Department of Environment, Government of Karnataka, Secretariat Bangalore.
2. **The Additional Principal Chief Conservator of Forests (C)**, Ministry of Environment, Forest and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore – 560034
3. **The Chairman**, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. **The Chairman**, Karnataka State Pollution Control Board, No. 25, 6th – 9th Floor, Public Utility Building, M.G. Road, Bangalore – 560 001.
5. **The District Collector**, Bellary District, State of Karnataka.
6. **Guard File / Record file / Monitoring file.**
7. **MOEF&CC Website.**


(Sharath Kumar Pallerla)
Scientist 'F' / Director