MSP SPONGE IRON LIMITED

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Date : 08th December, 2018

To,
The Director (Industry-1)
Ministry of Environment, Forests & Climate Change (I.A Division),
Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj,
New Delhi - 110003

Subject : Environmental clearance for expansion of Ferro Alloys unit with 5 x 9 MVA submerged electric arc furnaces (SiMn- 84,474 TPA, FeMn – 1,03,958 TPA) and Captive Power Plant of 62 MW (including existing 12 MW power plant) at village-Manuapalli, Tehsil & district - Raigarh, Chhattisgarh – **Request for EC Amendment** under clause 7 (ii) – Reg.

Ref. : Environmental Clearance issued by MoEF&CC vide F.No. J-11011/178/2010-IA II (I) dated 23rd August 2012

Respected Sir,

We are very thankful to the Ministry for kindly according Environmental Clearance for our expansion project vide reference cited above for the following products & capacities.

(i) Installation of 5 x 9 MVA submerged Electric Arc Furnaces to produce Silico Manganese (SiMn) of 84,474 TPA & Ferro Manganese (FeMn) of 1,03,958 TPA. These production capacities have been arrived duly considering the existing 2 x 7.5 MVA submerged Electric Arc Furnaces & proposed 5 x 9 MVA Submerged Electric Arc Furnaces.

(ii) Power generation : 50 MW additional (Total power including existing 12 MW is 62 MW)

Copy of the aforementioned Environmental clearance is enclosed as **Annexure-1** for your kind perusal. CTE of 2 x 7.5 MVA submerged Electric Arc Furnaces is enclosed as **Annexure-2.**

Out of 5 x 9 MVA Submerged Electric Arc Furnaces (SEAF) 1 no. of Submerged Electric Arc Furnace of 9 MVA has been installed and is in operation. The CTO copy for 1 x 9 MVA Submerged Electric Arc Furnace is enclosed as **Annexure-3** for your kind perusal. The present production capacity from 1 x 9 MVA furnace installed is as following

SiMn : 13,860 TPA

FeMn : 18,495 TPA

Request for Amendment:

Now it has been proposed to **manufacture Ferro Chrome (FeCr)** also in the existing 2x7.5 MVA & 1 x 9 MVA Submerged Electric Arc Furnaces along with Si-Mn & FeMn products for which CTE & Environmental clearance have already been accorded vide reference cited above.

- The existing 2x7.5 MVA and 1 x 9 MVA Furnaces are capable of producing FeMn, SiMn or High Carbon Ferro Chrome. The production process of Ferro Chrome is also similar to that of Silico Manganese & Ferro Manganese products.
- Capacity utilization is similar.
- No design changes are required to the Submerged Electric Arc Furnaces to manufacture High Carbon Ferro Chrome.
- Power consumption to manufacture one ton of Silico Manganese (SiMn) is around 4000 units where as the power consumption for production of one ton of High Carbon Ferro Chrome will also be around 4000 units.
- **The following is existing and proposed amendment production details**

S. N.	Unit/Plant	Products	Existing capacity for which CTE obtained from CECB vide dated 01/04/2005	Existing capacity for which EC obtained from MOEF&CC vide dated 23/08/2012	Total units implemented (CTO obtained from CECB)		Proposed amendment		Final
1	Submerged Electric Arc Furnace		2x7.5 MVA	5x9 MVA	2x7.5 MVA	1x9 MVA	2x7.5 MVA	1x9 MVA	2x7.5 & 1x9 MVA
		Silico Manganese (Si Mn)	15,174 TPA	69,300 TPA	15,174 TPA	13,860 TPA	--	--	29,034 TPA
		Ferro Manganese (Fe Mn)	11,483 TPA	92,475 TPA	11,483 TPA	18,495 TPA	--	--	29,978 TPA
		(OR)							
		Ferro Chrome (FeCr)	--	--	--	--	**40,027 .5 TPA**	**24,016 .5 TPA**	**64,044 TPA**

COMPARISION OF ENVIRONMENTAL PARAMETERS

The following is the comparison of environmental parameters with production of FeMn &, Si Mn or with FeCr production.

Environmental Parameter	**Due to FeMn & SiMn (2 x 7.5 MVA & 1 x 9 MVA)**	**Due to FeCr production (2 x 7.5 MVA & 1 x 9 MVA)**	**Remarks**
Water requirement	80 KLD	80 KLD	**No increase in water consumption**
Wastewater	Closed circuit cooling system is adopted. Hence no wastewater discharge.	Closed circuit cooling system will be adopted. Hence no wastewater discharge.	**ZLD will be followed even after the present proposal.**
Solid waste disposal	Slag produced from Ferro Manganese production is utilizing in Silico Manganese production. Slag produced from Silico Manganese production is utilized in road construction/landfill.	Ferro chrome slag of 27,500 TPA will be generated & will be further processed in Zigging plant for Chrome recovery. TCLP test will be conducted for the remaining material. If chrome content is within the permissible level it will be utilized as landfill/ as base material in road laying or else it will be sent to the nearest TSDF facility. Disposal of slag will be in accordance with the permissible norms.	No solid waste disposal issue w.r.t solid waste disposal.
Particulate	5.04 Kg/hr	5.04 Kg/hr	No increase in

Environmental Parameter	Due to FeMn & SiMn (2 x 7.5 MVA & 1 x 9 MVA)	Due to FeCr production (2 x 7.5 MVA & 1 x 9 MVA)	Remarks
Emission load			particulate emission
Any additional Land acquisition	Not Applicable	No additional land acquisition is envisaged as it is only a change of product mix.	No increase in land due to the present proposal

Due to the proposal there will be

- No additional land.
- No additional water.
- No increase in air emissions load,
- No effluent discharge outside the plant. Zero liquid effluent discharge is maintained due to manufacture of Ferro Chrome

Hence we humbly request the Hon'ble MOEF&CC to kindly consider to issue amendment to produce Ferro chrome manufacturing from the same existing 2 x 7.5 MVA & 1x9 MVA of 64,044 TPA instead of FeMn & SiMn products to be produced from the same existing 2 x 7.5 MVA & 1x9 MVA submerged electric arc furnaces.

Certified compliance report issued by the RO, MOEF&CC is enclosed as **Annexure-4** for your kind perusal.

Updated Form-1 also enclosed as **Annexure-5** for your kind perusal.

Thanking you,

Yours sincerely

For: MSP Sponge Iron Limited

Pradip Kumar Dey – Director