

Director (Industry I),
Ministry of Environment and Forest & Climate Change
Indira Paryavran Bhawan, Jorbagh Road,
New Delhi - 110003

TSK/VP(O)/101/ 2020 01 June 2020

Sub: Environmental clearance for Integrated Steel Plant Expansion from 6 MTPA to 8 MTPA Crude Steel and 9 MTPA Finished Steel at Tata Steel Kalinganagar (Proposal No: IA/OR/IND/128148/2016, File No – IA-J-11011/07/2006-IA. II (I))

Ref: EDS dated 8th January 2020

Dear Sir,

Vide IA/OR/IND/128148/2016 dt 19th Dec 2019, proposal for grant of EC had been submitted for above mentioned expansion. An EDS has been raised with certain queries, on 8th Jan 2020. Response against these are provided herewith:

EDS Part A is on "Existing Project"

Query (i): Details of the construction activities undertaken from 7/11/2016 to till date.

<u>Reply</u>: Construction of various facilities under 6 MTPA EC granted by MoEF&CC, like CRM, Pellet Plant, Blast Furnace and Coke Plant is underway. Details are given in EIA report.

Query (ii): Permission obtained from MoEF&CC if any, for undertaking construction of balance facilities envisaged in the existing EC dated 7/11/2006 after the expiry of the validity period of the EC. If no, reasons for undertaken construction activity after the expiry of the validity period of the EC shall be submitted.

Reply: Multiple CTO were obtained for Phase 1 facilities for 6 MTPA Plant, as commissioning activities started. With CTO granted vide letter no 5505/IND-I-CON-6447, dated 28.03.2016, CTO for all facilities of Phase 1 were covered. As Phase 2 facilities were still under construction, on 28.11.2015, Tata Steel sought revalidation of CTE from OSPCB, beyond 28.3.2016, so that rest of the facilities can be completed. To this OSPCB clarified vide letter no. 2715 dated 11.2.2016, that:

"there is no need for revalidation of consent to establish for installation of rest of the plant facilities of 6.0 MTPA integrated steel plant as you have already made substantial physical progress of the project and obtained consent to operate from the Board"

Application for issuance of TOR, for expansion of capacity to 8 MTPA of Crude Steel & 9 MTPA of finished steel, was applied for on 20 Oct 2016. As an abundant precaution, application also requested for permission to continue construction of balance facilities of 6 MTPA EC. This application was deliberated in EAC (Industry – 1), in its 12th meeting on 28.10.2016. In the meeting, status of 6 MTPA project was reviewed and EAC had satisfied itself that substantial progress had been made in project. It had been seen that, Phase 1 facilities were already in operation. Also, it had been presented that construction activity in phase 2 facilities is in progress.

TATA STEEL LIMITED

After going through merits of the case, EAC (Industry -1) recommended issuance of the TOR, for expansion of capacity to 8 MTPA of Crude Steel and 9 MTPA of finished steel. Also, it was taken on record in the MOM and recommendation made to MoEF&CC that

"TSK has started commercial production in June 2016 by making operational the phase -1 facilities of its 6 MTPA steel Plant. However, Phase – II of the project is under implementation."

Based on recommendation of EAC, MoEF&CC granted TOR making specific reference to Phase II being under implementation, on 14th Mar 2017 as given below:

"The environmental clearance for 6.0 MTPA crude steel production was granted by the Ministry vide letter number J-11011/7/2006-IA-II (I) dated 7th Nov 2006. TSK has started commercial production in June 2016 by making operational the phase-1 facilities of its 6 MTPA steel plant. However, Phase –II of the project is under implementation."

(In addition to above, for easy reference, various continuous communications connected to EC & Implementation of Project, especially Phase II of 6MTPA Project at Tata Steel Kalinganagar, is presented chronologically in Annexure 1)

Query (iii): Submission of copies of CTO obtained till date - Same is being submitted

EDS Part B is on "EIA report" (i) to (xv)
EDS Part C is on "Form 2" (i) to (iv)

These are addressed in Form 2 being submitted.

Trust information provided above and in enclosure clarifies various questions raised in EDS

Thanking you Yours Truly,

For Tata Steel Ltd

(Rajiv Kumar)

Vice President, Operations Tata Steel Kalinganagar

Enclosed as above

Chronology of communications regarding start of production, status with regards to validity of EC / permission for continuing construction of 6 MTPA Project is given

- 1. Tata Steel Kalinganagar received EC, for a 6 MTPA Integrated Steel Plant, on 7th Nov 2006
 - Refer: J-11011/7/2006-IA II(i), Dt 7th Nov 2006
- 2. Integrated steel plants being capital & manpower intensive and inherently complex process, are always constructed & commissioned in phases. Accordingly, Tata Steel Kalinganagar Integrated Steel Plant construction and commissioning were phased suitably (referred to Phase 1 & Phase 2 in general)
- 3. On 10th Oct 2012, approval of modification in facilities had been obtained. These are:
 - (a) Reduction in number of blast furnace from three to two, in view of higher productivities that BF were achieving
 - (b) Addition of CRM based on demand in market
 - (c) Change of one Sinter Plant to Pellet Plant in Phase 2
 - Refer: J-11011/7/2006-IA II(i), dt 10th Oct 2012
- 4. In 2015, Phase 1 facilities were nearing completion and construction was underway for balance facilities in accordance with 2012 amendment. At this stage status of process plants installed were as follows:
 - (a) HSM complete
 - (b) Sinter Plant complete
 - (c) SMS 2 out of 3 converters installed
 - (d) Blast Furnace BF 1 reached operational readiness
 - (e) Work had progressed on other units like CRM, Pellet Plant, Blast Furnace 2
 - (f) Significant common facilities were also completed for 6 MTPA
- 5. Commissioning activities started in 2015, with commercial production starting in June 2016.
- 6. In the meantime, discussions were held with OSPCB regarding requirement of revalidation of approvals EC & CTE (Nov / Dec 2015):
 - (a) OSPCB clarified that with substantial progress in construction and CTO already obtained, no revalidation of CTE is necessary
 - (b) This was confirmed vide their letter 2715 IND -II-NOC-4072(pt) dt. 11-02-2016 enclosed
- MoEF&CC had been approached on 16th June 2016, with request for time extension for certain compliances. Status of complete Project was discussed in EAC meeting and following clarifications / noting were made
 - (a) Clarified that approval has been accorded by the ministry to set up plant in two phases
 - (b) Noted that construction of balance facilities is in progress
 - Reference J-11011/7/2006-IA II(i), dt 20th Dec 2016
- 8. In ensuing period (2012 2015), options for higher capacity realisation were explored to improve sustainability of operations:

- (a) Opportunities had arisen with regards to improved operating conditions leading to higher productivities
- (b) This coupled with minor changes in configuration, presented an opportunity to enhance total production from 6 MTPA crude steel to 8 MTPA crude steel by adding some balancing facilities and enlarging BF under construction.
- (c) Also, opportunity existed for achieving finished steel capacity of 9 MTPA.
- 9. Accordingly, fresh TOR was applied (dated 20th Sept 2016) for obtaining prior EC, for expanding crude steel production from 6 MTPA to 8 MTPA Crude Steel and 9 MTPA Finished Steel.
 - While applying for TOR, as a matter of abundant precaution, revalidation of EC had also been sought.
 - It was also mentioned in our application that construction of balance facilities is going on.
- 10. Discussion took place in EAC meeting on ongoing work of balance facilities. Wherein it was informed that as substantial progress has taken place, revalidation of EC is not required. Based on complete visibility of work in progress for balance facilities, TOR had been granted. This is reflected both in the MOM and TOR, wherein it has been recorded that construction of "balance facilities is in progress"
 - Refer MoM of EAC Meeting dtd 27/28th Oct 2016
 - Refer TOR dt 14th March 2017 enclosed.
- 11. Based on discussions with OSPCB, MoEF&CC and EAC Meeting, till date:
 - (a) only balance work as approved in 6 MTPA EC are being carried out
 - (b) no work related to new facilities under expansion project from 6 MTPA to 8 MTPA has commenced till date

B) EIA Report

S.No	Point	Reply	
i	EIA report is silent on the implementation status of the existing Environmental Clearances accorded by MoEF&CC and the details of the ongoing construction activities at the site at present	Provided in EIA report, Chapter 1, Section 1.1, Page 1-2 & Chapter 2 Section 2.6.1 Page 2-9 to	
ii	Consolidated water balance diagram for the existing and proposed expansion shall be furnished	Provided in EIA Report Chapter 2 and Fig 2-6 (part 1 & Part 2) at the end of Chapter 2 (9 MTPA finished product stage and details of Existing Operation)	
iii	Figure numbers mentioned in the EIA report does not match with description. For instance, Fig. No. 3-12 is post monsoon water level in the study area whereas in description it is mentioned as land use map. Overall EIA report needs to be re-checked	Corrected in EIA report	
iv	Satellite image of the land cover / land use map of the study area has not been furnished	Provided in EIA Report Chapter 3, Page 3-36 (fig 3-13)	
٧	Noise quality modelling has not been carried out	Provided in EIA Report Chapter 4, Section 4.7, page 4-27 to 4-28	
vi	Action plan for solid waste utilization has not been submitted	Provided in EIA Report Chapter 2, Section 2.7.4, Page 2-22 to 23	
vii	Traffic assessment study has not been carried out	Provided in EIA Report Chapter 3, Section 3.8, Page 3-37 to 3-38	
viii	Quantity of raw materials and finished products to be specifically transported by road and rail has not been furnished	Provided in EIA Report Chapter 2, Section 2.6.2, Page 2-11 to 2-12	
ix	Confirmed iron ore linkage for the proposed expansion has not been furnished	Own mines EC, provided in EIA Report Appendix 2-6,	
х	Material balance and Energy balance has not been furnished	Provided in EIA Report Chapter 2, Table 2-5 & 2-6 on pages 2-15 to 2-16 (Energy balance) & Drawing no.11410-97A-000-ENV-0003, Figs. 2-3 to 2-5 at the end of Chapter 2 (Material balance)	
хi	BOD plant details for the treatment of coke oven plant have not been furnished	Provided in EIA Report Chapter 4, Page 4-10	
xii	Risk assessment has not been carried out specific to the project activity. No scientific tools have been used to quantify the risk	Consequence modelling carried out for BF, LD and CO gas holders using Phast Micro software. Results of consequence modelling provided in Chapter 7, Pages 7-6 to 7	
xiii	Cost earmarked towards the CER is not as per the slab specified in the Ministry's O.M. dated 1/05/2018	Cost earmarked towards CER, is mentioned as per slab specified in Ministry's O.M. and is accordingly provided in EIA report Chapter 7, page 7-185	
xiv	EMP is generic and not specific to the proposed expansion	EMP (Environmental Management Plan) is provided in EIA report Chapter 10	
xv	Input file used for the AAQ modelling shall be furnished	Input data used in air dispersion modeling provided in Chapter 4, section 2.10.4 on page 4-to 4-80	

C) EIA Report

S.No	Point	Reply
i	Complete PH proceedings inter-alia including attendance sheet and written representations have not been furnished	PH proceedings uploaded with Form 2. Attendance sheet of PH with Form 2. Written representations: As data volume is very high, we have uploaded few representations in soft form with Form 2. All representations received during public hearing, will be submitted in hard copies /soft copies upload in one drive or Google Drive and Share to MoEF&CC

ii	Certified compliance report for all the existing ECs is not accessible on PARIVESH. On perusal of the report received through email, it is noted that noncompliances have been reported in respect of excess water drawl beyond the permitted capacity, discharge of waste water and desiltation of drain at raw material storage. It is requested to obtain the closure report from the Regional Office on the observed non-compliance's.	Closure report, about three non-compliances given in the Certified compliance report, have been issued by Bhubaneshwar Regional Office of MoEFCC.
ii	Details of capacity expansion of all the facilities have not been mentioned	Details of capacity expansion of all the facilities have been uploaded with Form 2.
i۱	Court orders uploaded on PARIVESH is not accessible	Court Orders uploaded on PARIVESH

Enclosed Document List (Please see Annexure 2 of additional attachments)

S.No	Reference	Subject
1.	J-11011/7/2006-IA II(i) dtd:7	MoEF&CC to Tata Steel Kalinganagar
	Nov 2006	Tata Steel Kalinganagar received EC, for a 6 MTPA Integrated Steel Plant, on 7 th Nov 2006
2.	J-11011/7/2006-IA II(i) dtd:	MoEF&CC to Tata Steel Kalinganagar
	10 Oct 2012	
		EC Amendment for modification in facilities
		(a) Addition of CRM
		(b) Change of one Sinter Plant to Pellet Plant in Phase 2
3	5505/IND- I-CON-6447 dtd:	OSPCB to Tata Steel Kalinganagar
	28 Mar 2016	Consent to Operate under to section 21 of Air (P&CP) Act,1981,
		Under Section 25 of Water(P&CP) Act,1974 for Phase 1 Facility
4	3938/IND- I-CON-6447 dtd:	OSPCB to Tata Steel Kalinganagar
	27 Mar 2020	Current CTO, Validity up to 31st March 2021
5	KPO/ENV/CER/696/2015	TATA Steel Kalinganagar to OSPCB
	dtd: 28.11.2015	Request to clarify whether revalidation to consent to establish is
		required for installation of rest plant component of integrated
		steel plant of 6.0 MTPA
5	2715 IND-II-NOC-4072(pt)	OSPCB to Tata Steel Kalinganagar
	dtd:11 Nov 2016	
		OSPCB clarification on revalidation to consent to establish is
		required for installation of rest plant component of integrated steel plant of 6.0 MTPA
6	J-11011/7/2006-IA II(i) dtd:	MoEF&CC to Tata Steel Kalinganagar
	20-12-2016	WOLF GOO to Fata Gloof Kallinganagar
		EC Amendment
7	TSL/DEL/201/2016	Tata Steel Kalinganagar to MoEF&CC
	dtd: 02 Sep 2016	A 1' 1' (
		Application for fresh TOR (dated 20 th Sept 2016) for obtaining
		prior EC, for expansion of crude steel production from 6 MTPA to 8 MTPA Crude Steel and 9 MTPA Finished Steel.
8	MoM of 12 th Meeting of	Summary record of the twelfth (12th) meeting of expert appraisal
	Expert Appraisal Committee	committee for environmental appraisal of industry-I sector
	(industry-I)	projects constituted under EIA notification, 2006 held on 27th –
	,	28th October 2016- The EAC recommended issue of TOR
9	J-11011/7/2006-IA II(i) dtd: 14 Mar 2017	MoEF&CC to Tata Steel Kalinganagar
		TOR - Integrated Steel Plant Expansion from 6 MTPA to 8 MTPA
		Crude Steel and 9 MTPA Finished Steel at Tata Steel
		Kalinganagar
10	СТО	Copies of Consent to Operate obtained from OSPCB from
		7/11/2016 to till date