# **Annexures**

#### Annexure 1: ToR Letter

F. No. IA-J-11011/44/2004-IA.II (I)

Government of India

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

Indira Paryavaran Bhawan Jor Bagh Road, Aliganj, New Delhi – 110003

E-mail: r.sundar@nic.in Tel: 011-24695304

Dated: 3rd December, 2021

To

Shri. Samar Suri, Head Projects,

M/s. Arcelormittal Nippon Steel India Limited,

Hazira Village, Chorasi Tehsil,

Surat, Gujarat - 394270

Email: Sankara.Subramanian@amns.in

Subject:

Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat – Prescribing for Terms of Reference-regarding.

S1 N 1

Sir,

This has reference to online application of M/s. Arcelormittal Nippon Steel India Limited made vide proposal no. IA/GJ/IND/231036/2021 dated 06/10/2021 along with the application in prescribed format (Form-I), Copy of Pre-feasibility report, proposed ToRs and ADS reply submitted vide letter dated 09/11/2021 through Parivesh for undertaking detailed EIA study as per EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no 3(a) Metallurgical Industries (ferrous & non-ferrous), 1(d) Thermal Power Plant and 4(b) Coke oven plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

2. The proposal above cited was initially considered in the 47<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 28-29<sup>th</sup> October, 2021 and re-considered in the 48<sup>th</sup> meeting of the Re-constituted EAC (Industry-I) held on 11-12<sup>th</sup> November, 2021. The EAC proceedings of the said meetings are given as below:

Details submitted by Project proponent

3. The project of M/s. Arcelormittal Nippon Steel India Limited is located in Hazira Village, Choryasi Tehsil, District Surat, Gujarat is for Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel).

Environmental site settings:

,	S No	Particulars	<b>Details</b>
Ī	1	Total land	Total land: 884.88 ha. (about 885 ha)

Terms of Reference for the project (titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 1 of 18

2	No	Particulars Particulars	Details
	- 1		• Industrial: 805 ha.
			• Private: 14.15 ha (applied for acquisition to sta
İ			government)
	- 1		• Forest land 65.73 ha (Stage II FC obtained)
-	1		(ouge in to obtained)
	j		For expansion - 186.08 ha
			• 65.73 Ha Forest land (Stage II FC obtained)
			14.13 Fig. (applied for consists
			government)
			• 35 Ha material handling area from GMB
-			1.4 Ha area will be used from section
14	Exis	stence of habitat	IOII   IVII
	& in	volvement of R &	R,
<u>_</u>	if an	ıy	
[3	Latin	tude and Longitu	nde   Latitude - 21° 6' 43.72''N
1	of th	e project site	Longitude - 72° 38' 40.29''E
4	Elev	ation of the proj	ect 4-6 m AMSL
<u> </u>	site		
5	Invo	lvement of For	est Yes, 65.73 ha.
	land	if any.	
			Stage II Forest Clearance Received for 65.73 ha land
	1		area.
	İ		[Stage II FC for diversion of 27.02 ha vide letter no. 6
			00010/2013-DDO/048 dated 16/03/2021 and
	1		diversion of 38.71 ha vide letter no. 6-GJC047/2012
	777		B110/049 dated 16/03/2021
5	Water	r body exists with	in   Project site: Nil
	the pr	oject site as well:	
	study	area.	Study area:
			Arabian sea: 1 Km/ South
			Tapi River: 0.5 km/ East
	}	•	<b>Details of Ponds</b>
	ĺ		Hazira village pond: 2.2km/ South
		6	Suvali village pond: 3.3 km/ NNW
			Mora village pond: 2.7 km/ North
			Junagam village pond: 1.4 km/ West
			Bhesan village pond: 12.5 km/ NF
			Tapi River: 0.5 km/ East
$\rightarrow$	D		Mindhola River tributary: 12.02 km/ SE
İ		nce of ESZ/ESA	Nil.
	nationa	1	
	sanctua		
- 1	reserve	tiger reserve	
	elephan	it reserve etc. if	1
		ithin the study	
- 1	area.		

Terms of Reference for the project titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 2 of 18



5. The existing project was accorded environmental clearance vide no. EC No. J-1/1011/381/2014-IA.II (I) dated 09/03/2016. Consent to Operate for the existing unit was accorded by State Pollution Control Board vide no. and dates as given below:

CTO No.	Date of issue	Validity up to
GPCB/CCA-SRT-1082(5) ID 28839 (Pipe Mill)	07/04/2020	31/12/2024
GPCB/CCA-SRT-1162 (2) ID 22968 (Plate Mill)	07/04/2020	31/12/2024
AWH 103579 (Power Plant)	19/08/2019	31/03/2024
GPCB/CCA-SURAT-1190(6)/ID 14186 (Conarc division)	20/05/2020	31/12/2024
GPCB/CCA-SURAT-340 (15)/ID 20680(HRC Division)	07/04/2020	31/12/2024

8 fris

6. The unit configuration and capacity of existing and proposed project along with the implementation status is given as below:

	Plant/	inpreint			given as		-		1	l Expansion (B)	41.5	al after ion (A+B)	
S.No	Facility	То	tal (A)	Implem	ented (A1)	Un-imple	mented (A2)	As per CTO	Config	Capacity	Config	Capacity	Remarks
		Config.	Capacity	Config	Capacity	Config	Capacity	Capacity					
٠.													* Earlier planning
													was to remove HBI Modules (1 to 4) totalling 4 MTPA and
	HBI Plant (DRI Mod 1	Mod I- IV: 4.0	7.83	Mod I- 1V: 4.0 Mod:V -							Mod I- IV: 4.0		replace it with Blast Furnace of 3.0 MTPA. This could not be implemented due to fund constraints
1	to VI) (in MTPA)	1 98 Mod VI:	(- 4.0* =3.83)	1.98 Mod VI;	7.83		<del>-</del>	7 83	0	0	Mod:V - 1.98	7.83	and legal cases at the NCLT. *Original capacity
		1.85		1.85							Mod VI: 1.85		prior to EC 2016 was 7.83 MTPA only. It is now proposed to maintain this original capacity.
											• .	X .	CTO has been sanctioned for 7.83 MTPA.
2	Blast Furnace (BF) (in MTPA)	1 x 2.04 (2200 m3)	5.04	1 x 2.04	2.04*	1 x 3.0	3.0#	2.04	1 x 0.96* + 2 x 4.0 (~4500 m3 each)	8.96	1 × 3.0 2 × 4.0	11.0	* Existing operational BF of capacity 2.04 MTPA is proposed to be upgraded to 3.0 MTPA.  # 1 x 3.0 MTPA couldn't be implemented due to fund constraints and legal cases at the NCLT, now dropped.

Terms of Reference for the project titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 3 of 18

			As	per EC da	ted :09.03.2	D16 ( A=A1	+A2)			Expansion		l after ion (A+B)	
S.No	Plant / Facility	Tot	al (A)	Implem	ented (A1)	Un-imple	mented (A2)	As per CTO	Config	Capacity	Config	Capacity	Remarks
		Config.	Capacity	Config	Capacity	Config	Capacity	Capacity					2 nos. of new B with 4.0 MTP. capacity each proposed.
3	Sinter Plant	1x 1.48 (1 x 120 m²) 2 x 3.5 (~ 325 m2 each)	8.48	1 x 1.48	1.48	2 x 3.5	7.0*	1.48			1x 1.48 (1 x 120 m2) 2 x 3.5 (~ 325 m2 each)	8.48	* 7.0 MTPA pl could not be implemented to fund constra- and legal cases the NCLT. Now, will establish the 7 MTPA Plan approved vid 2016 EC. (It w comprise of 0 number plants
4	Coke Oven (Recovery Type)	1 x 1.20	2.55	2 x 59 Ovens	135#	-	1.20*	-	4 x 59 Ovens	3.05	2 x 59 Ovens 4 x 59 Ovens	4.4	# Under implementation implementation implementation implemented of the fund constration and legal cases the NCLT.  *2016 EC approved for 2 MTPA, AMNS proceeding on with 1.35 MTI since 1.2 MTF originally secure in 2010 EC hanow lapsed.
5	Air Separation Plant (Nm3/Hr)	I X 343 TPD I X 257 TPD I X 785 TPD 3 X 1714 TPD I X 700 TPD (Only oxygen) I X 2200 TPD	424,744	1 X 343 TPD 1 X 257 TPD 1 X 785 TPD 3 X 1714 TPD 1 X 700 TPD (Only oxygen)	360,544	i X 2200 TPD*	64,200*	360,544	-		1 X 343 TPD 1 X 257 TPD 1 X 785 TPD 3 X 1714 TPD 1 X 700 TPD 1 X 2200 TPD (Only oxygen)	424,744	* 64200 Nm³/ plant will be established as 2016 EC
6	SMS-1 (EAF 4 Nos.)	4 x 150 MT Heat size	4.6*	4 x 150 MT Heat size	4.6*		-	4.6		0	4 x 150 MT Heat size	4.6	*Earlier plann was to remove MTPA EAF nos. and replace with BOF-3 n in its place b that could not implemented to fund constra and legal case the NCLT. Original capac prior to EC 20

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Page 4 of 18

			As	per EC da	nted :09.03.2	016 ( A=A	I+A2)		1 -	Expansion (B)	ļ.	al after ion (A+B)	
S.No	Plant / Facility	Tot	tal (A)	lmplem	ented (A1)	Un-imple	mented (A2)	As per CTO	Config	Capacity	Config	Capacity	Remarks
		Config.	Capacity	Config	Capacity	Config	Capacity	Capacity		S- <b>p</b> y		oup.icit,	Ì
													was 4.6 MTPA only and it is no submitted to reta this original capacity. CTO has been sanctioned for 4 MTPA.
7	SMS-2	4 x 200 MT Heat size	5.0	4 x 200 MT Heat size	5,0		-	5,0	į.	0	4 x 200 MT Heat size	5.0	
8	SMS-3 (BOF- 3 nos.)		0	·				-	3 x 350 MT Heat size *	6.0	3 x 350 MT Heat size *	6.0	New SMS-3 sho of 6.0 MTPA is proposed. * 2 Working + stand by
	Total SMS		9.6		9.6		•	9.6		6.0		15.6	
													Plant will be operated till th proposed expansion is
													completed.  * Thereafter it v
9	Corex Plant	2 x 0.85	1.7	2 x 0.85	1.7			1.7		·	2 x 0.85	1.7*	be shutdown safely and will started only in
γ							,						case of any un going down b maintaining sanctioned
													production of l metal.
,		1 x 0.45							1 x 0.27* (1 x 200				*0.27 MTP/
10	Lime Plant (Lime/Doli me	(4 x 300 TPD) 1 x 0.48 (3 x 500 TPD)	0.93	1 x 0.45 1 x 0.48	0.93		-	0.93	+ 1x 500 TPD) 1 x 0.8 (4 x 600 TPD)	1.07*	1 x 0.45 1 x 0.48 1 x 0.27* 1 x 0.8	2.0	proposed in To 2021. 0.8 MTPA proposed in th expansion.
11	Plate Mill	1 x 1,5	1.5	1 x 1.5	1.5			1.5		0	1 x 1.5	1.5	
										-			* 3.5 MTPA approved vide
12	CSP and HRC	1 x 3.5	3.5*	I x 3.5 1 x 4.5#	8.0*		-	8.0	1 x 6.0	6.0	1 x 3.5 1 x 4.5# 1 x 6.0	14.0	05.07.2010 EC # 4.5 MTPA Approved vide 2 05-2008 EC Total 8.0 implemented, b inadvertently mentioned 3.5 MTPA only in 2016 EC
13	CRM	1 x 1.5	1.5	1 x 1.5 1 x 0.54*	2.04*			2.04	1 x 2.2	3.2#	1 x 1.5 1 x 0.54* 1 x 2.2 1 x 1.0	5.24	* CTO taken f additional 0.5 MTPA from GPCB.

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Page 5 of 18

	District		As	per EC da	ted :09.03.2	016 ( A=A1	+A2)			Expansion (B)		il after ion (A+B)		
S.No	Plant / Facility	Tot	al (A)	Impleme	ented (A1)	Un-imple	mented (A2)	As per CTO	Config	Capacity	Config	Capacity	Remarks	
			Config.	Capacity	Config	Capacity	Config	Capacity	Capacity					
													#3.2 MTPA proposed in Modification Project, 2021.	
14	Pipe mill:													
	H Saw Pipes (in MTPA)	1 x 0.15	0.15	1 x 0.15 1 x 0.15*	0.30*		0	0.3		0	1 x 0.15 1 x 0.15*	0.30	0.15 MTPA as p 2016 EC *CTC taken for additional 0.1: MTPA from GPCB. (0.15+0.15=0.3)	
	L Saw Pipes (in MTPA)	1 x 0.33	0.33	1 x 0.33	0.33		0	0.33		0	1 x 0.33	0.33		
15	CPP (in MW)	1 X 475 MW 1 X 31 MW 1 X 40 MW 1 X 10 MW 1 X 48 MW	604	1 X 475 MW I X 31 MW I X 40 MW I X 10 MW	5 56	1 x 48 MW	48*	556	1 X 475 MW 1 X 31 MW 1 X 40 MW 1 X 10 MW 2 x 100 MW 2 x 25 MW	250#		854	* 48MW to be implemented # 2 x 100 MW surplus fuel ga + 2 x 25 MW TRT.	
16	Waste Heat Recovery based Power Plant (in MW)	1 x 25 MW 1 x 20 MW	45	1 X 25 MW	25	1 X 20 MW	20*	25	Ix 100 MW CDQ	100	1 x 25 MW 1 x 20 MW 1x 100 MW CDQ	145	*20 MW to be implemented I x 100 MW CDQ based	
17	Jetty (length in m)	456 m+ 734 m	1190 m	456 m + 734 m	1190 m	-	-	734 m*	-		456 m + 734 m	1190 m	* 734 and 456 meters capacit; was sanctioned 2006 EC. This was implemented although inadvertently mentioned 734 only in 2016 E and CTO also mentioned the same 734m leng	

7. The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

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Page 6 of 18

		Quantity	required p	er annum	} ′	Distance	
S No	Raw Material	Existing	Proposed	Total	Source	from site (Approx. Kms)	Mode of Transportation
1.	DR Grade Pellets	11,823,300	0	11,823,300	AMNSI's Palletization		
2.	BF Grade Pellets	5,400,000	6,759,536	12,159,536	plants located at Vizag and Paradeep	5200/ 5750	Sea Route
3.	Calibrated Lump Ore	0	127,660	127,660	NMDC mines in Kirandul, Dist. Dantewada, CG	450+5200	Rail + Sea Route
4.	Iron Ore Fines	185,000	3,942,444	4,127,444	Goa, Odisha NMDC mines	900/5750	Sea Route
5.	Coal-PCI-BF	408,000	2,036,444	2,444,444	RBCT, SA	7680	
6.	Coal for Corex	2,770,000	-2,770,000	0	Australia	11053	Sea Route
7.	Metallurgical Coal	1,957,500	4,501,564	6,459,064	Japan Poland Russia	16044 10245	Sea Route
8.	Coke	1,155,000	-1,155,000	0	Kussia	10243	
9.	BF and Sinter Grade Flux (Limestone +Dolomite +	690,000	493,715	1,183,715		2640/	
	Pyroxenite + Quartzite)				Dubai and Oman	2200	Sea Route
10.	SMS grade Limestone and Dolomite	1,863,000	2,562,564	4,425,564		in a said and a said and a said a said a said a said a said a said a said a said a said a said a said a said a	



Raw material from Adani port to plant will be transported through 1.3 Km conveyor along the Surat -Hazira state high way. The required Right of Way of around 1.3 ha (1300m x 10 m width) from Revenue Department & state highways will be obtained. The basic scheme for raw material transportation by covered conveyors submitted by M/s. AMNSI. Break bulk cargo (Finished Goods) will be dispatched maximum through existing captive jetty & EBTL terminal. For balance cargo if any, through Adani Port, National highways (NH-6) route will be used. The same has been mentioned in the revised PFR. It is expected to move - 5% of 20 MTPA (-1 MTPA) as break bulk cargo.

- 8. The water requirement for the project is estimated as 3,815 m³/hr, out of which 3,400 m³/hr. of fresh water requirement will be obtained from the River Tapi and remaining requirement of 600 m³/hr will be recovered from Effluent Treatment Plant. The Permission for drawl of surface water is obtained from Narmada Water Resources Water Supply and Kalpasar Department vide letter no. 248/2021/1444 dated 27th July 2021.
- 9. The power requirement for the project is estimated as 1573 MW, out of which 810 MW will be obtained from the Captive Power Plant, 243 MW from Third party and 520 MW from

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Page 7 of 18

Grid.

- 10. The capital cost of the project is Rs. 35,145 Crores and the capital cost for environmental protection measures is proposed as Rs. 1565 Crores. The employment generation from the proposed project / expansion is direct 1750 and indirect 5250.
- 11. It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.
- 12. Name of the EIA consultant: M/s. Kadam Environmental Consultants [Sl. No. 20, List of ACOs with their Certificate no. NABET/EIA/1922/RA0138, valid up to 25/05/2022; Rev. 15, October 11, 2021].

13. Proposed Terms of Reference (Baseline data collection period: 15th March, 2021 – 15th June, 2021):

S		Sa	mpling	
No	Attributes	No. of stations	Frequency	Remarks
A.	Air			
a.	Meteorological parameters Temperature, wind speed, wind direction, Relative humidity, Rainfall, cloud clover	At Site	Continuous for 12 weeks	-
b.	AAQ parameters PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx, NH <sub>3</sub> , HC, CO	8	24 hrs twice a week at each station spread over the entire season with gaseous samples being changed six times (at 8-hour intervals).	_
B.	Noise	8	24 Hrs at each location once only	-
C.	Water			-
	Surface water/Ground water quality parameters Ground water parameters as per IS 10500 Standard Limits for drinking water Surface water parameter as per Inland Surface Water (CPCB)	8 + 8 (Groundwater + Surface water)	Each sample taken once during the monitoring period	-
D.	Land			
a.	Soil quality Porosity, Water Holding Capacity, Permeability, Particle Size Distribution, Texture, Cation Exchange Capacity, SAR, Exchangeable Sodium, Electrical conductivity, pH, Calcium,	8	Each sample taken once only	-

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Page 8 of 18



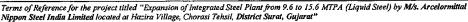
~		Sa	mpling		
S No	Attributes	No. of stations	Frequency	Remarks	
	Magnesium, Sodium, Potassium, Organic carbon, Total Nitrogen, Available potassium				
b.	Land Use		10 Km Radius Study area		
E.	Biological				
a.	Aquatic	Aquatic			
b.	Terrestrial	(Phyto, Zoo, Benthos) Terrestrial (Mammals, Avifauna, Herpetofauna)	10 Km Radius Study area	•	
F.	Socio-economic parameters	Nearby villages	10 Km Radius Study area		

#### **Observations of the Committee**

- 14. The EAC noted the following:
  - i. TOR is being sought for undertaking EIA study for expansion integrated steel plant from 9.6 to 15.6 MTPA at Hazira Village, Chorasi Tehsil, District Surat, Gujarat.
  - ii. The proposal was considered in EAC meeting held on 28-29<sup>th</sup> October, 2021 in which proposal was deferred for additional information.
  - iii. ADS reply submitted by the proponent on 09/11/2021 was found satisfactory except the location of AAQ monitoring stations. PP may carry out AAQ monitoring for another 1 month in the 4 locations in conformity to the wind rose diagram for all the 12 parameters.
  - iv. BF 1 is being modified to increase its capacity from 2.01 MTPA to 3 MTPA. Stove waste gas heat recovery shall be proposed under expansion program.

## Recommendations of the Committee

- 15. After deliberations, the Committee recommended the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToR enclosed at Annexure-1 read with additional ToRs at Annexure-2:
  - i. Cumulative impact assessment for the existing integrated steel & power plants and proposed modernization & expansion project shall be carried out including the impact on riverine ecology of the Tapi river.
  - No construction activity/infringement will take place in the flood plain of Tapi river situated in the vicinity of the project site.
  - iii. Status of the Forest clearance for the forest land and the land acquisition details as per MoEF&CC O.M. dated 7/10/2014 shall be submitted.
  - iv. Action plan to develop green belt in 33% of the total project area all along the project boundary with density of 2500 saplings per hectare shall be submitted.
  - v. During dismantling of existing facilities large number of trees are expected to be uprooted. PP shall enumerate the trees to be cut, possible numbers that could be



Page 9 of 18



- translocated and compensatory afforestation to be done (in consultation with DFO). Detail for the same shall be incorporated in the EIA report.
- Total water requirement for existing and expansion project shall be sourced from TAPI River. Raw Water treatment facility shall be installed inside the plant premises. Sludge disposal plan shall be elaborated in EIA report.
- PP has proposed the use of 75000 KLD treated sewage water from Surat Municipal vii. Corporation to be pumped from Surat to Hazira. Scheme for treated sewage water pumping shall be furnished.
- Two new BF Gas cleaning process in the proposed expansion will be Dry type and viii. Stove waste gas heat recovery shall be proposed with TRT.
- Raw material from Adani port to plant will be transported through 1.3 Km conveyor along the Surat-Hazira state high way and the same been marked in the layout. The required Right of Way for the conveyor shall be furnished in the EIA report.
- Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.
- Separate chapter on cyclone/ disaster management shall be prepared and included in the EIA report.
- Mass balance as well as energy balance for the integrated steel plant shall be submitted.
- The issues raised during public hearing and commitment of the project proponent on xiii. the same along with time bound action plan to implement it as per MoEF&CC O.M. dated 30/09/2020 shall be clearly provided.
- Performance evaluation of the existing pollution control systems shall be carried out xiv. and report shall be submitted.
- Socio-economic survey in the project influence area that is 10 Kms radial coverage XV. from the project site shall be carried out and included as a part of EIA report.
- Characteristics of the coal to be used in the steel and power plant shall be submitted xvi. along with the EIA report.
- Details regarding the existence of mangroves and coral reefs if any, within the study xvii. area of the project site along with the conservation plan shall be included in the EIA report.
- Action plan to limit the dust emission from all the stacks below 30 mg/Nm3 shall be xviii. furnished.
- Action plan for fugitive emission control in the plant premises shall be provided. xix.
- Action plan for 100 % solid waste utilization shall be submitted.
- Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- AAQ modelling shall be done considering proximity to the coast and riverine xxii.
- AAQ monitoring shall be carried out for one-month period at four locations in xxiii. conformity to the wind rose diagram for all the 12 parameters.
- Comprehensive risk assessment study for the entire steel complex shall be carried xxiv. out and submitted.

## **Decision of MoEF&CC**

The undersigned is directed to inform that Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environment Impact Assessment

Terms of Reference for the project titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 10 of 18



- (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1) hereby decided to accord above-said specific ToRs, in addition to the standard ToRs and Sector Specific ToRs as enclosed at Annexure I read with additional ToRs at Annexure-2 for carrying out detailed EIA/EMP for the above project.
- 17. It is requested that the draft EIA Report may be prepared in accordance with the above-mentioned specific ToRs and enclosed generic ToRs and additional ToRs and thereafter further necessary action including conduct of public consultation may be taken for obtaining Environment Clearance in accordance with the procedure prescribed under the EIA Notification, 2006 as amended.
- 18. The ToRs are valid for a period of four years from date of issue of this letter as per the Ministry's Notification S.O. 751 (E) dated 17/02/2020.
- 19. This issue with the approval of the Competent Authority.

(Sundar Ramanathan)
Scientist 'E'

#### Copy to:

- 1. Secretary, Department of Environment, Government of Gujarat, Secretariat, Gandhinagar.
- Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal – 462016.
- Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- Member Secretary, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- Chairman, Gujarat State Pollution Control Board, Sector 10-A, Gandhi Nagar 382043, Gujarat.
- 6. District Collector, Surat District, Gujarat.
- 7. Guard File/Record File/Monitoring File.
- 8. MoEF&CC Website.

(Sundar Ramanathan) Scientist 'E'

## ANNEXURE -1

# GENERIC TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

#### 1. Executive Summary

## 2. Introduction

- i. Details of the EIA Consultant including NABET accreditation
- ii. Information about the project proponent
- iii. Importance and benefits of the project

## 3. Project Description

- . Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
- ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
- x. Hazard identification and details of proposed safety systems.
- xi. Expansion/modernization proposals:
  - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30<sup>th</sup> May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA-EMP report.
  - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

## 4. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Co-ordinates (lat-long) of all four corners of the site.

Terms of Reference for the project titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 12 of 18

- iv. Google map-Earth downloaded of the project site.
- v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- vii. Land use break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- ix. Geological features and Geo-hydrological status of the study area shall be included.
- x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak minfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xii. R&R details in respect of land in line with state Government policy.

## 5. Forest and wildlife related issues (if applicable):

- Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
- ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.
- w. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

### 6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>X</sub>, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

Terms of Reference for the project titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 13 of 18

- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

## 7. Impact Assessment and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E (P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A

Terms of Reference for the project titled "Expansion of Integrated Steel Plant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 14 of 18

- detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

#### 8. Occupational health

- i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre-designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
- iii. Annual report of health status of workers with special reference to Occupational Health and Safety.
- Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

### 9. Corporate Environment Policy

- Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
- 10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers

Terms of Reference for the project titled "Expansion of Integrated Steel P. ant from 9.6 to 15.6 MTPA (Liquid Steel) by M/s. Arcelormittal Nippon Steel India Limited located at Hazira Village, Chorasi Tehsil, District Surat, Gujarat"

Page 15 of 18

during operation phase.

- 11. To address the Public Hearing issues, provisions contained under Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 30/09/2020 shall be complied.
- 12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- 13. A tabular chart with index for point wise compliance of above ToRs.
- 14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

## The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material in Regional languages shall be provided.
- iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
- The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
- vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
- ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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#### ANNEXURE-2

## ADDITIONAL TORS FOR INTEGRATED STEEL PLANT

- 1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
- 2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
- 3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
- Recent land-use map based on satellite imagery. High-resolution satellite image data 4. having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/landcover mapping of the area.
- 5. PM (PM<sub>10</sub> and P<sub>2.5</sub>) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM10 to be carried over.
- 6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
- 7: Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
- 8. Plan for slag utilization
- Plan for utilization of energy in off gases (coke oven, blast furnace)
- System of coke quenching adopted with justification.
- 11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
- 12. Trace metals in waste material especially slag.
- 13. Trace metals in water
- Details of proposed layout clearly demarcating various units within the plant. 14.
- Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
- 16. Details on design and manufacturing process for all the units.
- Details on environmentally sound technologies for recycling of hazardous materials, as 17. per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
- Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
- Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
- 20. Details on toxic content (TCLP), composition and end use of slag.

## **Executive Summary**

Executive summary of the report in about 8-10 pages incorporating the following:

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)
- ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Ouantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
- Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project Nature of land Agricultural (single/double crop), barren, Govt./private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora-fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.
- xiv. Occupational Health Measures
- xv. Post project monitoring plan

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# Annexure 2: Land Possesion Documents for 65.73 Ha Forest Land



Range Forest Office

**Dumas Range** 

Van Bhavan, GangeshwarMahadev Road

Adajan, Surat



e-mail :- rfodumas@gmail.com

## POSSESSION CERTIFICATE

As per the Govt. of India Ministry of Environment & forest, New Delhi's letter No. 6-GJC 047/2012-BHO/049, Dat.16/03/2021 and subsequent orders- 6-GJC 047/2012-BHO/195 dated 13/09/2021 and 6-GJC047/2012-BHO dated 19/1/2022 and Department of Forests and Environment, Government of Gujarat letter vide no. FCA-1012/3-18/11/SF-44/F dated 04/03/2022, the possession of 38.71 ha. Forest land of Survey No.179 paiki of Village Hazira Taluka Choryasi District Surat for the Purpose of setting 300MW Power Plant at Hazira, Dist-Surat is handed Over on Dated 25/03/2022. To ArcelorMittal Nippon Steel India Ltd.

Place: Hazira

Date. 25 /03/2022.

Possession Handed Over By

Possession Handed Over To

For ARCELORMITTAL NIPPON STEEL INDIA LTD. (Formerly Known as Essar Steel India Ltd.)

Arcelor Mittal Nippon Steel India in the Signatory

In Presence of:

Range Forest Officer

Dumas

Range Forest Officer (Survey)

Assistant Conservator of Forests, Surat

TRUE COPY

Assist, Conservator of Foresta Normal Subcello Dy. Conservator of Forest

Annexure

Name of Village	Survey No.	Area (In Hect.)
Hazira	179/paiki	38.71
Т	otal	38.71

Description & Boundaries

1. South

: 179/Pt

2. North

3. East

: 179 (Pt : Revenue S. No. Go, 63, 64, 70, 71, 72

4. West

: 179 / PL

Signed by: Shailesh I. Patel.

ArcelorMittal Nippon Steel India Ltd.

Hazira, Surat

Authorised Signatory

In the presence of: 1. Navesh G. Tandel

Section Engineer

AM/NI India

Signed by:

NULASE Kange Forest Officer

Dumas

In the Presence of: 1. Range Forest Office

2. Assistant Conservator of Forests, Surat

Assist. Conservater of Feresa Normal Swoeld



Range Forest Office

Dumas Range

Van Bhavan, GangeshwarMahadev Road

Adajan, Surat



e-mail :- rfodumas@gmail.com

#### POSSESSION CERTIFICATE

As per the Govt of India, Ministry of Environment, Forest and Climate Change order no. 6-GJC 018/2015-BHO/048, dated 16/03/2021 and subsequent orders- 6-GJC 018/2015-BHO/194 dated 13/09/2021 and 6-GJC018/2015-BHO dated 19/1/2022 and Department of Forests and Environment, Government of Gujarat letter vide no. FCA-1014/10-07/14/SF-60/F dated 04/03/2022, the possession of 27.02 ha Reserved Forest land bearing Survey No. 179/pt at Village- Hazira, Taluka- Choryasi for construction of Raw Material Facilities is handed Over on Dated 24/03/2022 To ArcelorMittal Nippon Steel India Ltd.

On behalf of Forest Department, the possession of said land is handed over by the Range forest officer Shree Nitin L. Varmora where as the charge of land is taken over by Shree. Shallesh I. Palal .... the representative of Arcelor Mittal Nippon Steel India Ltd.

Place: Hazira

Date: 24/03/2022.

Possession Handed Over By

Range Forest Officer
Dumas

In Presence of

Range Forest Officer (Survey 12.

Assist, Conservator of Forest

Possession Handed Over T

For ARCELORMITTAL NIPPON STEEL INDIA LTD. (Formerly Known as Essar Steel India Ltd.)

ArcelorMittal Nippon Steel India Ltd. Hazira, Buran Signatory

Assistant Conservator of Forests, Surat

Dy. Conservalor of Forests

Annexure

SCHEDULE 1	REFFRRED TO IN THE AE	OVE AGREEMENT
Name of Village	Survey No.	Area (In Hect.)
Hazira	179/paiki	27.02
	Total	27.02

Description & Boundaries

1. South

2. North

3. East

: 179/Pt : Boundary of Shiv & ampus : Revenue 5. No. 2, 7, 8, 59 & 60

4. West

: 179/PL

Signed by: Shailesh I. Patel

PPON STEEL INDIA LTD.

Arcelor Mittal Nippon Steel India Ltd.

Hazira, Surat

Authorised Signaldy

In the presence of: 1. Navresh G. Tandel
(section Engineer)
AMINS India.

Signed by:

Range Forest Officer

Dumas

In the Presence of: 1. Range Forest Officer (Surveyor)

2. Assistant Conservator of Forests, Surat

Assist, Conservater of Foresto Normal Sworth





Date: 07/04/2022

To, The Deputy Conservator of Forest, Surat Division <u>Surat</u>

Subject: Change in land use of diverted Forest land 38.71 Ha. Under clause 5.6(a) of the FCA, 1980

Dear Sir,

As you are aware, erstwhile Essar Steel India Ltd. had applied for diversion of 38.71 Ha reserved and unclassed Forest Land for setting up 300 MW Power Plant for use in their **steel-making expansion program** as specified in our application.

Essar Steel India Ltd. (ESIL) underwent a successful corporate insolvency resolution process under the Insolvency & Bankruptcy Code, 2016. Through the said process, a resolution plan submitted by ArcelorMittal India Private Limited (AMNS) was approved by the Committee of Creditors of ESIL on 27.03.2019. The Resolution Plan was implemented with effect from 16.12.2019. Subsequent to the implementation of the Resolution Plan, the name of the company was changed to "ArcelorMittal Nippon Steel India Limited" with effect from 08.01.2020.

Requisite formal approvals (stage-II) for the project have been granted by MoEF & CC vide letter No.6-GJC047/2012-BHO/049 dated. 16-03-2021. Pursuant to approval of Resolution plan our request of name change from ESIL to AMNS was approved on 19-01-2022 by MoEF & CC. Subsequently, Range Forest Officer, Dumas has handed over the 38.71 Ha Forest land to the company on 25/03/2022.

Now, ArcelorMittal Nippon Steel India Limited has planned to finally implement the expansion of steel-making capacity from 9.6 MTPA to 15.6 MTPA with significant investment. With the advent of new technologies and change in steel market dynamics the company had to change the end product mix. Also, renewed emphasis on clean energy is also coming to bear on all expansion projects. Accordingly, there has been a change in the configuration of the expansion plan on 38.71 Ha as per the attached layout. Details of the Earlier Plan by ESTIL and proposed plan by AMNS are as under. However, the project (expansion of steel-making capacity) and user agency remains the same on the said diverted forest. Detailed layout indicating proposed development on said land is attached herewith for ready reference.

Sr. No.	Particulars	Earlier Plan by ESTIL	Proposed Plan by AMNS
1	38.71 Ha	Setting up 300 MW Power Plant including Cooling water system, generator transformer, electrical switch yard and distribution arrangement, road, green belt and misc.	Setting up Blast Furnace, Steel Melt Shop, Transport and Utilities including railways, ASU Plant, roads, drains, water pipeline, gas pipelines, green belt, transmission lines, telecom/data transmissions lines, civic facilities, cooling water system, generator, electric switch yard etc for integrated steel plant

ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

Registered Office: 27th km, Surat-Hazira Road, Hazira, Surat 394 270 Gujarat, India CIN U27100GJ1976FLC013787 T +91 0261-668 9200 E contact@amns.in W www.amns.in

A joint venture between ArcelorMittal and Nippon Steel Corporation





Further, we undertake to abide by all the conditions stipulated in the formal approvals & name change approvals and any additional conditions as imposed by MoEF & CC.

In view of the above, you are requested to grant permission for change of land use of the diverted forest land in the aforesaid formal approvals at the earliest so that we can commence the expansion work as mentioned above.

Thanking You.

For, Arcelor Mittal Nippon Steel India Ltd.

(Authorized Signatory)

- Encl: 1. Formal approvals for diversion of forest land.
  - 2. Change of Name Approval.
  - 3. Layout plan indicating proposed development.

#### Copy to:

- 1. Nodal Officer & APCCF Land, Gandhinagar
- 2. Chief Conservator of Forest, Surat Circle

સુરત વન વિભાગ, સુરત.

मुण्य कन संस्थानशीनी हरोरी

નાયબ વન સંરક્ષકશ્રીની કચેરી

સુરત વર્તુળ, સુરત. वन ભવन, ગંગેયર મહાદેવ रोड, શિવાજી ચોક, અડાજા,

सुरत-उ६५००६.





Date: 07/04/2022

To, The Deputy Conservator of Forest, Surat Division <u>Surat</u>

Subject: Change in land use of diverted Forest land 27.02 Ha. Under clause 5.6(a) of the FCA, 1980

Dear Sir,

As you are aware, erstwhile Essar Steel India Ltd. had applied for diversion of 27.02 Ha reserved and unclassed Forest Land for Construction of Raw material handling facilities and utilities for use in their steel-making expansion program as specified in our application.

Essar Steel India Ltd. (ESIL) underwent a successful corporate insolvency resolution process under the Insolvency & Bankruptcy Code, 2016. Through the said process, a resolution plan submitted by ArcelorMittal India Private Limited (AMNS) was approved by the Committee of Creditors of ESIL on 27.03.2019. The Resolution Plan was implemented with effect from 16.12.2019. Subsequent to the implementation of the Resolution Plan, the name of the company was changed to "ArcelorMittal Nippon Steel India Limited" with effect from 08.01.2020.

Requisite formal approvals (stage-II) for the project have been granted by MoEF & CC vide letter No.6-GJC018/2015-BHO/048 dated 16-03-2021. Pursuant to approval of Resolution plan our request of name change from ESIL to AMNS was approved on 19-01-2022 by MoEF & CC. Subsequently, Range Forest Officer, Dumas has handed over the 27.02 Ha Forest land to the company on 24/03/2022.

Now, ArcelorMittal Nippon Steel India Limited has planned to finally implement the expansion of steel-making capacity from 9.6 MTPA to 15.6 MTPA with significant investment. With the advent of new technologies and change in steel market dynamics the company had to change the end product mix. Also, renewed emphasis on clean energy is also coming to bear on all expansion projects. Accordingly, there has been a change in the configuration of the expansion plan on 27.02 Ha as per the attached layout. Details of the Earlier Plan by ESTIL and proposed plan by AMNS are as under. However, the project (expansion of steel-making capacity) and user agency remains the same on the said diverted forest. Detailed layout indicating proposed development on said land is attached herewith for ready reference.

Sr. No.	Particulars	Earlier Plan by ESTIL	Proposed Plan by AMNS
1	27.02 ha	Construction of Raw material handling facilities and utilities including Conveyor and Green belt	Setting up Steel Melt Shop (part) Hor Strip Mill, Transport and Utility including railways, roads, drains, water pipeline, gas pipelines, green belt, transmission lines, conveyors, telecom/data transmissions lines, civic facilities, etc for integrated steel plant

ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

Registered Office: 27<sup>th</sup> km, Surat-Hazira Road, Hazira, Surat 394 270 Gujarat, India CIN U27100GJ1976FLC013787

T +91 0261-668 9200 E contact@amns.in W www.amns.in A joint venture between ArcelorMittal and Nippon Steel Corporation





Further, we undertake to abide by all the conditions stipulated in the formal approvals & name change approvals and any additional conditions as imposed by MoEF & CC.

In view of the above, you are requested to grant permission for change of land use of the diverted forest land in the aforesaid formal approvals at the earliest so that we can commence the expansion work as mentioned above.

Thanking You.

Arcelor Mittal Nippon Steel India Ltd.

(Authorized Signatory)

Encl: 1. Formal approvals for diversion of forest land.

2. Change of Name Approval.

3. Layout plan indicating proposed development.

Copy to:

Nodal Officer & APCCF - Land, Gandhinagar Chief Conservator of Forest, Surat Circle.

નાયબ વન સંરક્ષકશ્રીની કચેરી, સુરત વન વિભાગ સરત 🤇

> र्याच अन्यहुन सुम्य वन संरक्षडशीनी डरोरी सुरत वर्तुण, सुरत.

વન ભવન, ગંગેયર મહાદેવ એક, શિવાજી ચોક, અડાજસ,

सुरत-३६५००६.

## Stage I Forest Clearance for 20.76 Ha Land



भारत सरकार
GOVERNMENT OF INDIA
पर्यावरण एवं वन मंत्रालय
MINISTRY OF ENVIRONMENT & FORESTS

क्षेत्रीय कार्यालय, पश्चिम क्षेत्र, Regional Office, Western Region, ''केन्द्रीय पर्यावरण भवन''

"Kendriya Paryavaran Bhavan लिन्क रोड नं0-3,Link Road No. 3 E-5, रविशंकर नगर/Ravi Shankar Nagar, भोपाल (म0प्र0)/Bhopal-462016 (M.P.) -0755-2466525, 2463102 (Fax), 2465496

अणुडाक /E-mail: apccfbhopal@gmail.com

No: 6-GJC 019/2011-BHO/ 9 50

To.

The Principal Secretary.
Govt. of Gujarat,
Forest and Environment Department.
14/8, Sardar Bhawan,
Sachivalaya, Gandhinagar.

Suh: Diversion of 20.76 ha reserved forest land for construction of housing accommodation and allied employees infrastructure facilities in Village-Hazira (Suvali) in favour of M/s Essar Steel Ltd in Ahmedabad District of Gujarat.

Sir,

l am to invite reference to your letter No. FCA-1009 (10-03) S.F-92-F dated 24/02/2011, letter No. FCA-1009/10-03/SF-92/F, letter No. FCA/29/A/577-78/11-12 dated 26/7/2011, letter of even dated 05/08/2011 and letter dated 04/05/2013 on the subject cited, seeking prior approval of the Central Government under Section-2 of the Forest (Conservation) Act, 1980.

After careful consideration of the proposal of the State Government, the undersigned is directed to convey that the Central Government hereby agrees in-principle for diversion of 20.76 ha Reserved Forest land for construction of housing accommodation and allied employees infrastructure facilities in Village-Hazira (Suvali) in favour of M/s Essar Steel Ltd in Ahmedabad District, subject to the following conditions:-

- The legal status of the forest land shall remain unchanged.
- 2 (a) Compensatory afforestation shall be taken up by the Forest Department over 20.76 ha non-forest land Survey No. 258/3/P 23. 24, 33. 38, 39P, Village- Sanala, Taluka-Palitana, District- Bhavnagar at the cost of the User Agency.
- (b) The non forest land shall be transferred and mutated in favour of the Forest Department.
- (c) The non-forest land shall be notified as Reserved Forest.
- The Penal compensatory afforestation over 41.52 ha. of degraded forest land Compartment/ Survey No. 219, Foresst Division-Vyara, Village- Kanji, Taluka- Songadh, District- Tapi will be raised at the cost of User Agency.
- The cost of compensatory afforestation and Penal afforestation shall be deposited in advance at prevailing wage rates with the Forest Department by the User Agency.
- The User Agency will provide 110 ha of non-forest land in "Lion Corrior" area, suitable as Lion habitat in Village- Sanada, Ta- Palitana, District-Bhavnagar.
- b) The non forest land shall be transferred and mutated in favour of the Forest Department.
- c) The non-forest land shall be notified as Reserved Forest.

08/06/19

Contd....2

-2-

- As a CSR the User Agency will deposit 2.5 times of the market value prevailing in 2006 for the area in "Lion Conservation Society".
- 7.. (a) The State Government shall charge the "Net Present Value" (NPV) for the 20.76 ha of forest land to be diverted under the proposal from the User Agency as per the orders of the Hon'ble Supreme Court of India dated 30/10/2002, 01/08/2003, 28/03/2008 and 09/05/2008 in IA-566 in W.P. (Civil) No. 202/1995 and as per the guidelines issued by the Ministry vide letters No.5-1/1998-FC (Pt.II) dated 18/09/2003, as well as letter No.5-2/2006-FC dated 03/10/2006 and 5-3/2007-FC dated 05/02/2009 in this regard.
  - (b) Additional amount of NPV of diverted forest land, if any, becoming due after finalization of the same by the Hon'ble Supreme Court of India on receipt of the report from the Expert Committee, shall be charged by the State Government from the User Agency, which shall furnish an undertaking to this effect.
- All the funds received from the User Agency under the project shall be transferred to the Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA) in Savings Bank A/c No. (CAF Gujarat) SB 01025208 Corporation Bank. Lodhi Complex, New Delhi 110 003.
- 9. The User Agency will obtain clearance under the provisions of ST & OTFD (Recognition of Forest Rights) Act, 2006 as may be applicable, before the final approval. A certificate to the effect that all claims and rights over the proposed forest land have been settled will be forwarded to this office by the State Govt. before the final approval.
- 10. a) Demarcation of the area shall be done on ground at the project cost using four feet high RCC pillars with Serial Numbers, forward and back bearing and distance from pillar to pillar.
  - b) At the cost of User Agency, the area of compensatory afforestation will also be fenced, if demanded by the State Forest Department.
- 11. No tree felling will be allowed.
- The forest land shall not be used for any purpose other than what is specified in the project proposal.
- All statutory Acts and rules made thereunder applicable to the project have to be strictly followed.
- 14. Any other condition, which the Central Government may stipulate.

After receipt of the compliance report on fulfilment of condition Nos 2(b), 4, 5 (b),6, 7, 8 and 9 from the State Government, proposal will be considered for final approval under Section – 2 of the Forest (Conservation) Act, 1980 by this office.

Any order for transfer of forest land to user agency shall not be issued by the State Government till formal approval order for diversion of forest land is issued by the Regional Office, MoEF, Bhopal.

Yours faithfully,

( S.K. B

Chief Conservator of Forests

Contd....3

Copy to :-



- The Director, ROHQ, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi – 110003.
- The Addl. Principal Chief Conservator of Forest and Nodal Officer (Forest Conservation)
   Act. Aranya Bhavan, Block No. A/3, Near "Ch" Circle, Opposite St. Xaviers High School,
   Sector-10A, Gandhinagar (Gujarat).
- 3. The Dy. Conservator of Forests, Vyara Forest Division, District-Ahmedabad, Gujarat.
- 4. The Dy. Conservator of Forests, Bhavnagar Forest Divison, District- Bhavanagar, Gujarat.
- M/s Essar SEZ Hazira Ltd, ESSAR House 11, K.K. Marg, Mahalaxmi, Mumbai-4000 034.

6.. Order File.

Chief Conservator of Forests (Co. V.

## Annexure 3: Adani Support letter for RM Transportation



Logistics

AHPL/AMNS/21-22/0304 04 March 2022

To, ArcelorMittal Nippon Steel India Limited 27 Km Surat Hazira Road, Hazira, Surat Surat, Gujarat -394270

> Name: Mr. Ashutosh Mathur, Head Ports & Chartering Email: <u>ashutosh.mathur@amns.in</u>

Sub: Storage and Handling of 25 million MTPA of Dry Bulk and Break Bulk Cargo of

ArcelorMittal Nippon Steel Plant at Hazira Port.

Ref: Our Letter dated 14th Sep 2021

Dear Sir,

In continuation to our earlier Letter dated 14th Sep 2021 and various discussion for your steel Plant cargo requirement, this is to inform you that we can handle your increased cargo handling requirement.

We hereby give our in-Principle acceptance to perform handling and storing of your 25 million MTPA bulk cargo such as Iron ore, Coal, Coke, Limestone, Steel Slag, BF slag etc. and Break bulk Products such as Steel Coils, Plates, Pipes etc required for the steel plant.

We will work on the Commercial Terms and Conditions and finalise the Agreement for Cargo handling and Storage Requirement for your Steel Plant expansion at the appropriate time when your plant expansion takes place.

Yours Sincerely For Adani Hazira Port Limited

Name: Pranav Choudhary

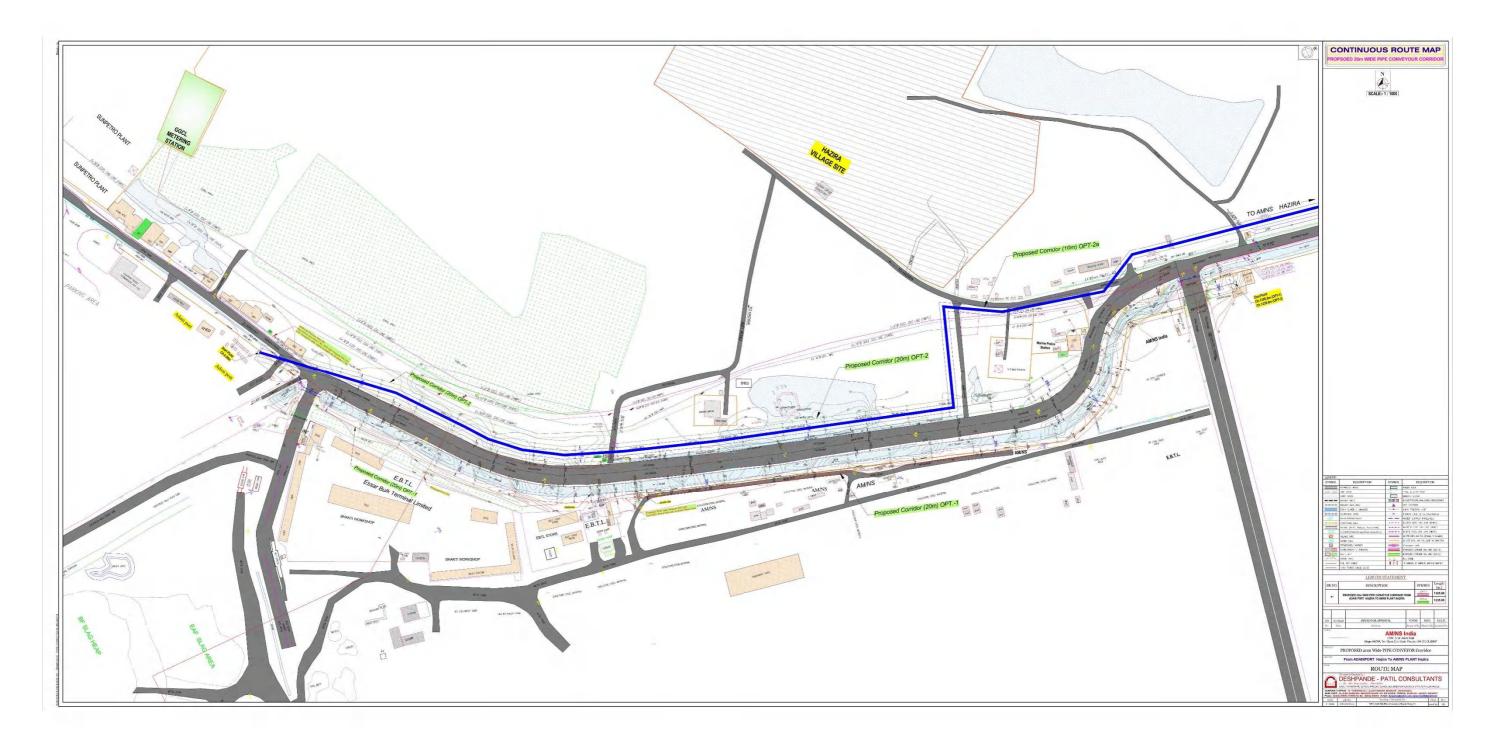
Designation: Chief Executive Officer

Adani Hazira Port Ltd At 8 PO Hazira Choryashi Surat 394 270 Gujarat, India CIN: U45209GJ2009PTC058789

Tel +91 261 220 7780 Fax +91 261 220 7777 Info@adani.com www.adaniports.com

Registered Office: Adani Corporate House, Shantigram, Nr Valshno Devi Circle, S G Highway, Khodiyar, Ahmedabad 382 421, Gujarat, India

# Annexure 4: Layout showing corridor of conveyor belt for Transportation



KADAM ENVIRONMENTAL CONSULTANTS | JULY 2022



Reference: AMNSI / R&B / 21-22 / 1101

Date: 10th January 2022

To,

The Superintending Engineer,

Road and Building Department, 1st Floor, R & B Building, Opp. Dutch Garden, Nanpura, Surat - 395001

Kind Attn: Mr. A. G. Vasava - Superintending Engineer

Sub: Seeking ROW / NOC for installing conveyor beside old Surat-Hazira Road from Adani Port to AMNSI Plant at Hazira

Respected Sir,

ArcelorMittal Nippon Steel India Ltd (AMNSI) owns and operates a fully integrated steel plant at Hazira, Gujarat. AMNSI currently producing 7.35 MTPA of steel from a plant of 9 MTPA capacity. Further, AMNSI has embarked on a journey to expand its capacity at Hazira plant from present level to 14 MTPA of steel by investing INR 35000Cr.

With this proposed mega expansion, AMNSI is required to handle bulk cargo from current level of 25 MTPA to approx. 45 MTPA. Presently 25 MTPA is being handled by captive port and for additional 20 MTPA of bulk cargo handling, it is arranged through neighboring Adani Port facility. Carting such huge volume through road will severely impact existing road infrastructure in this area and unsafe too. Considering this, it is proposed to install a state of the art conveyor system to transport bulk cargo from Adani Port to AMNSI plant. It will also be an environment friendly and safe approach of handling bulk cargo. A 10 m (max) wide corridor parallel to old Surat Hazira Road would be धीन्वर्ड इबाई

ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

required to install this conveyor.

Registered Office: 27th km, Surat-Hazira Road, Hazira, Surat 394 270 Gujarat, India CIN U27100GJ1976FLC013787

T +91 261 668 9200 E contact@amns.in W www.amns.in

અધિશક ઈજનેર શ્વરત (મા x મ) વર્તુળ, દયાળજી બાગ સાચે, सरत - उट्य ००१.

A joint venture between ArcelorMittal and Nippon Steel Corporation







The conveyor will mainly transport Limestone/ Coke/ Coal/ Palettes etc. for Steel manufacturing process. This Elevated conveyor will be approx. 1.235 km in length and will cross Surat-Hazira Road at two locations, first in front of Adani gate while coming out from Adani Port Premises and second opposite to Hazira Marine police station to take the conveyor into the AMNSI material handling yard, detail of which are as per the attached layout – DPC/AM/NS/Pipe Conveyor/Route Map/01.

For the above-mentioned purpose, we earnestly seek your support and request you to grant us the Right of Way for installing the conveyor. We will be highly obliged and will work on this following your instructions / guidelines.

We thank you in anticipation.

Yours Faithfully,

For, Arcelor Mittal Nippon Steel India Limited

Rajiv Bhatnagar

Executive Director - Projects

AMNS India Ltd.

Hazira, SURAT

Enclosures:

1. Route Map - DPC/AM/NS/Pipe Conveyor/Route Map/01

A joint venture between ArcelorMittal and Nippon Steel Corporation

ArcelorMittal

NIPPON STEEL

ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited) Registered Office: 27<sup>th</sup>km, Surat-Hazira Road, Hazira, Surat 394 270 Gujarat, India CIN U27100GJ1976FLC013787

T +91 261 668 9200 E contact@amns.in W www.amns.in 2

## Annexure 5: Power Permission Letter



पश्चिम क्षेत्र भार प्रेषण केन्द्र

एफ-3, सेन्ट्रल रोड, एम्.आई.डी.सी. एरिया, मरोल, अन्धेरी (पूर्व), मुंबई - 400 093. दुरभाष : 022-28202691 • फैक्स : 022-28235434, 28202630 • ई-मेल : wrldc@posoco.in

WESTERN REGIONAL LOAD DESPATCH CENTRE

Dated: 28.12.2021

F-3, Central Road, MIDC Area, Marol, Andheri (East), Mumbai – 400 093.

Phone: 022-28202691 • Telefax: 28235434, 28202630 • E-mail: wrldc@posoco.in

CIN: U40105DL2009G01188682

# " Standing Clearance"

Ref No. WRLDC/MO/1016/21-22/Q4/04

Name of the RLDC issuing Standing : WRLDC

Clearance

2 Region : Western Region

3 Name of the Entity : ARCELOR MITTAL NIPPON STEEL

INDIA LTD. (AMNSIL)

4 Status of Entity (e.g. ISGS/State Utility/ : Regional Load Entity

CPP/ IPP/ Bulk Consumer/Others)

5 If Generator, then Type of Generator (RE: Not applicable

or Non-RE)

6 Point(s) of Connection : 220KV EPTCL Hazira

7 Max. MW ceiling allowed for Injection\* : 0
8 Max. MW ceiling allowed for Drawal\* : 700

(\* RLDCs may specify different MW ceilings for different time blocks, if required.)

•

Validity Period : RTC From 01.01.2022 To 31.03.2022

10. Transmission losses (Regional Transmission Losses)

	Whether Applicable or not (Yes/No)	ISTS Losses
Regional Transmission	Yes	As per CERC Sharing
Losses		Regulation 2020

11. Transmission Charges (Regional Transmission Charges)

	Whether Applicable or not (Yes/No)	ISTS Charges
Regional Transmission Charges	Yes	As per CERC Sharing Regulation 2020

स्वहित एवं राष्ट्र हित मे ऊर्ज़ा बचायें

Save Energy for Benefit of Self and Nation

पंजीकृत कार्यालय : वी-9, कृतब इंस्टीटयूशनल प्रिया , कटवारिया सराय , नई दिल्ली-110 016 दूरभाष : 011-26560121 फॅक्स : 26601081 Registered Office : B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi - 110 016. Tel.: 011-26560121 Fax : 26601081

#### **Terms and Conditions:**

- a) The above limit shall be honored in case of simultaneous trading through multiple exchanges.
- b) It needs to be ensured by M/s AMNSIL that the maximum schedule contracted considering all LTA/MTOA/STOA (Collective & Bilateral) transactions should not exceed the above mentioned quantum in case of purchase of power.
- c) All trades/contracts to be done as per applicable CERC regulations/procedures/orders. Quantum of trades would be restricted to margins available over the transmission system, in case of corridor constraints.
- d) For renewal of the standing clearance, M/s AMNSIL shall approach WRLDC at least one week prior to the expiry of the standing clearance, with a request for renewal and affidavit, depicting the maximum quantity desired to be traded in Short Term market.
- While contracting any trade using this standing clearance, M/s AMNSIL needs to ensure that no PPAs are being breached.
- f) WRLDC possesses the right to rescind the standing clearance in case of emergency of any adverse situations / detection of undesired gaming or conditions/new developments which may warrant the same for preservation of Grid safety/security or complaints regarding breach of PPAs.
- g) M/s AMNSIL shall be responsible for timely payment of dues into the Regional Pool Accounts and WRLDC Fees & Charges account well within the due dates.

Place : Mumbai Name : S. Usha

Date: 28.12.2021 Designation: Sr. General Manager (MO & Regulatory)

Phone No: 9869404458

Copy to: 1. VP (Market Operation) PXIL, Mumbai

2. Director (Market Operation) IEXL, New Delhi

3. CGM (Market Operation) NLDC, New Delhi

#### Annexure 6: Water Permission letter

## NARMADA WATER RESOURCES WATER SUPPLY AND KALPSAR DEPARTIMENT નર્મદા,જળસંપત્તિ,પાણી પુરવઠા અને કલ્પસર વિભાગ

Office of the Executive Engineer,

K.R.B.C.Division, Surat

Sinchai Bhavan, 1<sup>st</sup> Floor

Near Lourdes Convent bus stoo

Athwalines Surat-395001

Tel. (0261)- 2669048

Fax- (0261)-2667494

E-mail:krbcdn@gmail.com

કાર્યપાલક ઇજનેરશ્રીની કચેરી, કા. જ.કાં

નહેર વિભાગ, સરત.

सिंयाछ भवन, पहेली माण

(५५% होन्वेन्ट स्डल जस स्टोपनी जाषुमां,

અઠવાલાઇન્સ , સુરત-૩૯૫૦૦૧

हेलीश्रेन नं- (०२५१) २५५७४८

ફેક્સ નં- (૦૨૬૧) ૨૬૬૭૪૯૪

ઇ-મેઇલ - krbcdn@gmail.com

જા.નં.કાજકાનવિ/પીબી-४/રાંદેર/ AMNS India Ltd/ Steel Plant Expansion/ Future water

requirement/ 7.35 MTPA to 18 MTPA/ NOC/Environment Clearance/Clall-286 /2888

al. /09/2029 2 7 JUL 2021

प्रति,

AMNS India Ltd, Hazira,

Surat.

વિષય :- Intimation of Future water requirement with steel Plant Expansion અનુસંધાન :- (૧) આપની તા.૨૯/૦૪/૨૦૨૧ ના પત્ર ક્રમાંક - AMNSI/KRBC/21-22/001

ઉપરોક્ત વિષય અન્વચે જણાવવાનું કે આપની કંપનીનુ સરકારશ્રી સાથે વર્ષ ૨૦૨૧-૨૦૨૪ સુધી બિનખેતી વિષ્યક ફેતુસર ૪૫ MGD પાણી આપવાનો કરાર થયેલ છે. જે મુજબ કંપની ફાલમાં પાણી નો ઉપાડ કરે છે. સન્દર્ભ ફેઠળના પત્રથી આપના દ્રારા જણાવેલ છે કે AMNS India Ltd કંપની દ્રારા તેમના ફયાત સ્ટીલ પ્લાન્ટનુ વિસ્તુતીકરણ કરી પ્લાન્ટની ક્ષમતા ૧૮ MTPA કરવા માંગે છે. સદર વિસ્તુતીકરણ માટે કંપનીને વર્ષ ૨૦૩૦ સુધી ૮૭ MGD પાણીની જરૂરીયાત છે.

આ બાબતે જણાવવાનુ કે ભવિષ્યમાં ડેમમાં પાણી ઉપલબ્ધ ફશે તો તેના આધારે સરકારશ્રીના નિયમોન્સાર તથા સક્ષમ કક્ષાની મંજુરી મળે તો પાણી આપી શકાશે.

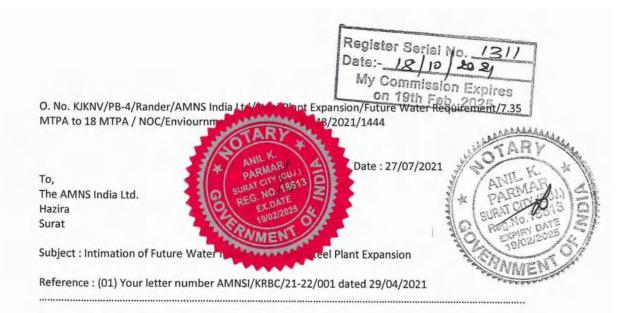
સદર પત્ર માત્ર AMNS India Ltd કંપની દ્રારા તેમના હ્યાત સ્ટીલ પ્લાન્ટનુ વિસ્તુતીકરણ કરી પ્લાન્ટની ક્ષમતા ૧૮ MTPA કરવા Environment Clearance મેળવવા માટે આપવામાં આવે છે તથા ભવિષ્યમાં પાણી બાબતે કોઇપણ જાતની પુર્વ બાઢેધરી આપવામાં આવતી નથી તથા આ પત્રના આધારે કોઇપણ પ્રકારનો હકદાવો કે કોર્ટકેસ કરી શકાશે નહી.

કાર્યપાલક ઇજનેર,

કા.જ.કા.નફેર વિભાગ,

सुरत.

નકલ રવાના પૃતિ, નાયબ કાર્યપાલક ઇજનેરશ્રી, રાંદેર સિચાઇ પેટાવિભાગ, રાંદેર તરફ
 શ્રાગ માત્ર



With reference to abovementioned subject it is to inform that an agreement was occurred between your company and the government for supply of 45 MGD water for non agriculture purposes during the period from 2021 – 2024. You have informed through the above referred letter that AMNS India Company Limited wants to expand the capacity of its existing plant upto 18 MTPA. For this expansion company need 87 MGD of water by the year 2030.

In this connection it is to inform that in future if the water is available in the dam then the same will be provided as per the rules of the Government and as per the permission from competent authority.

This letter is provided only for the purpose of environmental clearance to AMNS India Limited, for expansion of its existing plant upto a capacity of 18 MTPA and there is no prior guarantee for water in future and no claim or court case will be entertained on the basis of this letter.

TIFIED BY

H D Patel Executive engineer Ka. J. Ka. Canal Division Surat

God Deputy Executive Engineer, Rander Irrigation Sub division, At Rander, for information



## Annexure 7: TSDF Membership



Certificate

Certificate No. :

MEPPL-508

## TO WHOMSOEVER IT MAY CONCERN

THIS IS TO CERTIFY THAT

# ARCELOR MITTAL NIPPON STEEL INDIA LTD

PLOT NO. 203-230,245-264,312-321,

@ 27 KM,

SURAT-HAZIRA ROAD,

SURAT GUJARAT-394270

# MAURYA ENVIRO PROJECT PVT. LTD.

FOR INTEGRATED COMMEN HAZARDOUS WASTE MANAGEMENT FACILITY.

THIS MEMBERSHIP IS VALID FOR A PERIOD OF

**3 YEARS** 

DATE OF ISSUE

: 19/04/2022

FOR, MAURY ENVIRO PROJECT PVT. LTD.

DATE OF EXPIRATION

: 18/04/2025

PLACE OF ISSUE

: AHMEDABAD

DIRECTOR/AUTHORISED SIGNATORY

Site: Sarvey No.: 75/A/75/B, Jamiyat Pura, Taluka - Balasinor, District - Mahisagar



#### BHARUCH ENVIRO INFRASTRUCTURE LIMITED

Ref. BEIL/ANK/2018

15th February, 2018

To, Essar Steel India Ltd. 27 Km, Surat - Hazira Road, Hazira - 394 270, Dist. Surat.

Sub: Renewal Membership Certificate for Common Solid Waste Disposal Facility.

Dear Sir,

We hereby certify that you have become member for 5 years upto 15/02/2023 for the common Solid/Hazardous waste disposal facility of Bharuch Enviro Infrastructure Ltd., at GIDC, Ankleshwar. You have booked solid waste quantity of 2400 MT/Years. Your Membership No. is Oth/309.

Waste will be accepted after submitting valid authorization of GPCB.

Thanking you,

Yours faithfully,

For BHARUCH ENVIRO INFRASTRUCTURE LTD.

**AUTHORISED SIGNATORY** 

CIN No.: U45300GJ1997PLC032696

Works Office : Plot No. 9701-16 GIDC Estate, Post Box No. 82, Ankleshwar 393 002, Dist. : Bharuch (Gujarat)
Phones (02646) 253135, 226228 • Fax : (02846) 222849 • E-mail : panjwanla@uniphos.com
Regd. Office : Plot No. 117-118, GIDC Estate, Ankleshwar 393 002, Dist.: Bharuch. (Gujarat)

#### Annexure 8: Copy of Existing EC

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F. No. J-11011/381/2014-1A II (1)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan Jor Bagh Road, Aliganj, New Delhi – 110003 E-mail: r.sundar@nic.in Tel: 011-24695304

Dated: 23rd February, 2021

To

Shri. Rajiv Bhatnagar,
Executive Director-Projects,
M/s. ArcelorMittal Nippon Steel India Limited,
Village: Hazira Taluka: Changai

Village: Hazira, Taluka: Choryasi District: Surat, Gujarat-394270, E-mail: dr.anil.jain@amns.in

Subject: Change of company name in the Environment Clearance titled "Replacement of existing Hot Briquetted Iron (HBI)/Direct Reduced Iron (DRI) Modules I to [IV with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing Electric Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated steel plant of M/s. Essar Steel India Limited located in Hazira Notified industrial area, Village Hazira, Tehsil Choryasi, District Surat, Gujarat" from M/s. Essar Steel India Limited to M/s. ArcelorMittal Nippon Steel India Limited – regarding.

8. fry

Ref. : (i) MoEF&CC letter No. J-11011/381/2014-IA II (I) dated 09/03/2016 (ii) Online proposal no. IA/GJ/IND/179435/2020 dated 04/12/2020

Sir,

- Reference is invited to your online proposal no. IA/GJ/IND/179435/2020 dated 04/12/2020 requesting to transfer the Environment Clearance accorded by MoEF&CC vide letter no. J-11011/381/2014-IA II (I) dated 09/03/2016 from M/s. Essar Steel India Limited to M/s. ArcelorMittal Nippon Steel India Limited.
- The Ministry of Environment, Forest and Climate Change (MoEF&CC) has examined the
  request submitted by you. It is noted that the acquisition of M/s. Essar Steel India Limited
  by M/s. ArcelorMittal Nippon Steel India Limited was happened through Corporate
  Insolvency and Resolution Process.
- It is also noted that following documents have been submitted for change of company name in the Environmental Clearance:
  - A. Documents submitted for EC transfer:
    - i. Form No.7 for transfer of Environmental Clearance.
    - Authorization letter enabling Shri. Rajiv Bhatnagar, Executive Director-Projects to correspond and execute documents with MoEF&CC.

Change of company name in the Environment Clearance titled "Replacement of existing Hot Bequieted Iron (HBI) Direct Reduced Iron (DRI) Modules I to [Weth Blost Furnace and associated facilities like Sinter Plant, Coke Own Plant and existing Electric Are Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated steel plant of Mrs. Exar Steel India Limited to Counted in Hastric Motified industrial area, Village Hazira, Tehsil Choryasi, District Surat, Gujarat" from Mrs. Exar Steel India Limited to Mrs. Arcelor-Mutul Suppon Steel India Limited.

Page 1 of 3

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- NOC from M/s. Essar Steel India Limited stating that they have no issues or objection on change of their unit's name form from M/s. Essar Steel India Limited to M/s. ArcelorMittal Nippon Steel India Limited.
- iv. Undertaking by way of Affidavit dated 15/09/2020 and registered on 23/09/2020 of M/s. ArcelorMittal Nippon Steel India Limited in a non-judicial stamp stating that they will abide by and comply with all the conditions/environmental safeguards stipulated in the Environment Clearance dated 09/03/2016.
- v. Hon'ble Supreme Court Order dated 15th November, 2019 regarding CIRP.
- vi. Memorandum and Articles of Association of M/s. ArcelorMittal Nippon Steel India Limited.
- Certificate of incorporation pursuant to change of name issued by the Ministry of Corporate Affairs to M/s. ArcelorMittal Nippon Steel India Limited on 08/01/2020.
- 4. As per the para 11 of EIA notification 2006, a prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written "no objection" by the transferor to and by the regulatory authority concerned, on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases.
- 5. This Ministry hereby accepted the request for transfer of Environment Clearance accorded vide letter no J-11011/381/2014-IA II (I) dated 09/03/2016 from M/s. Essar Steel India Limited to M/s. ArcelorMittal Nippon Steel India Limited subject to satisfactory compliance to all the stipulated specific and general conditions. You are also requested to obtain 'Consent to Establish' and 'Consent to Operate' from the Gujarat Pollution Control Board in the name of M/s. ArcelorMittal Nippon Steel India Limited.
- M/s. ArcelorMittal Nippon Steel India Limited shall comply with the all specific and general conditions stipulated in the Environment Clearance letter dated 09/03/2016.
- In case, there is a change in the scope of the project, fresh Environment Clearance shall be obtained.
- 8. This issues with the approval of the Competent Authority.

Yours faithfully,

Sundar Ramanathan) Scientist 'E'

Change of company name in the Environment Clearance titled "Replacement of existing Hot Briquetted Iron (HBI) Direct Reduced Iron (DRI) Modules I to [W with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing Electric Are Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated steel plant of M.s. Essar Steel India Limited located in Hazira Notified industrial area, Village Hazira, Tehsil Choryasi, District Surat, Gujarat" from M.s. Essar Steel India Limited to M.s. ArcelorMittal Nippon Steel India Limited.

Page 2 of 3

### Copy to:-

- 1. Secretary, Department of Environment, Government of Gujarat, Secretariat Gandhinagar.
- Regional Officer, Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal-462016
- Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 4. Chairman, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar-382010.
- Member Secretary, Central Ground Water Authority. West Block -II, Wing -3, Sector I, R.K.Puram, New Delhi - 110086.
- 6. District Collector, Surat District, State of Gujarat.
- 7. Guard File / Record file / Monitoring file.
- 8. MOEF&CC Website.

(Sundar Ramanathan) Scientist 'E'

Change of company name in the Environment Clearance titled "Replacement of existing Hot Briquetted Iron (HBI) Direct Reduced Iron (DBI) Modules 1 to [IV with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing interite Are Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated sixely plant of M.s. Exist Neel India Limited to acta in Hazira Notified industrial area, Village Hazira, Tehsil Choryasi, District Surat, Gujarat" from M.s. Essar Sixel India Limited to M.s. ArcelorMittal Nippon Sixel India Limited.

Page 3 of 3

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### F. No. J-11011/381/2014-IA II (I)

Government of India Ministry of Environment, Forest and Climate Change (I.A. Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003
E-mail: satish.garkoti@nic.in
Tel: 011- 24695316

Dated: 8th March, 2016

To

M/s. Essar Steel India Limited Hazira industrial area, Village Hazira, Tehsil Choryasi, District Surat, Gujarat-394270

Subject: Replacement of existing Hot Briquetted Iron (HBI)/Direct Reduced Iron (DRI) Modules I to IV with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing Electric Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated steel plant of M/s. Essar Steel India Limited located in Hazira Notified industrial area, Village Hazira, Tehsil Choryasi, District Surat, Gujarat - Environment Clearance regarding.

Sir,

This has reference to your online application no. IA/GJ/IND/28742/2014 dated 25<sup>th</sup> June, 2015 along with copies of EIA/EMP report seeking Environment Clearance under the provisions of the EIA Notification, 2006 for the project mentioned above and subsequent letter No. ESTIL/ENV/JP/EC/11-15 dated 9<sup>th</sup> November, 2015. The ToRs to the project was awarded by Ministry of Environment, Forest and Climate Change vide letter No. J-11011/381/2014-IA.II (I) dated 12<sup>th</sup> February, 2015 for preparation of EIA/EMP report.

- 2.0 Based on the TORs prescribed to the project; the project proponent submitted an application for environmental clearance to the Ministry online on 02.08.2015. The project was appraised by the Expert Appraisal Committee (Industry) during its meeting held on 03.09.2015 and desired to revise the EIA & EMP report. The revised EIA & EMP report was received by the Ministry on 09.11.2015.
- 3.0 The proposal is for replacement of existing Hot Briquetted Iron (HBI)/Direct Reduced Iron (DRI) Modules I to IV with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing Electric Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility. Details of existing and proposed configuration, production facilities and products are as follows.

1



NI.	Name of Production	III-14		Capacity		Status of Existing
No.	Unit/Products	Unit	Existing	Proposed	Total	Units
1.	HBI Plant (DRI Mod. I to VI)	MTP A	7.83	-4.0	3.83	Only Mod V & VI are in operation.
2.	Blast Furnace	MTP A	2.04	3	5.04	In operation
3.	Sinter Plant	MTP A	1.48	7	8.48	In operation
4.	Coke Oven (Recovery	Гуре)				
	Gross Coke	MTPA	1.2	1.35	2.55	Under
	Crude tar (by-product)	TPA	52,200	63,000	1,15,200	construction.
	Sulphur (by-product)	TPA	1,700	1,980	3,680	
	Crude Benzol (by- product)	TPA	0	18,243	18,243	
	Naphthalene	TPA	130	0	130	
5.	Air Separation	-			1	7
	Oxygen Gaseous		3,60,544	64,200	4,24,744	In operation
	Oxygen liquid	3	2,950	500	3,450	
	Nitrogen	Nm <sup>3</sup> /hr	1,19,944	25,700	1,45,644	
	Argon	1 1	3,470	1,500	4,970	1
6.	Steel Melt Shop-1( EAF) (4 Nos)	MTP A	4.6	- 4.6	0	In operation (Partial)
7.	Basic Oxygen Furnace (BoF) (3 Nos)	MTP A	0	4.6	4.6	Proposed
8.	Steel Melt Shop-2 (4 EAF & 4 LF)	MTP A	5.0	0	5.0	In operation
9.	Corex Plant (2 Nos)	MTP A	1.7	0	1.7	In operation
10.	Lime Plant (Lime /Dolime)	MTP A	0.93	0	0.93	In operation
11.	CPP	MW	31	0	31	In operation (Partial)
		MW	48	0	48	Not yet established
		MW	525	0	525	Not in operation
12.	Plate Mill	MTP A	1.5	0	1.5	In operation
13.	Pellet plant	MTP A	4.0	0	4.0	Not yet established



No.	Name of Production	Unit		Capacity	0.	Status of Existing
110.	Unit/Products	Unit	Existing	Proposed	Total	Units
14.	CSP, Hot Rolling Mill & Long Product - HRC	MTP A	3.5	0	3.5	In operation
	Rebar		1.6	0	1.6	Not yet
	Wire Rod		0.7	0	0.7	established
15.	Caster Shop					
	Slabs from slab caster		4.9	0	4.9	In operation
	Billets from Billet caster	МТРА	2.37	0	2.37	Not yet established
16.	CRM					Cstablished
	Hot Rolled Pickled Coils/Sheets		1.5	. 0	1.5	In operation
	CR Coils/Sheets	L ATTO	1.3	0	1.3	
	Galvanized Coils/Sheets	MTPA -	0.65	0	0.65	**
	Coated Sheets/Coils		0.1	0	0.1	
17.	Extension of Existing Jetty	Mete rs	734	0	734	In operation
18.	Waste Heat Recovery Based Power Plant	MW	25	20	45	In operation
19.	Pipe Mill					
	H Saw Pipes	MTPA	0.15	0	0.15	In operation
	L Saw Pipes	MTPA	0.33	0	0.33	in operation

- 4.0 The total land required for the project is 50.163 ha. The proposed replacement will be carried out in the existing units after dismantling and at other vacant areas. No additional land will be acquired. No forest land involved. The topography of the area is flat and reported to lies between 21° 6'15.07" to 21° 7'26.78" N Latitude and 72° 38'28.24" to 72° 39'1.29" E Longitude in Survey of India topo sheet No. F43M12, at an elevation of 9 m AMSL. The Tapi River passes adjacent to the project area. It has been reported that no modification/diversion in the existing natural drainage pattern at any stage has not been proposed. It has been reported that Dumas Reserved Forest is located towards south-east direction of the project.
- 5.0 The targeted production capacity of the plant will not be increased and remained 9.6 million TPA. The ore in the form of DR and BF Grade Pellets for the plant would be procured from Essar's Pelletization plant located at Visakhapatnam & Paradeep, Calibrated Lump Ore would be procured from NMDC mines in Kirandul, District Dantewada, Chhattisgarh and Oxide Fines would be procured from Goa, Orissa and NMDC mines in Kirandul. The ore transportation will be done through sea route. The details of raw material is as under:

No.	Name of Raw	terial	ent (MTPA	.)		Mode of
NO.	Material	Existing	Proposed	Total	Source	Transpor- tation
1	DR Grade Pellets	83,91,000	44,03,000	39,88,000	Essar's Pelletization	
2	BF Grade Pellets	45,00,000	1,72,000	46,72,000	Plant located at Visakhapatnam & Paradeep	Sea Route
3	Calibrated Lump Ore	21,65,000	11,47,000	10,18,000	NMDC mines in Kirandul, Dist Dantewada, CG.	
4	Oxide Fines	6,12,000	52,18,000	58,30,000	Goa, Orissa, NMDC mines in Kirandul	Sea Route
	Total Iron Bearing material	1,56,68,000	-1,60,000	1,55,08,000	-	-

- 6.0 The ground water table reported to ranges between 0.80 m to 9 m below the land surface during the post-monsoon season and 2 m to 6 m below the land surface during the pre-monsoon season. Water for the project is/will be sourced from Tapi River at Variav, 31 km upstream from Hazira.
- 7.0 The water requirement of the project is estimated as 1,375 m³/hr, while total water requirement for the facilities/unit to be dismantled (HBI / DRI Modules I to IV and EAF 4 nos.) is around 1,400 m³/hr. Total water requirement of complex will be 8,499 m³/hr. Entire water is being sourced from existing water source i.e. Tapi River at Variav, 31 km upstream from Hazira. The power requirement of the project is estimated as 101MW. Total power for the facilities/unit to be dismantled (HBI/DRI Modules I to IV and EAFs 4 nos.) is around 330 MW. Total power requirement of complex will be 623 MW. Power is being sourced from 400 KV transmission tower line.
- 8.0 Solid waste to the tune of 85,21,352 MTPA will be generated due to the project, out of which 38,50,852 MTPA will be used as raw material within steel complex, 15,52,000 MTPA will be used for land filling and road construction, 23,52,000 will be sent to cement plant and 7,66,500 MTPA will be sold to authorized party. It has been informed that 49,247 MTPA of hazardous waste will be generated due to the project, out of which 17,600 MTPA will be used in sinter plant as iron bearing material by the way of micro pellets or disposal at GPCB approved TSDF site, 3,079 MTPA will be sold to registered re-refiners, 15,090 nos./MTPA will be sent to authorised recyclers/reprocessors, 11,138 MTPA will be disposed at GPCB approved CHWIF and 2,340 MTPA will be Sold to authorized recyclers. It has been reported that an area of 159 ha is already developed as green belt and envisaged



additional 93 ha to be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

10.0 The Public hearing is exempted for the proposed project as it is located within the notified Hazira industrial area.

- 9.0 The capital cost of the project is Rs. 8,097 Crores and the capital cost for environmental protection measures is proposed as Rs. 1,543 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 185.85 Crores. The proponent has mentioned that there is no court case to the project or related activity.
- 10.0 The matter was considered by the Expert Appraisal Committee (Industry-I) in its 2<sup>nd</sup> meeting held on 28<sup>th</sup> -30<sup>th</sup> December, 2015. After detailed deliberations, the EAC (I) recommended the project for Environmental Clearance and stipulated Specific Conditions along with other environmental conditions while considering for accord of Environmental Clearance.
- 11.0 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 grant Environmental Clearance to the above mentioned proposal of Replacement of existing Hot Briquetted Iron (HBI)/Direct Reduced Iron (DRI) Modules I to IV with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing Electric Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated steel plant of M/s. Essar Steel India Limited under the provision of EIA Notification dated 14<sup>th</sup> September, 2006, as amended, subject to strict compliance of the following Specific and General conditions:

#### A. SPECIFIC CONDITION:

- The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm<sup>3</sup> and installing energy efficient technology.
- iii. Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development.
- iv. All the coal fines and char shall be utilized within the plant and no char shall be used for briquette making or disposed off anywhere else. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.

- v. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.
- vi. The Standards issued by the Ministry vide G.S.R. No. 277(E) dated 31<sup>st</sup> March, 2012 regarding integrated iron and steel plant shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be followed.
- viii. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30<sup>th</sup> May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- ix. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- x. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- xi. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.
- xii. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.
- xiii. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activities, its proper utilization and disposal.
- xiv. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Chennai.
- xv. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xvi. Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.



- xvii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- xviii. The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xix. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to being into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xx. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xxi. The project proponent shall provide for LED lights in their offices and residential areas.
- xxii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

#### B. GENERAL CONDITIONS:

- The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).

- iii. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>X</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhopal and the SPCB/CPCB once in six months.
- iv. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.
- v. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- viii. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- ix. Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhopal. The funds so provided shall not be diverted for any other purpose.
- x. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEFCC at Bhopal. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects



shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- xii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhopal / CPCB / SPCB shall monitor the stipulated conditions.
- xiii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Bhopal by e-mail.
- xiv. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEFCC) at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhopal.
- xv. Project authorities 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 and the date of commencing the land development work.
- 12.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 13.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 14.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

(Dr. Satish C. Garkoti)
Scientist 'F'

### Copy to:-

1. The Secretary, Department of Environment, Government Gujarat.

 The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.

- 3. The Chairman, Gujarat State Pollution Control Board, 4, Paryavaran Bhavan, Opp. Bij
- Nigam, CHH Road, Sector 10A, Sector 10, Gandhinagar, Gujarat 382010.

  4. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal - 462016.
- 5. Guard File / Record File/Monitoring file.

(Dr. Satish C. Garkoti) Scientist 'F'

# Annexure 9: Long Term Meteorological Data

## जलवायवी सारणी CLIMATOLOGICAL TABLE



स्टेशन :	सूर	ात					3	अक्षांश	à	शांतर	CLIMAT	OLOGIC		BLE ामुद्री तल माध्य	य से ऊंचाई		मीटर			प्रक्ष	णों पर आध	ारित	
STATION:	Su								12	ONG.	72° 50'		ŀ	HEIGHT ABOV	E M.S.L.	12	METRES		В	ASED ON O	^	ONS 19	981-201
							7	त्रायु तापमा	न											वष	f		
					दैनिक	माध्य दैनिक				दिनांक	चरम		31	ार्द्रता	मेघ की	मात्रा	-	वर्षाके	वर्षसहित सबसे नम	वर्षसहित	24 घंटोकी	दिनांक	
माह		स्टेशन का सतह दाब	शुष्क बल्ब	नम बल्ब	दानक अधिक तम	दानक न्यून तम	माह में उच्चतम	माह में निम्नतम	उच्चतम	ादनाक और वर्ष	निम्नतम	दिनांक और वर्ष	सापेक्ष आर्द्रता	बाध्य दाब	समस्त मेघ	निम्न मेघ	मासिक योग	दिनोंकी संख्या	सबस नम महीने का योग	शुष्कतम महीने का योग	सबसे भारी वर्षा	और वर्ष	माध्य पवन गति
							AIR T	EMPER	ATURE										RAIN	FALL			
		STATION			N	MEAN	14041505	. CIMEDE		11111111	REMES		ним	IDITY	CLO			NO OF	TOTAL IN WETTEST	TOTAL IN	HEAVIEST	DATE	4454
MONTH		STATION LEVEL PRESSURE	DRY BULB	WET BULB	DAILY MAX	DAILY MIN	HIGHEST IN THE MONTH	LOWEST IN THE MONTH	HIGHEST	DATE AND YEAR	LOWEST	DATE AND YEAR	RELATIVE HUMIDITY	VAPOUR PRESSURE	CLOUDS	CLOUDS	MONTHLY TOTAL	NO, OF RAINY DAYS	MONTH WITH YEAR	MONTH WITH YEAR	FALL IN 24 HOURS	AND YEAR	MEAI WING SPEE कि.मी
		एच.पी.ए hPa	डि. सें <sup>O</sup> C	डि. सें <sup>O</sup> C	डि. सें <sup>0</sup> C	डि. सें <sup>O</sup> C	ਭਿ. ਜੋਂ <sup>O</sup> C	ਫ਼ਿ. ਜੋਂ <sup>੦</sup> C	ਭਿ. ਜੋਂ <sup>○</sup> C		डि. सें <sup>○</sup> C		प्रतिशत %	एच.पी.ए hPa	आकार अच्छा Oktas (	गश	मि.मि. mm		मि.मि. mm	मि.मि. mm	मि.मि. mm		क्र.मा, प्र. घं. Kmpl
जनवरी JAN	i II	1014.1 1010.9	17.5 27.5	14.3 18.9		15.2	34.8	11.4	38.3	20 1952	4.4	31 1929	68 41	13.9 15	0.8 0.9	0.2 0.2	1.5	0.1	91.7 1920	0	43.7	6 1920	3.
फरवरी FEB	I II	1013 1009.8	19.5 29.5	15.6 19.1	32.3	16.7	36.9	12.6	41.7	28 1953	5.6	1 1929	64 34	14.8 13.8	0.8 0.8	0.2 0.2	0.3	0.1	65 2003	0	65	19 2003	3.
मार्च MAR	I II	1011 1007.2	24.1 32.9	19.5 21.3		20.7	40.2	16.5	44	26 1973	8.9	9 1979	64 33	19.2 15.9	0.8 0.7	0.1 0.1	0.4	0	34.9 1967	0	13	26 1967	3.
ਮਾ <del>ਪੈ਼ਕ</del> NPR	ı	1008.7 1005	28 34	23.4 23.8		24	41.4	21.1	45.6	15 1952	15	3 1903	66 42	25.1 21.3	1.2 0.8	0.5 0.1	0.2	0	149.4 1947	0	97.8	19 1947	4
मई MAY	l II	1006.4 1002.9	30.1 33	26 26.4	35.8	26.8	41.2	24	45.6	1 1956	19.4	<b>4</b> 1888	70 58	30.2 28.9	2.6 1	2.1 0.7	3.9	0.3	128.1 1917	0	51.6	26 1974	
जून JUN	ı II	1002.5 999.8	29.6 31.6	26.6 27.1	34	27	38.1	23.6	45.6	10 1901	20.2	19 1962	78 70	32.4 32.2	4.6 3.5	3.2 2		7	836.7 1976	0	260.1	27 1922	8
जुलाई JUL	11	1001.7 999.8	27.9 29.4	26.1 26.6		25.9	33.9	23.8	38.9	7 1902	19.9	11 1979	86 80	32.4 32.6	6 5.6	3.8 3.5		14.6	1614 1988	0	459.2	2 1941	8.
अगस्त AUG		1003.5 1001.4	27.3 28.8	25.6 26		25.5	33.2	23.6	37.2	31 1932	20.2	3 1989	86 79	31.5 31.5	6.3 5.9	3.9 3.4	283.8	12.7	888.1 1953	0	324.6	13 1964	6
सतम्बर SEP	i	1006.8 1003.9	27.5 30.2	25.4 25.9		25.4	35.8	23.4	41.1	26 1951	20.6	9 1884	83 70	30.7 29.9	4.5 3.8	2.6 2	151.8	6.7	1066.3 1954	0	403.1	23 1945	3
मक्तूबर OCT	l II	1010 1006.7	26.6 32.1	23.2 24.5		23.3	38.2	19.8	41.4	16 1987	14.4	20 1893	73 52	25.8 24.7	2 2	0.9 0.9	41.8	1.7	429 1894	0	257.1	25 1894	2.
त्वम्बर NOV	I II	1012.7 1009.5	23.2 30.4	18.9 21.7		19.6	36.5	15.6	39.4	9 1951	10.6	19 1881	65 44	18.6 19.1	1.3 1.5	0.5 0.6	7.1	0.5	190.3 1946	0	148.3	6 1946	1
DEC	<u> </u>	1014.3 1011.1	19.2 28	15.6 19.7		16.5	34.8	12.6	38.9	2 1953	6.7	27 1903	67 43	15.1 16.4	1.1 1.2	0.3 0.3		0	42.5 1933	0	42.2	20 1933	
वार्षिकयोग यामाध्य ANNUAL	ı	1008.8	25	21.6	33.4	22.2	42.3	10.9	45.6	15	4.4	31	73	24.1	2.6	1.5	1202.8	43.8	2298.7	363	459.2	2	4
TOTAL OR MEAN		1005.7	30.6	23.4					4	1952	1	1929	53	23.4	2.2	1.1			1976	1904	7	1941	
वर्षोकी सं NUMBER OF YEARS	II	27	27	27	30	30	30	30	109		109		27	27	24	24	28	28	122	122	132		1:
1 ILAKO		Z f	Zí	<b>∠</b> i	30	30	30	JU	109		103		_ Zi	<b>∠</b> i		24		20	122	122	132		

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654

# जलवायवी सारणी CLIMATOLOGICAL TABLE

स्टेशन : सूरत

STAION:	Su	rat		<b></b> .	परिघटना			T																		<u>~</u>					-					
					पारघटना गेंकी संख				वन की ग दिनों की (कि. मी.	संख्या	थ		<u> </u>	वन पर	वनकी <sup>1</sup> संख्या	देशा के का म		ती						मेच) सङ्गि अष्टमांइ		मेघ			प्रमहता ॥ - अद	-			डड्यमा स्व	दृश्यता वित दिनों	की संख्या	
		वर्षण 0.3 मि.मि.या			1 44 44	धूल भरी	चंड	62 या	20-	1-					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Z-1					- 14	41 44			•		1411				कुहरा	1 कि.मी.	1-4	4-10		20 कि.मी. सें
माह		अधिक	ओले	गर्जन		आंधी	वात	अधिक	61	19	.0	ड	उपू	पू	दपू	द	दप	ч	उप	शांत	0	ले-2	3-5	6-7	8	0	ले-2	3-5	6-7	8	8	तक	कि.मी.	कि.मी.	कि.मी.	अधिक
					PHENON				o. OF DA WIND S (Km.)	SPEED	H		W	IND PER	CENTA WII	GE No		AYS			No.	MOUN1	AYS WIT T (ALL C	TH CLOU CLOUDS) S	D	CLOUD No		AYS WI AMO O K T		V CLOU	D	N		YISIBILIT YS WITH	Y Visibility	
MONTH		PPT 0.3 mm Or more	HAIL	THUN DER	FOG	DUST STORM	SQU	62 Or more	20-61	1-19	0	N	NE	E	SE	s	sw	w	NW	CALM	0	T-2	3-5	6-7	8	0	T-2	3-5	6-7	8	FOG B	UP TO 1 Km.	1-4 Kms.	4-10 Kms.	10-20 Kms.	OVER 20 Kms.
जनवरी JAN	( ()	0.4	0	0	0.4	0	0	0	0	22 28	9 3	25 25	22 13	8 2	4 1	2	1 5	1 8	9 36	28 9	23 23	3 3	4 4	1 1	0	29 29	1 1	1 1	0	0	0	0.7 0	9.3 0.2	9.6 17.6	11.4 13.2	0
फरवरी FEB	( ()	0.2	0	0.1	1	0	0	0	0	18 26	10 2	19 22	18 8	3 0	5 1	3 2	1 11	2 14	11 35	38 7	21 20	3 3	4 4	0 1	0	26 26	1 1	1 1	0	0	0	1.2 0	7.2 0.2	8.6 15.3	11.1 12.4	0
मार्च MAR	l II	0.2	0	0.1	0.5	0	0	0	0	19 28	12 3	13 14	10 3	3 1	6 1	7 3	7 21	5 21	10 27	39 9	23 24	3 3	4 3	1 1	0	29 30	1 1	1 0	0 0	0	0 0	0.5 0	6.2 0	10.3 19.1	14 11.9	0
अप्रैल APR	( ()	0	0	0.1	0	0	0	0	0	22 29	8 1	10 7	5 1	1 0	4 0	13 6	25 46	7 19	6 16	29 5	20 23	3 3	6 3	1 1	0	24 28	3 2	3 0	0 0	0	0 0	0 0	2.6 0	15.2 16.3	12.2 13.7	0
<del>र्म्ड</del> MAY	II î	0.5	0	0.1	0	0	0	0	0 1	27 30	4 0	3 2	1 0	1 0	1 0	10 9	55 68	11 16	4	1 <u>4</u> 1	8 20	<i>4</i> 5	17 5	2 1	0	10 24	4 4	16 3	1 0	0	0 0	0	0.2 0	18.9 18	11.9 13	0
জুন JUN	1 (i	9.6	0	1.6	0	0	0	0	0 1	26 28	4 1	1 0	0	0	3 1	11 15	56 70	13 11	3 1	13 2	3 7	1 4	14 11	8 6	4 2	4 10	4 7	20 12	2 1	0 0	0 0	0	1.4 1.3	18.2 17.1	10.4 11.7	0
जुलाई JUL	I II	20.2	0	1.2	. 0	0	0	0	0 1	26 29	5 1	0	0	0 0	2 1	8 6	53 73	17 15	3 1	17 4	1 2	0 1	8 9	14 13	8 6	2 3	3 4	22 21	4 3	0 0	0 0	0.1 0	3.2 1.8	19.3 19.9	8.4 9.3	o o
अगस्त AUG	( ()	18.1	0	1	0.1	0	0	0	0	25 30	6 1	0	0	0	0 0	3 3	50 77	21 13	3 2	23 5	0	0 <b>1</b>	7 9	17 15	7 6	0 2	3 5	25 21	3 3	0 0	0	0.1 0	1.5 1.1	21.8 20.6	7.6 9.3	(
सितम्बर SEP	( ()	9.6	0	2.7	0.3	0	0	0	0	19 26	<b>1</b> 1 4	2 3	2 1	1 1	3 1	6 7	26 51	14 16	6 6	40 14	2 5	3 5	15 11	7 7	3 2	6 10	7 9	15 10	2 1	0 0	0	0.2 0	2.3 0.5	17.5 18	10 11.5	(
अक्तूबर OCT	( ()	2.5	0	0.7	0.7	0	0	0	0	17 24	14 7	6 9	10 9	9 6	11 1	8 5	4 17	2 13	4 17	46 23	14 14	5 6	8 8	3 3	1 0	22 20	4 6	5 5	0 0	0 0	0	0.5 0	7.4 0.1	12.4 18	10.8 12.9	C
नवम्बर NOV	( ()	1	0	0.3	0.5	0	0	0	0	20 22	10 8	8 14	24 17	16 8	8 2	2 1	0 4	1 8	3 19	38 27	21 18	3 4	5 6	1 2	0	27 25	1 2	2 3	0 0	0 0	0 0	0.7 0	11.8 0.2	8.2 19.2	9.2 10.5	C
दिसम्बर DEC	( 	0.2	0	0	0.6	0	0	0	0	20 25	11 6	19 22	22 17	12 4	6 1	1 1	0 3	1 7	4 24	35 21	22 21	3 3	5 6	1 1	0	28 28	1 1	2 2	0 0	0 0	0 0	0.8 0	12.5 0.2	8.8 19	8.9 11.7	C
वार्षिकयोग यामाध्य ANNUAL	l II	62.3	0	7.9	4.1	0	0	0	1	259	105	9	10	5	4	6	23	8	6	29	167	32	90	52	24	218	31	104	12	0	0	4.7	61.7	177.3	121.3	c
TOTAL OR MEAN								0	4	323	38	10	6	2	1	5	36	13	16	11	181	41	77	49	17	241	41	75	8	0	0	0	5.6	218.1	141.2	0
वर्षोंकी सं NUMBER OF	1																																			
EARS				2	27				2	7						27							24					24	4					27		

## Annexure 10: Date wise AAQM Data for Summer Season & Post Monsoon Season

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutanı (µg/r		centra	ntion	Averag e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	•	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
1	AA01	11.3.21	Nand niketan	Industria 	113	42	8.4	10. 6	BD L	974	1.01	BDL
2	AA01	12.3.21	Nand niketan	Industria I	60	48	9.6	12. 4	BD L			BDL
3	AA01	19.3.21	Nand niketan	Industria 	114	24	7.7	10. 7	BD L			BDL
4	AA01	20.3.21	Nand niketan	Industria I	51	10	8.5	13. 0	BD L			BDL
5	AA01	27.3.21	Nand niketan	Industria I	99	11	9.0	11. 0	BD L			BDL
6	AA01	28.3.21	Nand niketan	Industria 	68	12	8.4	11. 0	BD L	104 8	0.89	BDL
7	AA01	6.4.21	Nand niketan	Industria I	61	11	7.4	14. 1	BD L			BDL
8	AA01	7.4.21	Nand niketan	Industria I	112	52	9.4	11. 9	BD L			BDL
9	AA01	14.4.21	Nand niketan	Industria I	45	22	8.0	12. 1	BD L			BDL
10	AA01	15.4.21	Nand niketan	Industria I	47	41	8.7	13. 3	BD L	108 4	1.13	BDL
11	AA01	22.4.21	Nand niketan	Industria 	48	36	9.5	11. 4	BD L			BDL
12	AA01	23.4.21	Nand niketan	Industria 	113	21	7.2	10. 7	BD L			BDL
13	AA01	30.4.21	Nand niketan	Industria I	93	17	8.4	11. 2	BD L	992	1.01	BDL
14	AA01	31.4.21	Nand niketan	Industria I	84	12	9.2	12. 8	BD L			BDL
15	AA01	14.5.21	Nand niketan	Industria I	74	22	8.8	13. 6	BD L			BDL
16	AA01	27.5.21	Nand niketan	Industria I	107	12	7.9	10. 9	BD L			BDL
17	AA01	28.5.21	Nand niketan	Industria I	107	11	7.8	10. 4	BD L	104 3	1.13	BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutan (µg/r		centra	ation	Averag e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
18	AA01	29.5.21	Nand niketan	Industria	117	17	9.7	12. 1	BD L			BDL
19	AA01	30.5.21	Nand niketan	Industria I	121	18	8.4	11. 5	BD L			BDL
20	AA01	31.5.21	Nand niketan	Industria 	130	12	9.0	13. 2	BD L			BDL
21	AA01	5.6.21	Nand niketan	Industria I	130	12	9.0	13. 2	BD L			BDL
1	AA02	11.3.21	T.P.A	Industria I	128	48	9.2	12. 1	BD L	100 2	0.96	BDL
2	AA02	12.3.21	T.P.A	Industria I	112	38	7.4	11. 4	BD L			BDL
3	AA02	19.3.21	T.P.A	Industria I	98	13	8.6	13. 7	BD L			BDL
4	AA02	20.3.21	T.P.A	Industria I	121	9	8.8	13. 3	BD L	119 3	1.09	BDL
5	AA02	27.3.21	T.P.A	Industria I	37	11	7.9	10. 6	BD L			BDL
6	AA02	28.3.21	T.P.A	Industria I	53	10	9.2	11. 7	BD L			BDL
7	AA02	6.4.21	T.P.A	Industria I	100	14	8.0	11. 4	BD L			BDL
8	AA02	7.4.21	T.P.A	Industria I	135	13	9.2	11. 1	BD L			BDL
9	AA02	14.4.21	T.P.A	Industria I	127	29	8.3	12. 4	BD L	109 8	1.03	BDL
10	AA02	15.4.21	T.P.A	Industria I	40	22	7.8	10. 5	BD L			BDL
11	AA02	22.4.21	T.P.A	Industria I	110	9	9.3	13. 9	BD L			BDL
12	AA02	23.4.21	T.P.A	Industria 	97	36	9.0	12. 2	BD L			BDL
13	AA02	30.4.21	T.P.A	Industria I	42	10	7.7	13. 2	BD L	112 1	0.96	BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutani (µg/r		centra	ntion	e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
14	AA02	31.4.21	T.P.A	Industria	133	14	8.2	10. 6	BD L			BDL
15	AA02	14.5.21	T.P.A	Industria	91	16	9.8	12. 0	BD L			BDL
16	AA02	27.5.21	T.P.A	Industria 	114	12	8.4	11. 5	BD L			BDL
17	AA02	28.5.21	T.P.A	Industria I	106	16	9.0	13. 7	BD L	105 9	1.27	BDL
18	AA02	29.5.21	T.P.A	Industria 	35	16	7.3	11. 9	BD L			BDL
19	AA02	30.5.21	T.P.A	Industria I	30	12	8.4	12. 5	BD L			BDL
20	AA02	31.5.21	T.P.A	Industria I	107	10	8.6	13. 6	BD L			BDL
21	AA02	5.6.21	T.P.A	Industria I	107	10	8.6	13. 6	BD L			BDL
1	AA03	13.3.21	Dumas	Commer cial	82	40	7.8	13. 9	BD L	100 4	1.03	BDL
2	AA03	14.3.21	Dumas	Commer cial	87	55	8.0	10. 2	BD L			BDL
3	AA03	21.3.21	Dumas	Commer cial	37	38	8.5	13. 1	BD L			BDL
4	AA03	22.3.21	Dumas	Commer cial	44	25	9.1	12. 0	BD L			BDL
5	AA03	29.3.21	Dumas	Commer cial	82	8	9.0	10. 7	BD L			BDL
6	AA03	30.3.21	Dumas	Commer cial	78	17	7.3	11. 8	BD L			BDL
7	AA03	5.4.21	Dumas	Commer cial	101	31	8.4	13. 2	BD L			BDL
8	AA03	9.4.21	Dumas	Commer cial	40	32	8.3	10. 8	BD L	109 7	1.02	BDL
9	AA03	16.4.21	Dumas	Commer cial	89	17	9.0	12. 9	BD L			BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutan (µg/r		centra	ntion	Averag e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
10	AA03	17.4.21	Dumas	Commer	94	19	8.3	11. 5	BD L			BDL
11	AA03	24.4.21	Dumas	Commer	62	22	7.4	13.	BD L			BDL
12	AA03	25.4.21	Dumas	Commer cial	52	8	9.6	12. 5	BD L			BDL
13	AA03	1.5.21	Dumas	Commer cial	86	23	8.2	10. 9	BD L	104 8	1.15	BDL
14	AA03	2.5.21	Dumas	Commer cial	86	19	7.8	11. 5	BD L			BDL
15	AA03	9.5.21	Dumas	Commer cial	72	20	9.0	11. 1	BD L			BDL
16	AA03	10.5.21	Dumas	Commer cial	62	12	7.8	12. 9	BD L			BDL
17	AA03	15.5.21	Dumas	Commer cial	85	29	7.2	13. 8	BD L		-	BDL
18	AA03	16.5.21	Dumas	Commer cial	94	34	9.2	12. 6	BD L	113 3	1.13	BDL
19	AA03	01.6.21	Dumas	Commer cial	65	21	9.7	16. 1	BD L			BDL
20	AA03	02.6.21	Dumas	Commer cial	87	28	4.3	10. 2	BD L			BDL
21	AA03	26.5.21	Dumas	Commer cial	91	32	7.5	16. 3	BD L	110 9	0.95	BDL
1	AA04	13.3.21	Hazira	Industria I	103	34	7.3	11. 4	BD L			BDL
2	AA04	14.3.21	Hazira	Industria I	70	13	8.8	12. 7	BD L			BDL
3	AA04	21.3.21	Hazira	Industria 	111	15	8.5	10. 3	BD L	101 5	1.27	BDL
4	AA04	22.3.21	Hazira	Industria 	117	23	9.2	11. 3	BD L			BDL
5	AA04	29.3.21	Hazira	Industria I	80	8	8.5	13. 3	BD L		-	BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutani (µg/r		centra	ntion	e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
6	AA04	30.3.21	Hazira	Industria	46	14	7.6	12. 9	BD L			BDL
7	AA04	5.4.21	Hazira	Industria 	93	16	8.2	12. 6	BD L	998	1.17	BDL
8	AA04	9.4.21	Hazira	Industria 	34	20	7.1	10. 8	BD L			BDL
9	AA04	16.4.21	Hazira	Industria I	32	33	9.4	13. 9	BD L			BDL
10	AA04	17.4.21	Hazira	Industria I	103	15	9.1	11. 1	BD L			BDL
11	AA04	24.4.21	Hazira	Industria I	71	35	8.0	12. 2	BD L			BDL
12	AA04	25.4.21	Hazira	Industria I	50	8	8.5	13. 4	BD L			BDL
13	AA04	1.5.21	Hazira	Industria I	112	13	8.0	11. 5	BD L	950	1.16	BDL
14	AA04	2.5.21	Hazira	Industria I	88	7	7.4	11. 5	BD L			BDL
15	AA04	9.5.21	Hazira	Industria I	109	6	9.0	10. 2	BD L			BDL
16	AA04	10.5.21	Hazira	Industria I	88	21	9.1	13. 5	BD L			BDL
17	AA04	15.5.21	Hazira	Industria I	105	55	10. 5	15. 2	BD L			BDL
18	AA04	16.5.21	Hazira	Industria I	99	33	6.7	15. 0	BD L	109 2	1.06	BDL
19	AA04	01.6.21	Hazira	Industria I	87	26	6.0	12. 9	BD L			BDL
20	AA04	02.6.21	Hazira	Industria I	95	29	7.3	9.9	BD L			BDL
21	AA04	26.5.21	Hazira	Industria I	67	20	14. 0	14. 2	BD L	107 0	0.89	BDL
1	AA05	7.3.21	Junaga m	Industria I	126	51	7.9	11. 9	BD L			BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutani (µg/r		centra	ntion	e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	со	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
2	AA05	8.3.21	Junaga m	Industria	81	41	8.4	10. 1	BD L			BDL
3	AA05	15.3.21	Junaga m	Industria 	49	53	9.1	12. 4	BD L			BDL
4	AA05	16.3.21	Junaga m	Industria 	138	48	7.4	11. 2	BD L	103 6	0.89	BDL
5	AA05	23.3.21	Junaga m	Industria I	51	27	8.3	13. 7	BD L			BDL
6	AA05	24.3.21	Junaga m	Industria I	93	22	7.7	10. 4	BD L			BDL
7	AA05	1.4.21	Junaga m	Industria I	79	19	9.8	13. 1	BD L			BDL
8	AA05	2.4.21	Junaga m	Industria I	132	28	9.1	11. 7	BD L	108 9	1.27	BDL
9	AA05	10.4.21	Junaga m	Industria I	129	35	8.8	10. 1	BD L			BDL
10	AA05	11.4.21	Junaga m	Industria I	33	8	7.4	13. 3	BD L			BDL
11	AA05	18.4.21	Junaga m	Industria I	99	20	9.2	11. 4	BD L			BDL
12	AA05	19.4.21	Junaga m	Industria I	114	20	8.3	12. 1	BD L	114 6	1.06	BDL
13	AA05	26.4.21	Junaga m	Industria I	82	20	9.8	13. 6	BD L			BDL
14	AA05	27.4.21	Junaga m	Industria 	112	25	7.3	10. 5	BD L			BDL
15	AA05	3.5.21	Junaga m	Industria I	39	21	7.6	12. 0	BD L			BDL
16	AA05	4.5.21	Junaga m	Industria I	37	10	9.4	13. 2	BD L	113 2	1.27	BDL
17	AA05	11.5.21	Junaga m	Industria 	76	18	8.3	11. 8	BD L			BDL
18	AA05	12.5.21	Junaga m	Industria I	89	32	9.2	10. 9	BD L			BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutani (µg/r		centra	ntion	e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
19	AA05	17.5.21	Junaga m	Industria	94	21	8.8	13. 0	BD L			BDL
20	AA05	18.5.21	Junaga m	Industria I	78	26	14. 0	12. 5	BD L	109 2	1.13	BDL
21	AA05	6.6.21	Junaga m	Industria I	78	26	14. 0	12. 5	BD L	109 2	1.13	BDL
1	AA06	7.3.21	Mora	Resident ial	105	47	7.9	12. 4	BD L			BDL
2	AA06	8.3.21	Mora	Resident ial	114	54	9.4	10. 9	BD L	108 9	1.01	BDL
3	AA06	15.3.21	Mora	Resident ial	32	13	8.2	11. 6	BD L			BDL
4	AA06	16.3.21	Mora	Resident ial	41	27	9.1	13. 4	BD L			BDL
5	AA06	23.3.21	Mora	Resident ial	112	11	7.7	11. 0	BD L			BDL
6	AA06	24.3.21	Mora	Resident ial	109	18	8.8	12. 0	BD L			BDL
7	AA06	1.4.21	Mora	Resident ial	55	9	9.6	13. 8	BD L	109 7	1.35	BDL
8	AA06	2.4.21	Mora	Resident ial	33	16	8.0	10. 1	BD L			BDL
9	AA06	10.4.21	Mora	Resident ial	68	10	9.7	13. 4	BD L			BDL
10	AA06	11.4.21	Mora	Resident ial	80	9	7.2	12. 5	BD L			BDL
11	AA06	18.4.21	Mora	Resident ial	113	13	8.2	10. 7	BD L	108 2	1.23	BDL
12	AA06	19.4.21	Mora	Resident ial	102	20	8.6	12. 2	BD L			BDL
13	AA06	26.4.21	Mora	Resident ial	66	42	7.4	11. 3	BD L			BDL
14	AA06	27.4.21	Mora	Resident ial	42	11	9.1	13. 7	BD L			BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutani (µg/r		centra	ntion	e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
15	AA06	3.5.21	Mora	Resident ial	105	47	9.4	10. 2	BD L	113 5	1.11	BDL
16	AA06	4.5.21	Mora	Resident ial	32	14	7.2	11. 0	BD L			BDL
17	AA06	11.5.21	Mora	Resident ial	86	14	8.3	12. 4	BD L			BDL
18	AA06	12.5.21	Mora	Resident ial	79	8	9.2	13. 2	BD L	111 7	1.23	BDL
19	AA06	17.5.21	Mora	Resident ial	85	26	10. 8	16. 0	BD L			BDL
20	AA06	18.5.21	Mora	Resident ial	92	34	7.6	10. 6	BD L	111 8	1.28	BDL
21	AA06	6.6.21	Mora	Resident ial	92	34	7.6	10. 6	BD L	111 7	1.28	BDL
1	AA07	9.3.21	22.3.21	Industria I	122	47	8.0	11. 0	BD L		-	BDL
2	AA07	10.3.21	23.3.21	Industria I	104	43	8.9	12. 2	BD L			BDL
3	AA07	17.3.21	30.3.21	Industria I	43	40	7.5	11. 9	BD L			BDL
4	AA07	18.3.21	31.3.21	Industria 	86	29	8.9	13. 1	BD L	984	1.17	BDL
5	AA07	25.3.21	7.4.21	Industria I	91	44	7.8	12. 3	BD L			BDL
6	AA07	26.3.21	8.4.21	Industria 	67	10	7.4	10. 8	BD L			BDL
7	AA07	3.4.21	15.4.21	Industria 	108	30	9.4	11. 5	BD L			BDL
8	AA07	4.4.21	16.4.21	Industria 	79	21	8.7	10. 6	BD L			BDL
9	AA07	12.4.21	23.4.21	Industria 	74	13	8.9	13. 2	BD L			BDL
10	AA07	13.4.21	24.4.21	Industria I	128	22	7.8	12. 9	BD L	107 4	1.2	BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	age Pol	lutani (µg/r		centra	ntion	e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
			on	,	PM 10	PM2 .5	SO 2	NO x	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi Othe	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically otified by	Sensitive		100	60	80	30	40 0	NS	4	6
11	AA07	20.4.21	1.5.21	Industria	49	23	8.4	11. 6	BD L			BDL
12	AA07	21.4.21	2.5.21	Industria	96	21	9.6	10.	BD L			BDL
13	AA07	28.4.21	9.5.21	Industria I	118	16	7.1	13. 2	BD L			BDL
14	AA07	29.4.21	10.5.21	Industria 	128	14	8.4	11. 8	BD L			BDL
15	AA07	5.5.21	17.5.21	Industria I	64	9	7.5	12. 0	BD L			BDL
16	AA07	13.5.21	25.5.21	Industria I	97	15	8.3	13. 2	BD L	114 1	1.19	BDL
17	AA07	3.6.21	26.5.21	Industria I	89	11	9.6	13. 9	BD L	ŀ	1	BDL
18	AA07	4.6.21	2.6.21	Industria I	87	29	6.0	10. 7	BD L	1	1	BDL
19	AA07	21.5.21	3.6.21	Industria I	92	34	7.9	8.3	BD L	1	1	BDL
20	AA07	24.5.21	6.6.21	Industria I	74	24	11. 6	16. 6	BD L			BDL
21	AA07	25.5.21	7.6.21	Industria I	82	29	16. 1	15. 3	BD L	1	-	BDL
1	AA08	9.3.21	Gaviyer	Resident ial	112	57	9.7	11. 4	BD L	112 6	0.96	BDL
2	AA08	10.3.21	Gaviyer	Resident ial	110	52	8.2	10. 1	BD L	I	I	BDL
3	AA08	17.3.21	Gaviyer	Resident ial	109	30	7.7	11. 3	BD L			BDL
4	AA08	18.3.21	Gaviyer	Resident ial	90	38	9.2	13. 6	BD L			BDL
5	AA08	25.3.21	Gaviyer	Resident ial	105	17	8.6	12. 3	BD L			BDL
6	AA08	26.3.21	Gaviyer	Resident ial	91	11	8.5	13. 4	BD L			BDL

S. No	Stati on Code	Sampli ng Date	Sampli ng Locati	Area /Categ ory	Avera	ige Pol	lutani (µg/r		centra	ntion	Averag e Polluta nt Conc. (mg/m 3)	Avera ge Pollut ant Conc. (ng/m 3)
	Sout		on	<b>5.1,</b>	PM 10	PM2 .5	SO 2	NO X	NH 3	нс	СО	As
					24 hr	24 hr	24 hr	24 hr	24 hr		1 hr	24 hr
CPC B	Indus	trial, Resi	dential, R er Area	ural and	100	60	80	80	40 0	NS	4	6
Nor ms		ologically	Sensitive		100	60	80	30	40	NS	4	6
7	AA08	otified by 3.4.21	Gaviyer	Resident	107	15	7.3	11.	<b>O</b> BD	102	1.01	BDL
8	AA08	4.4.21	Gaviyer	ial Resident ial	100	17	8.4	8 10. 9	BD L	7		BDL
9	AA08	12.4.21	Gaviyer	Resident ial	123	12	9.1	12. 0	BD L			BDL
10	AA08	13.4.21	Gaviyer	Resident	58	9	7.9	13. 9	BD L			BDL
11	AA08	20.4.21	Gaviyer	Resident ial	55	17	8.8	11. 7	BD L			BDL
12	AA08	21.4.21	Gaviyer	Resident ial	127	11	8.6	10. 5	BD L	108 5	1.19	BDL
13	AA08	28.4.21	Gaviyer	Resident ial	74	10	9.3	12. 1	BD L		-	BDL
14	AA08	29.4.21	Gaviyer	Resident ial	93	14	7.4	10. 7	BD L			BDL
15	AA08	5.5.21	Gaviyer	Resident ial	78	22	9.1	13. 3	BD L			BDL
16	AA08	13.5.21	Gaviyer	Resident ial	56	26	8.6	13. 8	BD L	109 7	1.13	BDL
17	AA08	3.6.21	Gaviyer	Resident ial	80	25	7.5	10. 6	BD L			BDL
18	AA08	4.6.21	Gaviyer	Resident ial	95	32	10. 7	13. 4	BD L			BDL
19	AA08	21.5.21	Gaviyer	Resident ial	74	21	11. 0	7.1	BD L		-	BDL
20	AA08	24.5.21	Gaviyer	Resident ial	81	28	7.0	10. 3	BD L	108 0	1.28	BDL
21	AA08	25.5.21	Gaviyer	Resident ial	58	27	6.3	13. 5	BD L			BDL

## One Month Additional Monitoring date wise results

				_	Avera	age Pollı			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
	Couc			,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
_	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		24.11.21	At Site	Industrial	84	29	7.1	16. 5	BDL	18. 8	BD L	BD L	BD L	N D	897	1.25 6	0.11	BDL
		25.11.21	At Site	Industrial	91	27	8.6	13. 9	BDL	6.1	BD L	BD L	BD L	N D			0.08	BDL
		10.12.21	At Site	Industrial	111	22	5.2	13. 1	BDL		BD L	BD L	BD L	N D	1012	1.04 2	0.07	BDL
		11.12.21	At Site	Industrial	78	33	8.6	13. 9	BDL	10. 7	BD L	BD L	BD L	N D			0.28	BDL
A	AAQ1	14.12.21	At Site	Industrial	126	37	5.2	13. 1	BDL		BD L	BD L	BD L	N D	843	1.02 1	0.46	BDL
		15.12.21	At Site	Industrial	73	31	8.6	13. 9	BDL	9.1	BD L	BD L	BD L	N D			0.14	BDL
		20.12.21	At Site	Industrial	78	52	5.2	13. 1	BDL	12. 6	BD L	BD L	BD L	N D	717	0.67 6	<0.0 1	BDL
		21.12.21	At Site	Industrial	136	54	8.6	13. 9	BDL		BD L	BD L	BD L	N D			<0.0 1	BDL

				_	Avera	ige Polli			ntratio	•				/m3 (	except (	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	СО	BaP	C6H 6
	<b>303</b>			,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		24.11.21	STP AREA	Industrial	45	35	6.7	15. 9	BDL	16. 1	BD L	BD L	BD L	N D	928	0.72 4	0.19	BDL
		25.11.21	STP AREA	Industrial	124	37	8.2	14. 2	BDL		BD L	BD L	BD L	N D		1	0.36	BDL
		04.12.21	STP AREA	Industrial	79	39	7.7	13. 4	BDL	9.1	BD L	BD L	BD L	N D	762	0.88 5	0.76	BDL
		05.12.21	STP AREA	Industrial	115	59	6.8	12. 5	BDL		BD L	BD L	BD L	N D			0.45	BDL
A	AAQ2	08.12.21	STP AREA	Industrial	67	31	5.0	12. 0	BDL	13. 3	BD L	BD L	BD L	N D	796	1.04 1	0.06	BDL
		09.12.21	STP AREA	Industrial	34	34	8.9	15. 5	BDL		BD L	BD L	BD L	N D		-	0.25	BDL
		12.12.21	STP AREA	Industrial	104	39	7.7	13. 4	BDL	6.1	BD L	BD L	BD L	N D			0.44	BDL
		13.12.21	STP AREA	Industrial	56	25	7.1	13. 1	BDL		BD L	BD L	BD L	N D			0.22	BDL
		16.12.21	STP AREA	Industrial	80	27	8.1	14. 0	BDL	14. 5	BD L	BD L	BD L	N D	873	0.95 1	0.13	BDL

	<u></u>			_	Avera	ige Polli			ntratio	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
				,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	rial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		17.12.21	STP AREA	Industrial	103	23	7.1	13. 1	BDL		BD L	BD L	BD L	N D			0.19	BDL
		26.11.21	HAZIRA VILLAGE	Residenti al	107	41	7.8	13. 0	BDL	17. 7	BD L	BD L	BD L	N D	788	0.77 2	0.26	BDL
		27.11.21	HAZIRA VILLAGE	Residenti al	125	57	6.9	15. 0	BDL		BD L	BD L	BD L	N D			0.19	BDL
		04.12.21	HAZIRA VILLAGE	Residenti al	51	35	6.2	15. 8	BDL	17. 8	BD L	BD L	BD L	N D	920	0.92 8	0.15	BDL
		05.12.21	HAZIRA VILLAGE	Residenti al	97	43	6.8	19. 8	BDL	4.8	BD L	BD L	BD L	N D			0.22	BDL
A	AAQ3	10.12.21	HAZIRA VILLAGE	Residenti al	110	33	5.9	19. 6	BDL		BD L	BD L	BD L	N D	997	0.69	0.35	BDL
		11.12.21	HAZIRA VILLAGE	Residenti al	65	52	6.8	18. 0	BDL	3.2	BD L	BD L	BD L	N D			0.43	BDL
		20.12.21	HAZIRA VILLAGE	Residenti al	108	48	6.2	19. 7	BDL		BD L	BD L	BD L	N D	889	0.96 2	0.59	BDL
		21.12.21	HAZIRA VILLAGE	Residenti al	74	47	7.1	18. 8	BDL	5.4	BD L	BD L	BD L	N D			0.55	BDL

	<u> </u>			_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
	<b>303</b>			,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		26.11.21	HAZIRA AGANWADI	Residenti al	86	48	7.5	14. 2	BDL	11. 4	BD L	BD L	BD L	N D	897	0.82 7	0.23	BDL
		27.11.21	HAZIRA AGANWADI	Residenti al	111	34	8.1	13. 7	BDL	3.2	BD L	BD L	BD L	N D			0.20	BDL
		04.12.21	HAZIRA AGANWADI	Residenti al	94	29	7.2	14. 6	BDL		BD L	BD L	BD L	N D	974	0.60 0	0.18	BDL
,	AAQ4	05.12.21	HAZIRA AGANWADI	Residenti al	112	40	6.6	13. 4	BDL	7.3	BD L	BD L	BD L	N D			0.20	BDL
,	-VAQ-1	10.12.21	HAZIRA AGANWADI	Residenti al	97	58	7.5	14. 2	BDL		BD L	BD L	BD L	N D	855	0.69 3	0.21	BDL
		11.12.21	HAZIRA AGANWADI	Residenti al	72	32	8.1	18. 4	BDL	6.7	BD L	BD L	BD L	N D			0.25	BDL
		20.12.21	HAZIRA AGANWADI	Residenti al	95	41	7.5	20. 2	BDL	5.1	BD L	BD L	BD L	N D	928	0.73 4	0.30	BDL
		21.12.21	HAZIRA AGANWADI	Residenti al	94	34	8.1	23. 8	BDL		BD L	BD L	BD L	N D			0.30	BDL
A	AAQ5	28.11.21	SUVALI	Residenti al	121	36	6.3	19. 3	BDL	6.1	BD L	BD L	BD L	N D	728	0.60 0	0.33	BDL

	<u> </u>			_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
				,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		29.11.21	SUVALI	Residenti al	83	32	7.2	21. 8	BDL	12. 1	BD L	BD L	BD L	N D			0.17	BDL
		06.12.21	SUVALI	Residenti al	65	14	6.6	15. 7	BDL		BD L	BD L	BD L	N D	937	0.92 8	0.24	BDL
		07.12.21	SUVALI	Residenti al	55	35	6.6	20. 2	BDL	10. 1	BD L	BD L	BD L	N D			<0.0 1	BDL
		14.12.21	SUVALI	Residenti al	62	20	7.2	21. 8	BDL		BD L	BD L	BD L	N D	856	1.05 2	0.27	BDL
		15.12.21	SUVALI	Residenti al	110	34	9.4	15. 7	BDL		BD L	BD L	BD L	N D			0.33	BDL
		20.12.21	SUVALI	Residenti al	67	30	7.2	21. 8	BDL	5.7	BD L	BD L	BD L	N D			0.40	BDL
		21.12.21	SUVALI	Residenti al	108	36	6.9	16. 4	BDL	7.9	BD L	BD L	BD L	N D	825	0.60 0	0.73	BDL
	AAQ6	28.11.21	At site (SW Corner)	Residenti al	112	56	6.6	14. 2	BDL		BD L	BD L	BD L	N D	928	0.88 4	0.28	BDL
<i>'</i>	1AQU	29.11.21	At site (SW Corner)	Residenti al	71	57	7.5	13. 5	BDL	3.8	BD L	BD L	BD L	N D			0.09	BDL

	<u> </u>			_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
	000			,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		08.12.21	At site (SW Corner)	Residenti al	63	17	6.6	14. 2	BDL	8.2	BD L	BD L	BD L	N D	1007	1.03 4	0.02	BDL
		09.12.21	At site (SW Corner)	Residenti al	72	58	7.5	13. 5	BDL		BD L	BD L	BD L	N D			0.15	BDL
		12.12.21	At site (SW Corner)	Residenti al	108	54	6.3	13. 6	BDL	6.3	BD L	BD L	BD L	N D	958	0.60	0.22	BDL
		13.12.21	At site (SW Corner)	Residenti al	77	51	7.9	21. 9	BDL		BD L	BD L	BD L	N D			0.39	BDL
		23.12.21	At site (SW Corner)	Residenti al	113	55	6.6	18. 6	BDL	4.4	BD L	BD L	BD L	N D			<0.0 1	BDL
		24.12.21	At site (SW Corner)	Residenti al	97	52	7.5	15. 2	BDL	12. 1	BD L	BD L	BD L	N D	880	0.81 7	0.14	BDL
		30.11.21	MORA	Residenti al	42	34	7.5	18. 6	BDL		BD L	BD L	BD L	N D	815	0.91 8	0.10	BDL
	AAQ7	01.12.21	MORA	Residenti al	119	28	6.6	11. 4	BDL	11. 4	BD L	BD L	BD L	N D			0.10	BDL
<b>_</b>	-1AQ/	06.12.21	MORA	Residenti al	105	58	10. 3	18. 3	BDL		BD L	BD L	BD L	N D	942	0.62 0	0.45	BDL

				_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
				,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		07.12.21	MORA	Residenti al	74	56	7.5	18. 6	BDL	7.6	BD L	BD L	BD L	N D			0.91	BDL
		12.12.21	MORA	Residenti al	105	40	6.6	11. 4	BDL		BD L	BD L	BD L	N D	1013	0.60 0	0.32	BDL
		13.12.21	MORA	Residenti al	71	24	10. 3	18. 3	BDL	13. 9	BD L	BD L	BD L	N D			0.08	BDL
		23.12.21	MORA	Residenti al	48	22	6.6	16. 2	BDL	5.7	BD L	BD L	BD L	N D	902	0.78 6	0.02	BDL
		24.12.21	MORA	Residenti al	42	15	11. 3	20. 1	BDL	8.8	BD L	BD L	BD L	N D			0.10	BDL
		30.11.21	DAMKA	Residenti al	77	21	7.8	14. 1	BDL	11. 5	BD L	BD L	BD L	N D	871	0.60 0	0.08	BDL
	AAQ8	01.12.21	DAMKA	Residenti al	40	12	9.4	15. 9	BDL		BD L	BD L	BD L	N D			0.02	BDL
'	-1AQ0	08.12.21	DAMKA	Residenti al	79	26	8.4	15. 2	BDL	8.8	BD L	BD L	BD L	N D	941	0.80	0.09	BDL
		09.12.21	DAMKA	Residenti al	85	23	9.4	15. 9	BDL		BD L	BD L	BD L	N D			0.06	BDL

				_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
	333			,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		16.12.21	DAMKA	Residenti al	50	19	8.1	14. 6	BDL	15. 2	BD L	BD L	BD L	N D	1012	0.60	0.10	BDL
		17.12.21	DAMKA	Residenti al	114	37	9.0	15. 2	BDL		BD L	BD L	BD L	N D			0.13	BDL
		23.12.21	DAMKA	Residenti al	45	22	8.4	15. 2	BDL	6.3	BD L	BD L	BD L	N D	961	0.89 6	0.03	BDL
		24.12.21	DAMKA	Residenti al	89	23	9.4	15. 9	BDL	9.1	BD L	BD L	BD L	N D			0.19	BDL
		28.11.21	KAVAS	Residenti al	132	19	7.5	13. 7	BDL	5.7	BD L	BD L	BD L	N D	721	0.71 9	0.03	BDL
		29.11.21	KAVAS	Residenti al	24	32	6.6	20. 6	BDL		BD L	BD L	BD L	N D			0.07	BDL
A	AAQ9	06.12.21	KAVAS	Residenti al	92	56	10. 3	17. 4	BDL		BD L	BD L	BD L	N D	920	0.92 2	0.07	BDL
		07.12.21	KAVAS	Residenti al	133	54	7.5	13. 7	BDL	8.2	BD L	BD L	BD L	N D			0.03	BDL
		14.12.21	KAVAS	Residenti al	110	55	6.6	20. 6	BDL	13. 3	BD L	BD L	BD L	N D	946	0.60 0	0.06	BDL

	<u> </u>			_	Avera	ige Polli			ntration	•				′m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
				,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		15.12.21	KAVAS	Residenti al	57	30	10. 3	17. 4	BDL		BD L	BD L	BD L	N D			0.04	BDL
		23.12.21	KAVAS	Residenti al	49	17	6.6	20. 6	BDL	7.6	BD L	BD L	BD L	N D	920	0.80 7	0.02	BDL
		24.12.21	KAVAS	Residenti al	24	11	10. 3	17. 4	BDL	7.6	BD L	BD L	BD L	N D		-	0.06	BDL
		30.11.21	GAVIYER	Residenti al	70.6	53.4	7.5	14. 5	BDL	8.8	BD L	BD L	BD L	N D	1011	0.92 9	0.08	BDL
		01.12.21	GAVIYER	Residenti al	78.2	47.8	6.6	18. 2	BDL		BD L	BD L	BD L	N D			0.08	BDL
_	AQ10	08.12.21	GAVIYER	Residenti al	65	34	7.2	14. 5	BDL	10. 1	BD L	BD L	BD L	N D	898	0.60 0	0.02	BDL
	WATO	09.12.21	GAVIYER	Residenti al	43	24	6.3	17. 4	BDL	5.4	BD L	BD L	BD L	N D			0.10	BDL
		14.12.21	GAVIYER	Residenti al	69	26	7.5	15. 1	BDL		BD L	BD L	BD L	N D	1018	0.71 8	0.13	BDL
		15.12.21	GAVIYER	Residenti al	103	50	6.6	18. 2	BDL	4.8	BD L	BD L	BD L	N D			0.03	BDL

	<u> </u>			_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
	000			,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		25.12.21	GAVIYER	Residenti al	76	24	7.5	15. 1	BDL	10. 7	BD L	BD L	BD L	N D	905	0.60 0	0.02	BDL
		26.12.21	GAVIYER	Residenti al	54	11	6.6	18. 2	BDL	-	BD L	BD L	BD L	N D		-	0.04	BDL
		04.12.21	DUMAS	Residenti al	84	18	7.2	13. 6	BDL	12. 7	BD L	BD L	BD L	N D	1066	0.60	0.02	BDL
		05.12.21	DUMAS	Residenti al	100	26	8.1	20. 8	BDL		BD L	BD L	BD L	N D			0.02	BDL
		10.12.21	DUMAS	Residenti al	99	39	7.2	13. 6	BDL	7.9	BD L	BD L	BD L	N D	874	0.60 0	0.11	BDL
А	AQ11	11.12.21	DUMAS	Residenti al	69	37	8.1	20. 8	BDL		BD L	BD L	BD L	N D			0.15	BDL
		16.12.21	DUMAS	Residenti al	62	27	7.5	14. 2	BDL	8.5	BD L	BD L	BD L	N D	946	0.80 7	0.07	BDL
		17.12.21	DUMAS	Residenti al	93	19	8.4	21. 7	BDL	6.1	BD L	BD L	BD L	N D			0.03	BDL
		25.12.21	DUMAS	Residenti al	48	18	7.5	14. 2	BDL		BD L	BD L	BD L	N D	905	0.91 8	0.04	BDL

	<u></u>			_	Avera	ige Polli			ntration	•				/m3 (	except	CO in		
S. N	Statio n Code	Samplin g Date	Sampling Location	Area /Categor y	PM1 0	PM2. 5	SO 2	NO x	NH 3	03	Pb	As	Ni	H g	нс	со	BaP	C6H 6
				,	24 hr	24 hr	24 hr	24 hr	24 hr	8 hr	24 hr	24 hr	24 hr	-	GRA B	1 hr		
	AAQS 2009	Industr	ial, Residential, R Other Area →	ural and	100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
	missibl limits		ogically Sensitive fied by Central Go		100	60	80	80	400	10 0	1	6	20	N S	NS	4	1	5
		26.12.21	DUMAS	Residenti al	68	28	8.1	20. 8	BDL	5.7	BD L	BD L	BD L	N D			0.03	BDL
		30.11.21	VANTA	Residenti al	121	61	7.5	20. 2	BDL	12. 0	BD L	BD L	BD L	N D	1095	0.72 1	0.05	BDL
		01.12.21	VANTA	Residenti al	114	39	6.6	13. 7	BDL	5.1	BD L	BD L	BD L	N D			0.07	BDL
		06.12.21	VANTA	Residenti al	115	37	7.2	17. 6	BDL		BD L	BD L	BD L	N D	893	0.85 2	0.09	BDL
		07.12.21	VANTA	Residenti al	48	25	7.5	20. 2	BDL		BD L	BD L	BD L	N D			0.10	BDL
		12.12.21	VANTA	Residenti al	50	27	6.3	13. 1	BDL	10. 9	BD L	BD L	BD L	N D	982	0.82 5	0.33	BDL
А	AQ12	13.12.21	VANTA	Residenti al	72	31	7.9	19. 2	BDL	10. 7	BD L	BD L	BD L	N D			0.56	BDL
		25.12.21	VANTA	Residenti al	60	50	6.6	13. 7	BDL		BD L	BD L	BD L	N D	1027	0.91 2	0.03	BDL
		26.12.21	VANTA	Residenti al	134	35	8.2	20. 1	BDL	7.3	BD L	BD L	BD L	N D			0.32	BDL

#### Annexure 11: NABET and NABL Certificate



## **Quality Council of India**



National Accreditation Board for Education & Training

## CERTIFICATE OF ACCREDITATION

## Kadam Environmental Consultants

871/B/3, GIDC Makarpura, Vadodara - 390010, Gujarat

Accredited as **Category - A** organization under the QCI-NABET Scheme for Accreditation of EIA Consultant Organizations: Version 3 for preparing EIA-EMP reports in the following Sectors:

SI. No.	Sector Description	Sector	(as per)	
31. NO.	Sector Description	NABET	MoEFCC	Cat
1	Mining of minerals including Open cast/ Underground mining	1	1 (a) (i)	A
2	Offshore and onshore oil and gas exploration, development & production	2	1 (b)	A
3	Thermal power plants	4	1 (d)	A
4	Coal Washeries	6	2 (a)	A
5	Mineral beneficiation including pelletisation	7	2 (b)	A
6	Metallurgical industries (ferrous & non ferrous)	8	3 (a)	В
7	Petroleum refining industry	10	4 (a)	A
8	Chlor-alkali industry	13	4 (d)	A
9	Chemical Fertilizers	16	5 (a)	A
10	Pesticides industry and pesticide specific intermediates (excluding formulations)	17	5 (b)	A
11	Petro-chemical complexes	18	5 (c)	A
12	Manmade fibers manufacturing	19	5 (d)	A
13	Petrochemical based processing	20	5 (e)	A
14	Synthetic organic chemicals industry	21	5 (f)	A
15	Integrated paint industry	23	5 (h)	A
16	Oil & gas transportation pipeline	27	6 (a)	A
17	Isolated storage & handling of hazardous chemicals	28	6 (b)	В
18	All ship breaking yards including ship breaking units	30	7 (b)	A
19	Industrial estates/ parks/ complexes/ Areas, export processing zones(EPZs), Special economic zones (SEZs), Biotech parks, Leather complexes	31	7 (c)	В
20	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	32	7 (d)	A
21	Bio-medical waste treatment facilities	32A	7 (da)	В
22	Ports, harbours, break waters and dredging	33	7 (e)	A
23	Common effluent treatment plants (CETPs)	36	7 (h)	В
24	Common Municipal Solid Waste Management Facility (CMSWMF)	37	7 (i)	В
25	Building and construction projects	38	8 (a)	В
26	Townships and Area Development projects	39	8 (b)	В

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RA AC minutes dated July 05, 2019 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/19/1025 dated August 05, 2019. The accreditation needs to be renewed before the expiry date by Kadam Environmental Consultants, Vadodara, following due process of assessment.

Sr. Director, NABET Dated: August 05, 2019 Certificate No. NABET/ EIA/1922/ RA 0138 Valid till 25.05.2022

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# National Accreditation Board for Education and Training



## **Certificate of Accreditation**

## **Kadam Environmental Consultants**

871/B/3, GIDC Makarpura, Vadodara- 390010, Gujarat

The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA-EMP reports in the following Sectors —

S.	Contro December	Secto	r (as per)	C-4
No	Sector Description	NABET	MoEFCC	Cat.
1	Mining of minerals including Open cast/ Underground mining	1	1 (a) (i)	А
2	Offshore and onshore oil and gas exploration, development & production	2	1 (b)	A
3	Thermal power plants	4	1 (d)	A
4	Coal Washeries	6	2 (a)	A
5	Mineral beneficiation including pelletisation	7	2 (b)	A
6	Metallurgical industries (ferrous & non ferrous)	8	3 (a)	A
7	Cement plants	9	3 (b)	В
8	Petroleum refining industry	10	4 (a)	A
9	Coke oven plants	11	4 (b)	Α
10	Chlor-alkali industry	13	4 (d)	A
11	Soda ash Industry	14	4 (e)	A
12	Chemical Fertilizers	16	5 (a)	A
13	Pesticides industry and pesticide-specific intermediates (excluding formulations)	17	5 (b)	A
14	Petro-chemical complexes	18	5 (c)	A
15	Manmade fibers manufacturing	19	5 (d)	Α
16	Petrochemical based processing	20	5 (e)	A
17	Synthetic organic chemicals industry	21	5 (f)	А
18	Distilleries	22	5 (g)	Α
19	Integrated paint industry	23	5 (h)	В
20	Pulp & paper industry	24	5 (i)	Α
21	Oil & gas transportation pipeline	27	6 (a)	A
22	All ship breaking yards including ship breaking units	30	7 (b)	A
23	Industrial estates/ parks/ complexes/ Areas	31	7 (c)	В
24	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	32	7 (d)	A
25	Bio-medical waste treatment facilities	32A	7 (da)	В
26	Ports, harbours, breakwaters and dredging	33	7 (e)	A
27	Highways	34	7 (f)	В
28	Common effluent treatment plants (CETPs)	36	7 (h)	В
29	Common Municipal Solid Waste Management Facility (CMSWMF)	37	7 (i)	В
30	Building and construction projects	38	8 (a)	В
31	Townships and Area Development projects	39	8 (b)	В

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in SAAC minutes dated Sep. 14, 2021 and supplementary minutes dated Dec. 14, 2021 and Mar.25, 2022 posted on QCI-NABET website.

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Sr. Director, NABET Dated: Apr. 19, 2022 Certificate No. NABET/EIA/2023/SA 0164 Valid up to Mar. 19, 2023

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## National Accreditation Board for Testing and Calibration Laboratories

#### MABI

## CERTIFICATE OF ACCREDITATION

## KADAM ENVIRONMENTAL CONSULTANTS

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

# "General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

871/B/3, GIDC MAKARPURA, VADODARA, GUJARAT, INDIA

in the field of

## **TESTING**

Certificate Number:

TC-7099

**Issue Date:** 

16/04/2020

Valid Until:

26/03/2022

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL



Kierlitism

N. Venkateswaran Chief Executive Officer





## National Accreditation Board for Testing and Calibration Laboratories

#### NABL

## CERTIFICATE OF ACCREDITATION

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# "General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

871/B/3, GIDC MAKARPURA, VADODARA, GUJARAT, INDIA

in the field of

**TESTING** 

Certificate Number: TC-7099

Issue Date: 27/03/2022 Valid Until: 26/03/2024

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.mabi-india.org)

Name of Legal Identity: Kadam Environmental Consultants

Signed for and on behalf of NABL



N. Venkateswaran Chief Executive Officer

#### Annexure 12: Classification of Landuse

## **Built up Land or Habitation**

It is defined as an area of human habitation developed due to non-agricultural use and that which has a cover of buildings, transport, communication utilities in association with water vegetation and vacant lands.

Kadam has chosen to further define this

### **Residential / Commercial**

Structures used by humans for living and primary landuse category into additional categories, namely residential, industrial and working, but not including structures used exclusively for manufacturing.

#### **Industrial**

Structures used for manufacturing products.

## **Agricultural Land**

It is defined as the land primarily used for farming and for production of food, fiber, and other commercial and horticultural crops. It includes land under crops (irrigated and un-irrigated), fallow land and plantations. These are further defined.

## Crop Land

It includes those lands with standing crop (per se) as on the date of the satellite imagery. The crops may be of either Kharif (June-September) or Rabi (October – March) or Kharif Rabi seasons.

#### Fallow Land

It is described as agricultural land which is taken up for cultivation but is temporarily allowed to rest uncropped for one or more seasons, but not less than one year. These lands are particularly those which are seen devoid of crops at the time when the imagery is taken during Rabi and Kharif.

#### **Plantations**

Plantations are described as an area under agricultural tree crops (for e.g. mango plantations) planted adopting certain agricultural management techniques. It includes tea, coffee, rubber, coconut, arecanut, citrus, orchards and other horticultural nurseries.

#### **Forests**

It is an area (within the notified forest boundary) bearing an association predominantly of trees and other vegetation types capable of producing timber and other forest produce. Forests can be further divided into sub-categories mentioned as follows.

## Evergreen / Semi-Evergreen Forests

These are forests which comprise thick and dense canopy of tall trees, which predominantly remain green throughout the year. Such forests include both coniferous and tropical broad-leaved evergreen trees. Semi-evergreen forests are often a mixture of both deciduous and evergreen trees but the latter predominate.

## **Deciduous Forests**

These are described as forests which predominantly comprise of deciduous species and where the trees shed their leaves once in a year.

## **Degraded Forest or Scrub**

It is described as a forest where the vegetative (crown) density is less than 20% of the canopy cover. It is the result of both biotic and abiotic influences. Scrub is a stunted tree or bush/shrub.

#### Forest Blank

A forest blank is an opening amidst forests without any tree cover. It includes openings of assorted size and shapes as seen on the imagery.

#### Forest Plantations

It is described as an area of trees of species of forestry importance and raised on notified forest lands. It includes eucalyptus, casuarinas, bamboo, etc.

## **Mangroves**

Mangroves are described as a dense, thicker or woody, aquatic vegetation or forest cover occurring in tidal waters near estuaries and along the confluence of delta in coastal areas. Mangroves include species of the genera Rhizophora and Aviccunia.

#### **Wastelands**

Wastelands are described as degraded lands which can be brought under vegetative cover with reasonable water and soil management or on account of natural causes. Wastelands can result from internal / imposed constraints such as by location, environment, chemical and physical prosperities of the soil or financial or management constraints.

Different types of wastelands include salt-affected lands, waterlogged lands, marshy/swampy lands, mudlands, gullied / ravenous lands, land with or without scrub, sandy areas and barren rocky / stony waste / sheet rock areas.

#### Salt-Affected Land

The salt-affected land is generally characterized as the land that has adverse effects on the growth of most plants due to the action or presence of excess soluble or high exchangeable sodium. Alkaline land has an exchangeable sodium percentage (ESP) of about 15, which is generally considered as the limit between normal and alkali soils. The predominant salts are carbonates and bicarbonates of sodium. Coastal saline soils may be with or without ingress or inundation by seawater.

## **Waterlogged Land**

Waterlogged land is that land where the water is at/or near the surface and water stands for most of the year. Such lands usually occupy topographically low-lying areas. It excludes lakes, ponds and tanks or in the context of the Wetlands (Conservation and Management Rules, 2010) such areas that could be considered as 'protected wetlands'.

#### Marshy / Swampy Land / Mud Land Area

Marshy land is that which is permanently or periodically inundated by water and is characterized by vegetation, which includes grasses and weeds. Marshes are classified into salt/brackish or fresh water depending on the salinity of water. These exclude Mangroves.

## **Gullied / Ravenous Land**

The 'gullies' are formed as a result of localized surface runoff affecting the friable unconsolidated material in the formation of perceptible channels resulting in undulating terrain. The gullies are the first stage of excessive land dissection followed by their networking which leads to the development of ravenous land. The word 'ravine' is usually associated not with an isolated gully but a network of deep gullies formed generally in

thick alluvium and entering a nearby river, flowing much lower than the surrounding high grounds. The ravines are extensive systems of gullies developed along river courses.

## Land with / without Scrub

They occupy (relatively) higher topography like uplands or high grounds with or without scrub. These lands are generally prone to degradation or erosion. These exclude hilly and mountainous terrain.

## Sandy Area (Coastal and Desertic)

These are the areas, which have stabilized accumulations of sand in-site or transported in coastal riverine or inland (desert) areas. These occur either in the form of sand dunes, beaches, channel (river/stream) islands, etc.

## **Barren Rocky / Stony Waste / Sheet Rock Area**

It is defined as the rock exposures of varying lithology often barren and devoid of soil cover and vegetation and not suitable for cultivation. They occur amidst hill forests as openings or scattered as isolated exposures or loose fragments of boulders or as sheet rocks on plateau and plains. It includes quarry or gravel pit or brick kilns.

#### **Water Bodies**

It is an area of impounded water, areal in extent and often with a regulated flow of water. It includes manmade reservoirs/lakes/tank/canals, besides natural lakes, rivers/streams and creeks.

## River / Stream

It is a course of flowing water on the land along definite channels. It includes from a small stream to a big river and its branches. It may be perennial or non-perennial.

## Reservoir / Lakes / Ponds / Tanks

It is a natural or man-made enclosed water body with a regulated flow of water. Reservoirs are larger than tanks/lakes and are used for generating electricity, irrigation and for flood control. Tanks are smaller in areal extent with limited use than the former. Canals are inland waterways used for irrigation and sometimes for navigation.

### **Others**

It includes all those landuse and land cover classes which can be treated as miscellaneous because of their nature of occurrence, physical appearance and other characteristics.

### Shifting Cultivation

It is the result of cyclic land use practice of felling of trees and burning of forest areas for growing crops. Such lands are also known as jhoom lands and cultivation called jhoom cultivation.

### Grassland / Grazing Land

It is an area of land covered with natural grass along with other vegetation, often grown for fodder to feed cattle and other animals. Such lands are found in river beds, on uplands, hill slopes, etc. Such lands can also be called as permanent pastures or meadows. Grazing lands are those where certain pockets of land are fenced for allowing cattle to graze.

### Snow Covered / Glacial Area

These are snow-covered areas defined as a solid form of water consisting of minute particles of ice. It includes permanently snow covered areas as on the Himalayas. Glacier is a mass of accumulated ice occurring amidst permanently snow-covered areas.

## **Vegetation Cover**

It is a land area predominantly covered with vegetation and is not part of Protected / Reserved Forest.

## Annexure 13: Methodology for Meteorological Data Collection

		Sample co	ollection		
S. No.	Sampling Parameters	Sampling equipment	Sensitivity/ Detection Limit	Sampling Frequency	Methodology
1	Wind Speed	Anemometer cup counter (0 to 65 m/s)	0.25 m/s		USEPA Document No.
2	Wind Direction	Wind vane (0° to 357°)	1°		EPA-454/R-99-005, Feb 2000
3	Temperature	Thermometer (-40° to 60°)	0.1°C	Hourly	(Meteorological Monitoring Guidance for Regulatory
4	Humidity	Relative Humidity meter (0-99%)	3%		Modelling Applications)
5	Rainfall	Rain gauge	0.5 mm		
6	Cloud Cover			4 Hourly	Visual Inspection by the observer.

## Annexure 14: Methodology for data collection for Ambient Air

S.	Env.	Sampling	Total	Sampling		Sample	e Collection & Anal	ysis		Method
No.	Component	location	Sampling Period	Frequency	Parameters	Field Instrument	Analytical Instrument	Sensitivity	Detection Limit	
1					PM10	Respirable Dust Sampler (RDS) APM- 460	Electronic balance	± 0.01 mg	10.0 μg/m3	IS: 5182: Part 23, 2006, with cyclone
2				24 – hour sample collection	PM2.5	Fine Particulate sampler AAS-127	Electronic balance	± 0.01 mg	2.0 μg/m3	CPCB Guideline volume -1 (Gravimetric method)
3	Ambient Air Quality	12 (Twelve) Locations	Summer Season 2021	twice a week at each station	SO2	Impinger Module with control valve & Flow Meter (attached to RDS)	Spectro- photometer	± 0.001 nm	3.75 µg/m3	IS: 5182: Part 2 (2001)
4					NOx	Impinger Module with control valve & Flow Meter (attached to RDS)	Spectro- photometer	± 0.001 nm	6 µg/m3	IS: 5182: Part 6 (2006)
5				Grab sample collection once a week at each station	HC as Methane	Todler Bag/Baladder & Pump	Gas Chromatograph	-	0.327 mg/m3	IS 5182 (Part 17) : 1979 (RA 2003)

S.	Env.	Sampling	Total	Sampling		Sampl	e Collection & Analy	ysis		Method
No.	Component	location	Sampling Period	Frequency	Parameters	Field Instrument	Analytical Instrument	Sensitivity	Detection Limit	
6				1 hour sample collection once a week at each station	СО	Todler Bag/Baladder & Pump	Gas Chromatograph	-	0.57 mg/m3	IS 5182 (Part 10): 1999 (RA 2009)
7				24 – hour sample collection twice a week 8at each station	NH3	Impinger Module with control valve & Flow Meter (attached to RDS)	Spectrophotometer		10 μg/m3	Indo Phenol Blue method
8				24 – hour	О3	Impinger Module with control valve & Flow Meter (attached to RDS)	Spectrophotometer	-	1 μg/m3	IS: 5182 (Part 9), 1971 (RA 2009)
9				sample collection twice a week at each station	Pb	Respirable Dust Sampler (RDS) APM- 460	AAS/ICPMS	-	1.0 ng/m3	IS 5182 (Part-22): 2004 (RA- 2014)
10				Station.	As	Respirable Dust Sampler (RDS) APM- 460	AAS/ICPMS	-	1.0 ng/m3	APHA 23rd edition (3125-B) 2017

S.	Env	Compling	Total	Compling		Sample	e Collection & Analy	ysis		Method
No.	Env. Component	Sampling location	Sampling Period	Sampling Frequency	Parameters	Field Instrument	Analytical Instrument	Sensitivity	Detection Limit	
11					Ni	Respirable Dust Sampler (RDS) APM- 460	AAS/ICPMS	-	20 ng/m3	APHA 23rd edition (3125-B) 2017
12					Hg	Respirable Dust Sampler (RDS) APM- 460	AAS/ICPMS	-	1.0 ng/m3	APHA (3500 Hg) 25th Edition
13					Benzo (a) Pyrene (BaP	Respirable Dust Sampler (RDS) APM- 460	Gas Chromatograph	-	1.0 ng/m3	IS 5182 (Part 12):2004
14					C6H6		ICP-MS	-	0.001	

## Annexure 15: Methodology for Ambient Noise Monitoring

Env.	Unit of	Sampling	Sample o	ollection	
Compo- nent	Measurement	Frequency	Sampling equipment	Detection Limit	Methodology
Ambient Noise levels	dB (A)	Once during the study Hourly reading for 24 hours at each location	Noise Level Meter	0.1 dB (A)	ISLM 100

### Annexure 16: Method for analysis of Ground and Surface water

## **Methodology of Sampling**

The purpose of ground water monitoring program and the collections of samples within that program is to obtain representative portions of the aquifer and to obtain in situ measurements at a selected time and place.

The collection of water sample from ground water abstraction structures occur in five (05) steps -

- Sampling preparation,
- Accessing the well before sampling & securing the well after sampling,
- Measuring water level,
- Purging the well, and
- Collecting & delivering the water sample.

## **Sampling Preparation**

The ground water sampling is carried out for analysing suitability of water for drinking purpose. And hence, the field sampling equipment is cleaned and calibrated before sampling. The field investigator must carry:

- Clean water containers from Laboratory
- Container sample labels, markers/pen/pencil
- · Field sheets for well-inventory data
- Measuring tape for dimension of borehole i.e. dia. of borehole/casing/outlet, measuring level, etc.
- pumping equipment such as bailer/peristaltic pump
- Water level measuring instrument
- Test kits for measuring field parameters such as pH/TDS.
- Personal protective equipment's, first aid

### Accessing the Well before Sampling & Securing the Well after Sampling

In general, the casing of bore-wells/tube-wells are usually packed and occasionally it is more difficult to identify the discharge pipe which is away from the located structures for collecting sample. In case of openwell, sampling is comparatively convenient. Ideally, when testing for ground water, the water sample shall not be collected from the tap.

Sampling is done immediately by direct filling bottles from the tubing outlet of a submersible pump of bore-wells/tube-wells. The location details and reference points must be noted in field data sheet using hand GPS machine and photographs must be taken with reference identification number.

### **Measuring Water-level**

After accessing the ground water structure, the first step is to measure the total depth to the water table using water level measuring instrument. Water-level information is important which may be directly linked to ground water quality changes. Considerable care is taken to avoid tangling or wedging the sampling equipment. The measuring details is noted down in field data sheet with date and time.

## **Purging the Borehole**

As a thumb rule, the standing water within the borehole is exposed to atmospheric conditions and can undergo changes to its physical and chemical characteristics and is not representative of the water in the aquifer, for this reason the borehole is purged before sampling. Also, purging is to reduce the turbidity to the point that the sample will represent the dissolved concentration of contaminants (metals and many organics).

### **Collecting and Delivering the Samples**

The water samples are collected after completion of purging. Before the sample containers are filled, sampling bottles is properly labelled and details is recorded. The field test is completed such as field pH, TDS, etc. Since water samples are not immediately analysed fully in the field, they typically required preservations which ensure the quality of the sample does not change between the time of collection in field and time of analysis in the laboratory. Preservation includes cooling the samples to maintaining the temperature as per required standards by laboratory. If a water sample is analysed for multiple parameters, it requires different preservation methods and to take more than a single sample. The sample is deliver to the laboratory within 2-3 of sampling. If samples are shipped, the sealed sample containers are put into ice box, are then packed with ice coolants and transported to the analytical laboratory by express delivery service. At the laboratory, the samples are logged in given sample ID numbers, and kept cool until they can be analysed.

## **Selection of Parameters**

The ground water samples to be analysed as per the APHA Standard Methods (23<sup>rd</sup> Edition) for the given parameters in the Technical Guidance published in December 2010.

Also, the baseline monitoring parameters guidance as per NABET & MoEF&CC (for standard/specific ToR) and approved sector at KEC Laboratory considering the sector wise parameters.

### **Ground Water Quality Testing Methodology**

S. No	Parameters	Methodology	Minimum Detection Limit
1	рН	APHA: 4500-H+ B(23 <sup>rd</sup> Edition), Electrometric method	2
3	Temperature	APHA: 2550 B (23 <sup>rd</sup> Edition), Standard Thermometer	0.5 Deg C
4	Turbidity	APHA: 2130 B (23 <sup>rd</sup> Edition), Nephelometric Method	0.1 NTU
5	TDS	APHA: 2540C (23 <sup>rd</sup> Edition), Gravimetric	3 mg/l
6	Electrical conductivity	APHA: 2510 B (23 <sup>rd</sup> Edition), Conductivity meter	1µmoh/cm
7	COD	APHA: 5220 B(23 <sup>rd</sup> Edition), Open reflux method	5 mg/l
8	BOD	IS: 3025(part-44):1993 (RA 2014) Iodometric	2 mg/l
9	Chlorides	APHA:4500-Cl- B (23 <sup>rd</sup> Edition), Argentometric method	1.0 mg/l
10	Phenol	APHA: 5530-D (23 <sup>rd</sup> Edition), Direct photometric Method	0.001 mg/l
11	Sulphates	APHA:4500-E as SO4 2-(23 <sup>rd</sup> Edition), Turbidimetric method	1 mg/l
12	Total Hardness	APHA: 2340-C (23 <sup>rd</sup> Edition), EDTA Titrimetric method	2 mg/l
13	Ca++ Hardness	APHA: 3500-Ca-B (23 <sup>rd</sup> Edition) EDTA Titrimetric method	2 mg/l
14	Mg++ Hardness	APHA: 3500-Mg-B (23 <sup>rd</sup> Edition), By calculation	2 mg/l
15	Total Alkalinity	APHA: 2320 B (23 <sup>rd</sup> Edition), Titration method	5 mg/l
16	Nitrate	IS:3025 (part-34)1988 (RA 2014), 3.3 colorimetric method	0.1 mg/l
17	Nitrite	IS:3025 (part-34)1988 (RA 2014)	0.05 mg/l
18	Fluoride	APHA:4500 F-D(23 <sup>rd</sup> Edition),SPANDS method	0.05 mg/l
19	Sodium	APHA:3500 Na-B (23 <sup>rd</sup> Edition), Flame emission Photometric method	1 mg/l

S. No	Parameters	Methodology	Minimum Detection Limit
20	Potassium	APHA: 3500 K-B (23rd Edition) Flame emission Photometric method	1 mg/l
21	Calcium	APHA: 3500-Ca-B (23 <sup>rd</sup> Edition) EDTA Titrimetric method	2 mg/l
22	Magnesium	APHA: 3500-Mg-B (23 <sup>rd</sup> Edition), Calculation method	2 mg/l
23	Salinity	APHA: 2520 B (23 <sup>rd</sup> Edition), Electrical Conductivity method	-
24	Total Nitrogen	APHA: 4500 N Org-B, (23 <sup>rd</sup> Edition), Macro Kjeldahl method	0.05 mg/l
25	Total Phosphorous	APHA: 4500 P-C (23 <sup>rd</sup> Edition), Colorimetric method	0.02 mg/l
26	Dissolved Oxygen	APHA: 4500 O-C(23 <sup>rd</sup> Edition), Iodometric method	0.2 mg/l
27	Ammonical Nitrogen	IS:3025(part-34), 1988 (RA 2014), Distillation & colorimetric	0.05 mg/l
28	SAR	Flamephotmetric& EDTA method	-
29	Heavy Metals	-	-
a	Arsenic (as As)	APHA: 3500-As-B (23 <sup>rd</sup> Edition) Silver diethyldithiocarbamate method/APHA: 3114-B (23 <sup>rd</sup> Edition) AAS	0.01 mg/l
b	Cadmium (as Cd)	APHA: 3111-B(23 <sup>rd</sup> Edition) AAS	0.003 mg/l
С	Chromium (as Cr)	APHA: 3500-Cr-B(23 <sup>rd</sup> Edition), colorimetric method	0.02 mg/l
d	Copper (as Cu)	APHA: 3500-Cu-B (23 <sup>rd</sup> Edition) Neocuproine method/ APHA: 3111- B (23 <sup>rd</sup> Edition) AAS	0.03 mg/l
е	Cyanide (as CN)	APHA: 4500 CN- D & E(23 <sup>rd</sup> Edition)	0.03 mg/l
f	Iron (as Fe)	APHA: 3500-Fe-B (23 <sup>rd</sup> Edition), Phenanthroline method/APHA: 3111-B(23 <sup>rd</sup> Edition) AAS	0.05 mg/l
g	Lead (as Pb)	APHA: 3111-B(23 <sup>rd</sup> Edition) AAS	0.01 mg/l
h	Mercury (as Hg)	IS 3025 (P-48): 1994 (RA 2014))/ APHA: 3112-B (23 <sup>rd</sup> Edition) Cold vapour AAS method	0.001 mg/l
i	Manganese (as Mn)	APHA: 3500-Mn-B (23 <sup>rd</sup> Edition) Persulphate method/ APHA: 3111-B(23 <sup>rd</sup> Edition) AAS	0.02 mg/l
j	Nickel (as Ni)	APHA: 3111-B(23 <sup>rd</sup> Edition) AAS	0.02 mg/l
k	Zinc (as Zn)	APHA: 3111-B(23 <sup>rd</sup> Edition) AAS	0.03 mg/
I	Boron (as B)	APHA: 4500 B-C (23 <sup>rd</sup> Edition), Carmine method	0.05 mg/l
30	Total Coliform	APHA: 9221-B (23 <sup>rd</sup> Edition), Multiple Tube Fermentation	Absent
31	Fecal Coliform	APHA: 9221-E (23 <sup>rd</sup> Edition), Multiple Tube Fermentation	Absent

## Annexure 17: Method of Analysis of Soil Sample

Sampling Parameters	Sample collection	Analytical Equipment	Methodology	Remarks
Porosity		-	IS: 2720 Part 7	
Water holding capacity		Keen Apparatus	HMSO, UK	Trial pit method for topsoil sample
Permeability		-	IS: 2720 Part 17	collection;
Moisture content		Electronic Balance	IS: 2720 Part 2	disturbed samples
Texture		-	IS: 2720 Part 4	Sumples
Particle size Distribution	Manual sample collection using	Glass wares	IS: 2720 Part 4	
Cation Exchange Capacity	hammer and container tube for	Centrifuge	IS: 2720 Part 24 (1976)	5% Leachate
SAR	collecting undisturbed top soil.	F. Photometer (Na, K) Titration ( Ca & Mg)	Calculation	to be made and as per APHA, "Standard Methods"
pH		pH Meter	4500 H+B	All method
Electrical Conductivity		Conductivity Meter	As per IS 14767 - 2000	numbers are as per APHA
Calcium		Glass wares	3500 Ca B	"Standard Methods" (21 <sup>st</sup>
Magnesium		Glass Wares	3500 Mg B	edition, 2005)
Sodium (Na)		F. Photometer	3500 Na B	
Potassium		F. Photometer	3500 K B	

## Annexure 18: Methodology for Ecology and Biodiversity Survey

## **Secondary / Desktop Literature Review**

No site specific (project site) data is available of flora and fauna, however information available on websites of Botanical Survey of India (BSI), ENVIS Centre, Zoological Survey of India (ZSI), District Forest working plan, published literature, research papers have been consulted.

## **Primary / Field Data Collection**

Sampling with standard methods was carried out to understand different floral and faunal components of the project site. The study area is dominated by scrub, shrubs, small and large trees along with agricultural fields and water bodies. The field observation on vegetation was made by surveying at different locations with the help of topographic maps and forest working plan. Birds were noted and identified with the help of binocular and standard field identification guides. Other animals were directly counted from amongst the vegetation, bushes and roadside fields. Other information regarding wild animals has been collected from the local people. Floral and faunal details along with other agriculture information have been collected during the field survey

## **Threatened Biodiversity Assessment Criteria**

Literature review of Indian wild Life Protection Act, 1972, Botanical Survey of India (BSI), Zoological Survey of India (ZSI), Red Data Book (Nayar &.Sastry, 1990¹).

KADAM ENVIRONMENTAL CONSULTANTS | JULY 2022

<sup>1</sup> Nayar, M. P. & A. R. K.Sastry (Eds.) (1990). Red data book of Indian plants. Vol. 3. Botanical Survey of India, Calcutta.

## Annexure 19: Study Methodology for Socio economic Survey

S.	Aim / Objective		ea	Methodology
No.		Study Area	Core Area Only	
1	To Identify and Assess			
1.1.	Social status of society in the focused area. To do this it is required to get reliable information with regards to:			
1.1.1	People residing in the study area along with key demographic figures as per the secondary data (mainly Census of India) giving information on: population, literacy, gender and occupation	V		Secondary data collection and collation from Census of India
1.1.2	Main sub-communities dwelling in the core zone by caste and religion		√	From interviews with PRI representatives
1.1.3	People who are vulnerable classes such as: Below Poverty Line (BPL), Scheduled Castes (SC) and Scheduled Tribes (ST)		√	From interviews with PRI representatives and census
1.2	Economic status of society in the study area. To do this it is required to get reliable information with regards to:			
1.2.1	Occupational pattern from secondary data (mainly Census of India) giving information on: main workers / marginal workers / non-working population	√		Secondary data collection and collation from Census of India
1.2.2	Sources of revenue available to Panchayati Raj Institutions (PRIs)		√	From interviews with PRI representatives
1.2.3	Economic well-being of different classes by gaining an understanding of: prevailing daily wage rates for labor (male / female), status of land holding across different classes / landless households, major crops and farmer support, livestock and animal husbandry		√	From interviews with PRI representatives
1.3	Status of physical and social infrastructure within the core and buffer areas. To do this, it is required to get reliable information with regards to			-
1.3.1	Physical infrastructure - reliable information on availability and adequacy with respect to: educational facilities, road infrastructure, power, water for drinking and irrigation, sanitation, garbage / MSW, banking facilities	√		From interviews with PRI representatives
1.3.2	Social infrastructure – reliable information on availability and adequacy with respect to infrastructure associated with: sports, community events and community self-help / support group		√	From interviews with PRI representatives
1.3.3	Cultural heritage of the area	√		From published literature and site visits
1.4	Effects of			-
1.4.1	Ongoing impacts of other developments in the vicinity of the subject development on people and their lifestyle within the core impact zones, as determined by the EIAC in interaction with FAE (WP / AP&AQ / SHW / RH & NV)		√	From focus group discussions

S.	Aim / Objective		ea	Methodology
No.		Study Area	Core Area Only	
1.4.2	Likely impacts of proposed operations (if a greenfield project) on people and their lifestyle within the core impact zones mentioned above		√	From focus group discussions
2.0	To Determine			-
2.1	Needs of different communities based on the work done in identification and assessment mentioned above		√	From data analysis, internal / client discussions
3.0	To Propose			-
3.1	A Social Management Plan with budgets, timelines and actionable items to achieve the expected outcomes		√	From data analysis, internal / client discussions

## Annexure 20: Copy of certified compliance report of Existing EC

#### THE NO.J-11/34-2021-IKUGNK



#### भारत सरकार

## GOVERNMENT OF INDIA

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय MINISTRY OF ENVIRONMENT, FOREST & CLIMATE

CHANGE

एकीकृत क्षेत्रीय कार्यालय, गांधीनगर / Integrated Regional Office, Gandhinagar

ए **407** , **409** "अरण्य भवन ", सीएच-**3** सर्कल के पास, सेक्टर-**10** ए, गांधीनगर-**382010**/ A-**407**& A-**409**, "ARANYA BHAWAN" Near CH-3 Circle, Sector-10A, Gandhinagar-382010

दूरभाष/Tel No: +9179-23255067 Email: iro.gandhingr-mefcc@gov.in

Dated:07th January 2022

To

The Additional Director/ Scientist 'E'

Monitoring Cell

Ministry of Environment, Forest and Climate change,

Indira Paryavaran Bhawan, Jorbagh Road, Aliganj,

New Delhi-110003

Subject: Review of Action Taken Report submitted by M/s ArcelorMittal Nippon Steel India Limited - reg.

Ref: MoEF's letter No. J-11011/714-A/2008- IA II (I) dated 05/07/2010 and: J 11011/381/2014- IA II (I) dated 09/03/2016.

Madam/Sir,

IRO Bhopal office had submitted a certified EC Compliance report to MoEF&CC, New Delhi vide letter dated 01.04.2021 wherein few partly compliances and non-compliance were reported. PP vide email dated 26.11.2021 submitted an action taken cum compliance report. The action taken report has been examined in light of the reply received from the PP followed by site inspection by IRO MoEF&CC, Gandhinagar. Based on the observations during the site visit on 17<sup>th</sup> and 18<sup>th</sup> December 2021 and review of the updated action taken report furnished by the project proponent vide e-mail dated 20.12.2021, the observations of IRO, Gandhinagar is annexed for information and necessary action.

This issues with the approval of competent authority.

Encl: As above

(Dr. Yogesh Kumar) Deputy Director (S)/Scientist-'C' IRO Gandhinagar, MoEFCC

Copy to:

- The Member Secretary, Industry, Ministry of Environment, Forests and Climate change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi-110003 for information please.
- Shri Rajiv Bhatnagar, M/s Arcelor Mittal Nippon Steel India Limited, 27 Km Surat-Hazira road, Hazira, Choryasitaluka, Surat - 394270, Gujarat for information please.

## Ministry of Environment, Forest & Climate Change Integrated Regional Office, Gandhinagar

Subject: Addendum to the compliance status reported vide letter dated 01.04.2021 by MoEF&CC, IRO Bhopal particularly with respect to partly complied and not complied conditions.

IRO Bhopal office has submitted a certified EC Compliance report to MoEF&CC, New Delhi vide letter dated 01.04.2021 wherein few partly compliances and non-compliance were reported. PP vide email dated 26.11.2021 submitted an action taken cum compliance report and requested for a site visit to verify the updated status of implementation of partly/non-complied conditions. Accordingly, a site visit to the project was undertaken on 17.12.2021 and 18.12.2021, wherein the action taken report was discussed in light of the reply received from the PP and accordingly, an updated compliance report was requested. Based on the observations during the site visit on 18.12.2021 and review of the updated action taken report furnished by the project proponent vide e-mail dated 20.12.2021, the remarks of MoEF&CC, IRO, Gandhinagar is presented below:

Updated status of Compliance w.r.to partly complied and not complied conditions of Environmental Clearance issued by the MoEF&CC Environment Clearance Reference letter. no.: J-11011/714-A/2008- IA II (I) dated 05/07/2010 and: J-11011/381/2014- IA II (I) dated 09/03/2016.

(Details of project: Replacement of existing Hot Briquetted Iron (BBI)/Direct Reduced Iron (DRI) Modules I and IV with Blast Furnace and associated facilities like Sinter Plant, Coke oven Plant and existing Electric Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) Facility in the existing Integrated Steewl Plant of M/s ArcelorMittal Nippon Steel India Limited)

Referred EC Conditions	Remarks of MoEF&CC, Regional office, Bhopal	Remarks of MoEF&CC, IRO, Gandhinagar based on the updated compliance status furnished by the Project Proponent and site visit on 17.12.2021 & 18.12.2021.
Specific Condition No. (vi) -	Point-wise compliance	Company is complying with the MoEF&CC
EC(09/03/2016): The Standards	status of G.S.R. No. 277	standards issued vide G.S.R. No. 277(E)
issued by the Ministry vide G.S.R.	(E) dated 31st March,	dated 31st March, 2012. Please find the
No. 277(E) dated 31st March, 2012	2012 has not been	pointwise compliance status attached as
regarding iron and steel plant shall	submitted.	Ann- 1.
be followed.		
		Observation:
		Complied
		The PP has not installed cove oven plant. The
		parameters mentioned in GSR No 277 (E) for
		Sintering plant, rolling mills, are furnace etc.

furnace and fugitive emissions were found to be very close to the prescribed limit. Measures should be taken to prevent its limit to cross beyond the prescribed one. The records were checked at site and it was found that the monitoring of parameters marked in G.S.R. No 277 were carried out by Pollucon Laboratories Pvt Ltd a NABL accredited laboratory.

were found in the prescribed limits. The suspended solid in the effluent of blast

In view of the information furnished by the project proponent and as per the site observations noted above, the stipulated condition is considered as complied.

## Specific Condition No. (x) – EC(09/03/2016):

'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.

## General Condition No. (iv) – EC(09/03/2016):

Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.

## Specific Condition No. (viii) – EC(05/07/2010):

An effort shall be made not to discharge any treated waste water outside the premises and adopt 'Zero' effluent discharge. An effort shall be made to recycle and reuse the maximum treated wastewater in the process itself to reduce quantity of water consumption and effluent discharge into Tapi estuary. Only excess treated waste water after meeting the norms of Gujarat Pollution Control Board or as mentioned in E(P) Act, whichever

Mixing of industrial waste water with storm water drains was observed.

- As per the prevailing metallurgical industrial practices in 1990s, our plant designed for carrying the Storm water & Industrial water in the common channels. Now separating the channels in the current plant layout is difficult. We have undertaken pipeline job to separate effluent water from storm water. This job is in progress & more than 50% work is completed. The photographs of the laid pipeline and proposed pipeline network drawing are submitted as **Ann-2**.
- As per Environment Clearances granted earlier, AMNS has permission to discharge water to the Tapi Estuary.
- As per latest Consent To Operate (CTO) granted by GPCB, Company has permission to discharge the water into Tapi Estuary for HRC Division, Plate Mill Division and Power Division. (Total Permission 27572 M3/day) and currently around 12,000 m3/day treated effluent is being discharged into Tapi estuary after confirming GPCB discharge standards.
- In 2016 EC, Ministry has recommended Zero liquid discharge (ZLD) for the proposed expansion facilities, however due to Financial Implications and NCLT earlier management could not be able to complete the ZLD. Now the new management i.e. AMNSI has taken over ZLD project. Pipe Line work is already started. Expected to complete in phases. First Phase will be

are more stringent, shall be discharged to Tapi Estuary through RCC Pucca Channels.

## General Condition No. (iv) – EC(05/07/2010):

Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.

completed by Jan'23 and remaining Phase will be completed by Dec'23.

#### Observation:

### **Not Complied**

	Generation in M <sup>3</sup>			Trea	
Mo nth	Mini mu m	Maxi mum	Aver age	tmen t / Recy cling / Reus e	Disc harge
Jun e'2 1	232 00	2612 5	2473 9	1227 4	1246 5
July '21	231 30	2670 0	2581 7	1280 8	1300 8
Au g'2 1	231 20	2714 2	2639 0	1309	1329 7
Sep '21	233 50	2625 3	2409 5	1195 4	1214 1
Oct '21	232 56	2595 4	2497 8	1239 2	1258 6
No v'2 1	245 05	2735 8	2639 7	1309 6	1330 0

The treated waste water was used in various system making process within the unit. But a huge volume of water from the Blast Furnace unit were discharged into a drain which was going out of the premises. The water was accumulated inside the premises of blast furnace unit and the raw material handling in the unit was also very poor.

The units were draining water outside the premises at three locations for which they have taken the consent from GPCB. The water quality monitoring station was installed

		at the outlet. The results were within the prescribed limits.
		The unit has taken an initiative to achieve the target of ZLD and in these directions they have started the construction for separating storm water from the industrial effluent. The Pipe Line work was seen during site inspection. It was informed that they are planning to execute the entire process in phases and the First Phase will most likely be completed by January 2023 and remaining Phase will be completed by December 2023.
		At present it is directed to make necessary arrangement to check the outfall of water from the blast furnace unit. The action taken should be intimated within 15 days to the regional office Gandhinagar.
		In view of the above and as per site observation the unit are in progress stage to achieve the mandate of ZLD. Although in the present scenario the condition is considered as not complied.
1		
Referred EC Conditions	Remarks of MoEF&CC, Regional office	Compliance Status & Action Plan as on 18.12.2021
Referred EC Conditions  Specific Condition No. (xi) — EC(09/03/2016): Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.	MoEF&CC, Regional	For STPs, Residual Chlorine should be maintained above 0.5 ppm to ensure the disinfection and GPCB norms for STP is also insisting for minimum 0.5 ppm of Residual Chlorine.  NABL approved & MoEF&CC recognized third Party agency is collecting and analyzing the STP samples regularly as per the Guidelines and the results are found within the limits and the copy of the STP samples analysis report is submitted as Ann-2 for
Specific Condition No. (xi) — EC(09/03/2016): Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.  Standard Condition No. (xi) — EC(05/07/2010): Ground water monitoring around	MoEF&CC, Regional office  Total residual chlorine from STP (600 m3 and 400 m3) and total dissolved solids exceeded	For STPs, Residual Chlorine should be maintained above 0.5 ppm to ensure the disinfection and GPCB norms for STP is also insisting for minimum 0.5 ppm of Residual Chlorine.  NABL approved & MoEF&CC recognized third Party agency is collecting and analyzing the STP samples regularly as per the Guidelines and the results are found within the limits and the copy of the STP samples
Specific Condition No. (xi) — EC(09/03/2016): Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent.  Standard Condition No. (xi) — EC(05/07/2010):	MoEF&CC, Regional office  Total residual chlorine from STP (600 m3 and 400 m3) and total dissolved solids exceeded	For STPs, Residual Chlorine should be maintained above 0.5 ppm to ensure the disinfection and GPCB norms for STP is also insisting for minimum 0.5 ppm of Residual Chlorine.  NABL approved & MoEF&CC recognized third Party agency is collecting and analyzing the STP samples regularly as per the Guidelines and the results are found within the limits and the copy of the STP samples analysis report is submitted as Ann-2 for your kind reference.  Groundwater monitoring is being carried out regularly and reports are

#### Regional Office at Bhopal, CPCB monitoring for ground water were carried out by NABL/MoEFCC accredited laboratory at and GPCB. slag dumping area behind steel melting plant 1 on 27th April 2021 and the results were found within the prescribed limits. It is directed to submit the ground water monitoring data around secure land fill area. For STPs, Residual Chlorine was maintained as per GPCB norms of minimum 0.5. The monitoring reports submitted by third party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi was verified and it was found that the parameters were within the prescribed limits. Although the TDS was found be very close to the maximum prescribed limit. In view of the above, the condition is considered as complied. ETP Sludge was scattered All the Solid waste & Hazardous waste's Specific Condition No. (xii) -EC(09/03/2016) & Specific near the ETP & also huge Handling, Storage, Utilization and disposal quantity of sludge was are being done in environment friendly Condition No. (x) -EC(05/07/2010): stored in open manner as per the statutory guidelines. ETP sludge is generated in dry condition. Dedicated storage area has been developed to Proper handling, storage, utilization and disposal of all the solid waste store & contain ETP Sludge properly. ETP shall be ensured and regular report sludge is being recycled maximum in our regarding toxic metal content in the Sinter plant operations and remaining is being disposed to GPCB approved TSDF waste material and its composition, end use of solid / hazardous waste sites. ETP sludge storage area photograph shall be submitted to the Ministry's submitted for your kind reference as Ann-4. Regional Office, SPCB and CPCB. Also, we are proposed to lay the paved approach roads for the ETP storage area and develop the Greenbelt around the storage area by Apr'2022. Complied No such sludge was observed near the ETP plant. It was disposed at TSDF site. A drain was trenched at the ETP site where water was seen accumulated, which needs to be filled in a time bound manner and the report should be submitted to the IRO Gandhinagar. The unit has provided two sludge storage area which

Specific Condition No. (xiii) – EC(09/03/2016):  A time bound action plan shall be submitted to reduce solid waste generated due to the project related activities, its proper utilization and disposal.	Time bound action plan with reference to solid waste used for backfilling has not been submitted.	were covered by the shed. There needs an improvement in the design of sludge storage area so that rainwater could not mix with the solid waste. The garland drain should be constructed all around to prevent the mixing along with a U shape ramp for loading and unloading of sludge. The area has the potential to develop a green belt all around. The roads around storage area should be made pucca in a time bound manner to prevent the fugitive emissions.  In view of the above, the condition is considered as complied.  Most of the material is recycled / reused inside the plant. Time bound action plan for Solid Waste Utilization is prepared and submitted in the Modification Project EIA report and the same is submitted as Ann-5 for your consideration please.  Complied  As per the documents provided at site it can be concluded that the unit were utilizing 80% of solid waste in house whereas they are exploring the possibilities with international technology supplier/CSIR labs to utilize 100% waste.  The slag storage area was seen and it was informed that they were in negotiation with NHAI to use the slag in road construction. They are also in negotiation in RDSO for replacing ballest with steel slag.
		In view of the above the condition is considered as complied.
Specific Condition No. (xiv) – EC(09/03/2016): Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and Subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufactures for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Chennai.	Fly ash utilization was not ensured stating that there is no generation of fly ash	AMNS India is not generating Fly ash and hence requesting for removing this condition.  Complied  No generation of fly ash were seen during site inspection. They don't have coal based power plant.

## Specific Condition No. (xv) – EC(09/03/2016):

A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.

## <u>Specific Condition No. (xvii) – EC(09/03/2016):</u>

At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.

## Specific Condition No. (xix) – EC(09/03/2016):

The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall interalia address

(i) Standard operating process/ procedure to being into focus any infringement / deviation violation of environmental or forest norms/ conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/ violation environmental norms to the Board of Directors of the

Risk and Disaster Management plan, details of expenditure incurred and funds earmarked for Enterprise social commitment, details of towards CER, policy compliance status of CC&A and EIA/EMP report has not been submitted.

Risk and Disaster Management Plan submitted to MoEF&CC / GPCB / CPCB through EC Compliance report dated 31st May, 2021 and copy of letter for your records as **Ann-6**.

We have undertaken community development activities for nearby villages. Till 2019, the unit was under NCLT process and no major CSR activities was carried out. Last year CSR Activity details and action plan for next 05 years is submitted as **Ann-7**.

CCA Compliance Report already submitted in the last compliance report of Oct'20 to Mar'21 dated 31st May, 2021

Our new management taken over the unit recently and we are framing the website in consultation with the parent company. After framing the new website, it will be uploaded as per the requirement. We will be getting system ready by Jan-22.

### **Partly Complied**

The unit has submitted the risk and disaster management plan. CSR activities were undertaken in and around the nearby villages of proposed expansion project. An amount of Rs. 16 crores have been dedicated for CSR activities for five years and the company has to identify stakeholders for the planning and implementation of CSR activities. Proposed activities with its estimated cost for benefitting the society at large and the local rural community in particular for a period of 5 years was provided the PP.

The CCA compliance report was already submitted to IRO Bhopal. During the site visit, it was noticed that the project proponent is complying with all the environmental protection measures like operation of ETP, air pollution control devices, fume extraction system etc., the details of which were discussed in the certified compliance report.

company and/ or stakeholders or shareholders.

## General Condition No. (i) – EC(09/03/2016):

The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB) and the State Government.

## General Condition No. (viii) – EC(09/03/2016):

The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care etc.

### <u>General Condition No. (vi) –</u> EC(05/07/2010):

The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care etc.

## General Condition No. (ix) – EC(05/07/2010):

The project proponent shall upload the status of compliance of the stipulated environment clearance condition, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC at Bhopal. The respective Zonal Office of CPCB and the SPCB. The

The unit has upgraded the Fume Extraction System of to reduce the gas emissions.

The unit has taken proactive steps towards compliance of conditions stipulated by the Ministry. Due to change in the ownership followed by a COVID setback the pace of implementation of the conditions were slow. It was promised by the PP to achieve the compliance in a planned and time bound manner.

criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

## General Condition No. (x) – EC(09/03/2016):

A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The Clearance letter shall also be put on the website of the company by the proponent.

## <u>General Condition No. (viii) –</u> EC(05/07/2010):

A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila parishad / Municipal Corporation, Urban Local body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

## <u>General Condition No. (xi) – EC</u> (09/03/2016):

The project proponent shall upload the status of compliance of the stipulated environment clearance condition, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEFCC at Bhopal. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack

Documentary proof of the information that industry is falling under Hazira notified Area has not been furnished.

Our Integrated Steel complex is located in the Hazira Notified area from the inception of our operation and the Hazira Notified area map highlighting our boundary is submitted as Ann-8

## Complied

The map shown during site inspection affirms that the unit falls under Hazira Notified area. Whereas an area of approx. 38ha falls outside the notified area.

Compliance status of EC conditions and monitored data has not been uploaded on company's website.

Our new management taken over the unit recently and we are framing the website in consultation with the parent company. After framing the new website, it will be uploaded as per the requirement. We will be getting system ready by Jan-22.

### Not complied

The unit is in process of making the website. It was informed that it will get ready by January 2021 and after that all the documents will be uploaded.

emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.		
Specific Condition No. (vii) – EC (05/07/2010):  Total water requirement from Singanpore Weir shall not exceed 1, 20, 711 m3 / day. No ground water shall be used. Separate drains for domestic, process, strom water shall be provided in consultation with GPCB. All the other effiuents shall be treated in plant – wise	Month-wise daily maximum and minimum water usage data has not been submitted	Month wise Daily Maximum & Minimum water usage data is being submitted along with Half yearly EC compliance report from 2021 and the month wise max & min water usage data for 2021 is submitted as Ann-9.  Complied  The unit has provided the monthly data on
independent waste water treatment system. BF – GCP and coal washery water shall be treated in thickener and used in the pig casting machine. Acidic and alkaline effluent from DM water plant shall be neutralized and reused in the plant through ash pond. Oil traps shall be provided to remove oil and grease. All the treated waste water from process shall be treated and recycled and reused for ash handling, dust suppression and green belt development. The domestic wastewater shall be treated in STP and treated wastewater after conforming to the prescribed standards shall be used for green belt development.		water uses. It was found that the uses were within the prescribed limits.
Specific Condition No. (vii) – EC (05/07/2010):  Total water requirement from Singanpore Weir shall not exceed 1, 20, 711 m3 / day. No ground water shall be used. Separate drains for domestic, process, strom water shall be provided in consultation with GPCB. All the other effluents shall be treated in plant – wise independent waste water treatment system. BF – GCP and coal washery water shall be treated in thickener and used in the pig casting machine. Acidic and alkaline effluent from	Water consumption data per ton of steel as prescribed by standard has not been submitted.	Specific water consumption details are being maintained and Water consumption details for FY 2020-21 is 3.78 m³/TCS.  Complied  The unit has provided the water consumption/ton of steel. It varied from 3.68 m³/TCS in FY 2019-20 to 3.84 m³/TCS in FY 3.68 m³/TCS.

DM water plant shall be neutralized and reused in the plant through ash pond. Oil traps shall be provided to remove oil and grease. All the treated waste water from process shall be treated and recycled and reused for ash handling, dust suppression and green belt development. The domestic wastewater shall be treated in STP and treated wastewater after conforming to the prescribed standards shall be used for green belt development.  Specific Condition No. (xi) – EC (05/07/2010):  As proposed, green belt for adequate width and density shall be provided in at least 33 % of plant area and along the boundary wall of the site as per the CPCB guidelines.	Details of total area utilized for greenbelt development has not been submitted.	Current Green belt area is around 22%. Updated Layout of the Greenbelt prepared with detailed action plan for meeting the 33% target by Dec'2024.  Action plan & Layout enclosed herewith as Ann-10.
		Complied  The unit has submitted the green belt development plan. The layout plan was seen at the site. At present 136.05 ha (20.31%) of plant area is under green belt and the unit is planning to add another 83 ha (12.39%) under green belt. The total green belt will be approx. 32.69% in the plant area.
Specific Condition No. (xiv) – EC (05/07/2010): The company shall comply with all the recommendations / action points made in the Charter on Corporate Responsibility for Environment Protection (CREPs) and progress report shall be submitted to MoEF/CPCB.	Point-wise compliance status of Corporate Responsibility for Environmental Protection (CREPs) has not been submitted.	Please find enclosed herewith the point wise compliance on Corporate Responsibility for Environment Protection (CREPs) as Ann-11.  Complied  The unit has submitted the point wise compliance of CREPs. The measures were highlighted to reduce 100% fugitive emissions by installing secondary de-dusting facilities.
General Condition No. (xii) – EC (05/07/2010):  The project Proponent shall inform the public that the project has been	Details of newspaper advertisement of EC granted, financial closure and final approval of	Basically, this 2010 EC is an administrative one for merging of earlier separate ECs obtained for our two units in 2007. There was no change in production as per this 2010 EC.

accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper that are widely circulated in the region of which one should be in vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office at Bhopal.

## <u>General Condition No. (xiii) – EC</u> (05/07/2010):

The Project Authorities 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 and the date of commencing the land development work.

project, date of commencing land development work has not been submitted.

Paper advertisements for the 2007 ECs only were given by the earlier management and the copy the same is submitted as **Ann-12**. We sincerely apologized for this pending action. We will assure to comply this point for all the ECs hereafter.

#### **Partly Complied**

The unit has published the public notice in two newspapers on 14<sup>th</sup> March 2016. The PP has apologized for the action taken in the past and ensured that no such lapse will occur in future correspondence.

#### SUMMARY NOTE:

Updated status of implementation of Conditions:

Compliance status of partly complied/not complied reflected in the Certified Compliance report dated 01.04.2021	Updated Compliance status as on 18.12.2021
Partly Complied- 13 (J-11011/381/2014- IA II (I) dated 09/03/2016) and 12 (J-11011/714-A/2008- IA II (I) dated 05/07/2010)	Complied – 10 including both ECs  Partly Complied – 2 including both ECs
Not complied-2 (J-11011/381/2014- IA II (I) dated 09/03/2016) and 2 (J-11011/714-A/2008- IA II (I) dated 05/07/2010)	Not Complied – 2 including both ECs

Deputy Director (S)/Scientist 'C' MoEFCC, IRO, Gandhinagar.

डॉ.योगेश कुमार/Dr. Yogesh Kumar वैज्ञानिक 'सी'/Scientist 'C' पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, Ministry of Environment, Forest & Climate Change, भारत सरकार/Govt. of India ए.क्षे.का, गाँधीनगर(गुजरात)/IRO.Gandhinagar(Gujarat)



# भारत सरकार GOVERNMENT OF INDIA पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE

SPEED POST

एकीकृत क्षेत्रीय कार्यालय. Integrated Regional Office, ''केन्द्रीय पर्यावरण भवन''

"Kendriya Paryavaran Bhavan" लिन्क रोड नं0—3/Link Road No. 3

ई—5,रविशंकर नगर/ E-5,Ravishankar Nagar, दूरभाष /Phone: 0755-2426611, 2466525,

Dated: 01/04/2021

फैक्स /Fax: 0755-2463102 भोपाल (म०प्र०)/Bhopal (M.P.)-462016 अणुडाक /e-mail: rowz.bpl-mef@nic.in

File No .: 5-52/2009(Env)/672

The Joint Secretary, (IA)
Ministry of Environment, Forest and Climate Change
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi - 110003

Sub: Environment Clearance for Integrated Steel Plant at Hazira, District Surat, Gujarat by M/s Arcelor Mittal Nippon Steel India Limited (Formerly Essar Steel India Limited).

Ref: 1. Ministry's Letter No. J-11011/714-A/2008-1A II (1) dated 05.07.2010

2. Ministry's Letter No. J-11011/381/2014-1A II (1) dated 09.03.2016

महोदय,

मंत्रालय के उपरोक्त संदर्भित पत्रों के संदर्भ में उक्त परियोजनाओं को पर्यावरणीय दृष्टिकोण से अनुमित देते समय अनुबद्ध शर्तों के अनुपालन एवं certification of compliance के निर्देशानुसार, पर्यावरणीय अनुमित दिनांक 05.07.2010 व 09.03.2016 का अनुविक्षण प्रतिवेदन (मॉनिटरिंग रिपोर्ट) एतद् द्वारा संलग्न कर प्रेषित है। यह सक्षम प्राधिकारी द्वारा अनुमोदित है।

भवदीय

संलग्नः उपरोक्तानुसार

विश्व बन्धु मीणा) वैज्ञानिक 'सी'

#### Copy To:

- 1. Member Secretary, Industry, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi-110003 for kind information please.
- 2. The Director, Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi-110003 for kind information please.
- 3. Shri Rajiv Bhatnagar, M/s. Arcelor Mittal Nippon Steel India Limited, 27 km, Surat -Hazira road, Hazira, Choryasitaluka, Surat District. 394270, Gujarat for kind information please.

(विश्व बन्धु मीणा) वैज्ञानिक 'सी'

# Monitoring the Implementation of Environmental safeguards Ministry of Environment, Forest & Climate Change Integrated Regional office Gandhi Nagar Monitoring Report

#### PART-I DATA SHEET

Sr. No.	Particulars	Details
1.	Project Type :River Valley/Mining/ Industry/ Thermal/Nuclear/Other(Specify)	Industry
2.	Name of the Project	Replacement of existing Hot Briquetted Iron (HBI)/Direct Reduced Iron (DRI) Modules I to IV with Blast Furnace and associated facilities like Sinter Plant, Coke Oven Plant and existing Electric Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing Integrated Steel Plant of M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)
3.	Clearance letter (s)/OM No. and date	F. No. J-11011/381/2014-IA II (I) and dated 9th March, 2016.
4.	Location  a) District b) State c) Location/Latitude/Longitude	a) Surat b) Gujarat c) Location Latitude.: 21° 6'43.92" N, Longitude.: 72°38'46.66 "E
5.	Address for correspondence a.) Address of concerned Chief Engineer (With Pin Code & Mob. No./Telephone/ Telefax/E-mail) b) Address of concerned Project Engineer (With Pin Code & Mob. No./ Telephone/Telefax/ E-mail)	Rajiv Bhatnagar ArcelorMittal Nippon Steel India Limited, 27 km, Surat -Hazira road, Hazira, Choryasi taluka, Surat District 394270 L.No. +912616683241 M. No. 9879100063
6.	Salient Features a.) Of the project b) Of the Environment management Plan	E: Rajiv.Bhatnagar@amns.in Already mentioned in detailed in Environment Impact Assessment (EIA).
7.	Production details during compliance period and (or) during the previous financial year.	Please find enclosed as per Annexure-1
8.	Break up of the Project Area  a) Submerged area : forest & Non Forest  b) Others	Project activity will be carried out within existing premises. No additional land area will be required.

9.	Break up of the project affected population with enumeration of those losing house/dwelling unit only agricultural land, both dwelling unit & agricultural land & land less labours/artisan  a) SC,ST, Adivasi b) Others  (Pl Indicate whether these figures are based on any scientific and systematic survey carried out give details and year of survey)	of any population.
10.	Financial Detail  a) Project cost as originally revised estimates and the year of price reference	NA as project has not taken off.
	b) allocation made for environment management plan with item wise and year wise break up	
	c) Benefit cost ratio/internal rate of return and the year of assessment (if applicable)	
	d) Whether above includes the cost of environment management as shown in the above	
	e) Actual expenditure incurred on the project so far	
	f) Actual expenditure incurred on the Environment Management Plan so far	
11.	Forest Land Requirement  a) The status of approval for diversion of forest land for non forestry use	Forest land will not be acquired
	b) The status of cleaning felling	
	c) The status of compensatory afforestation, if any	
	d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far	
12.	The status of clear felling in non forest areas (such as submergence area of reservoir, approach roads) if any with quantitative information	
13.	Status of Construction	Construction has not yet started.

	Date Letter from MoEF&CC RO Bhopal  04.12.2020 MoEF&CC Bhopal's email dated 03.12.2020 regarding additional information	Date  Letter from PP  06.12.2020: The PP vide email dated 06.12.2020 submitted the additional information.		
	RO Bhopal			
	(The first monitoring report may conbut the later reports may cover only the	tain the details of all the letters issued so far		
16.	<ol> <li>Details of correspondence with project authorities for obtaining ac plans/information on status of compliance to safeguards other than the rou</li> </ol>			
	b) Date of site visit for this monitoring report	ng 27th & 28th Nov, 2020.		
	a) The dates on which the project w monitored by the MoEF & CC, Region Office on previous occasions. applicable)			
15.	Details of Site visit			
14.	Reasons for the delay if the project yet to start	is After initial feasibility studies etc. the project could not take off due to paucity of funds. Later the company went into NCLT process and then ownership changed. Project is under reconsideration.		
	b) Date of completion (Actual and/planned)			

#### Part - II & III

## DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF ENVIRONMENT CLEARANCE AND ENVIRONMENT MANAGEMENT

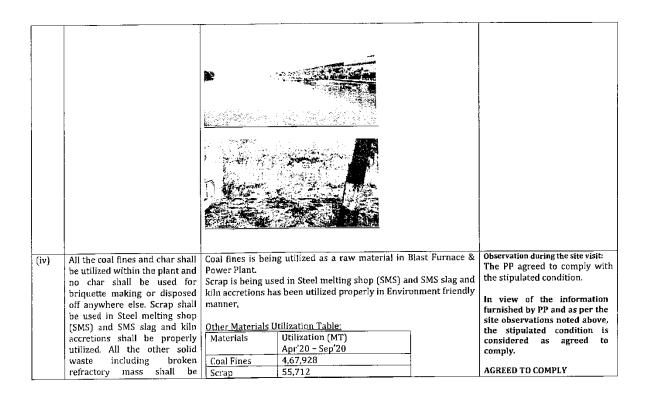
Details of project: Environment Clearance for Replacement of existing Hot Briquetted Iron (HBI)/ Direct Reduced Iron (DRI) Modules I to IV with Blast Furnace and associated facilities like Sinter plant, Coke oven plant and Existing Arc Furnace (EAF) facility with Basic Oxygen Furnace (BOF) facility in the existing integrated steel plant of M/s Arcelor Mittal Nippon Steel India Limited (Formerly Essar Steel India Limited).

#### EC No: F.No. J-11011/381/2014-IA II (I) dated 9th March, 2016. (Compliance Status for the period April 2020 to September 2020)

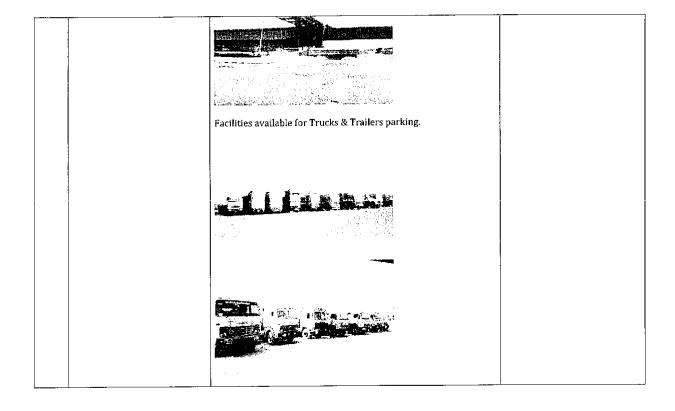
Sr. No.	EC Condition  SPECIFIC CONDITIONS	Status of Compliance as submitted by the PP Remarks of F office based of status furnish Proponent a observations of	
(i)	The Project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to ministry and its regional office.	Installed Four nos. of Continuous (24*7) Ambient Air Quality Monitoring Stations (CAAQMS).  Monthly Manual monitoring is being done for Ambient by Third Party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports are being sent to GPCB & CPCB & MoEF&CC regularly.  Third party Ambient Monitoring Reports Results for Apr'20 – Sep'20 along with Third Party Monitoring Report for Sep'20 enclosed herewith as Annexure – 1.	During the site visit, the PP informed that four nos. of Continuous (24*7) Ambient Air Quality Monitoring Stations

			furnished by the PP. It is noted that AAQ parameters are
	:		within the stipulated norms during the compliance period.
			In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
			COMPLIED
(ii)	Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitators	Continuous stack monitoring facilities for 72 stacks have been provided with effective air pollution control devices such as Dedusting systems, Electrostatic Precipitator (ESP), Bag House & Bag Filters, Hydro cyclone, Venturi Scrubber.  ESP Photograph (Sinter Plant):	During the visit, the PP
	(ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm3 and installing energy efficient technology.		devices.  The third party stack emission monitoring reports/data as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. The
		Bag House Photograph: (Bag Filters installed at SMP1, SMP2, Lime Plant 1, Lime Plant 2, Corex, Blast Furnace, HBI, Plate Mill, Pipe Mill)	reports were checked randomly and it was noted that the parameters were within the stipulated norms during the compliance period.
			In view of the information

			furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied. COMPLIED
		Monthly manual monitoring is being done for all Stacks by Third Party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports are being sent to GPCB & CPCB & MoEF&CC regularly.  Third party Stack Monitoring Reports Results for Apr'20 – Sep'20 along with Third Party Monitoring Report for Sep'20 enclosed herewith as Annexure – 2.	
(iii)	Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall he explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development.	Apr'20 - Sep'20.  We are using air cooled condensers and closed circuit cooling system.	Observation during the site visit: The visit to water reservoir was undertaken. The PP informed that total 8,10,081 m³ rain water harvested for the period Apr'20 - Sep'20. The treated effluent is being used for dust suppression and green belt development.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.



	properly disposed of in environment-friendly manner.	SMS Slag 5,12,626	
(v)	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coal mines shall be created within the Unit.	cleaning of the roads are being done regularly through mechanical sweepers.	Observation during the site visit: The internal roads are provided either with black top or by concrete. The PP informed that cleaning of the roads are being done regularly through mechanical sweepers.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
			COMPLIED



(vi) The Standards issued by the The Standards issued by the Ministry vide G.S.R. No. 277(E) dated Observation during the site visit:

		Ministry vide G.S.R. No. 277(E) dated 31st March, 2012 regarding iron and steel plant shall be followed.	31st March, 2012 regarding iron and steel plant is being followed.	The PP stated that the standards issued by the Ministry vide G.S.R. No. 277(E) dated 31st March, 2012 regarding iron and steel plant is being followed.
				However, the PP should submit the point-wise compliance status of G.S.R. No. 277(E) dated 31st March, 2012.
				In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
(1	vit)	The National Amblent Air Quality Emission Standards issued by the Ministry vide G.S.R. No 826 (E) dated 16th November, 2009 shall be followed.		Observation during the site visit: The PP stated that National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No 826 (E) dated 16th November, 2009 is being followed. During the site visit, the PP informed that Four nos. of Continuous (24*7) Ambient Air Quality Monitoring Stations (CAAQMS) have been installed. The third party
				ambient air monitoring reports as monitored by NABL accredited laboratory, M/s.
				Pollucon Laboratory, 1478. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. It is noted that AAQ parameters are within the stipulated norms during the compliance period.
				In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
(viii		including secondary fugitive emissions from all the sources shall be controlled within the	Monthly manual monitoring is being done for fugitive emissions by Third Party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports are being sent to GPCB & CPCB & MoEF&CC.	COMPLIED Observation during the site visit: The PP informed that monthly manual monitoring is being done for fugitive emissions by Third Party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi.  The monitoring data furnished

		PARTICULAT	E MATTER ( P	M10 ) – Mon	thly Average		
LOCATION	April 20	May'20	Jun' 20	Juli 20	Aug' 20	Sep* 20	CPCB Standardo
EAF HIV	F1	t+	1610	1730	1542	1420	4000
8 <sup>t</sup> ast Furnace	Ья	h.×	1836	2150	2478	25.12	3000
Conarc	4.71	t.e	2103	1978	2254	2086	3000
Corex 1	(1.9	þ.n.	1325	1250	1419	1920	3000
Corex 2	6.9	t×.	1789	1050	1258	1420	3000
Sinter Plant	K4	**	\$84	1052	2680	2710	3000
LP · A	4.1	t.e	2015	2148	235C	2250	4000
LP-B	610	6.8	1662	1554	1651	1782	3000

by the PP shows that parameter are within the stipulated norms during the compliance period.

In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.

COMPLIED

Guidelines/ Code of Practice issued by the CPCB is being followed.

Third party Fugitive Monitoring Report for Sep'20 enclosed herewith as Annexure – 3.

(ix) Vehicular Pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.

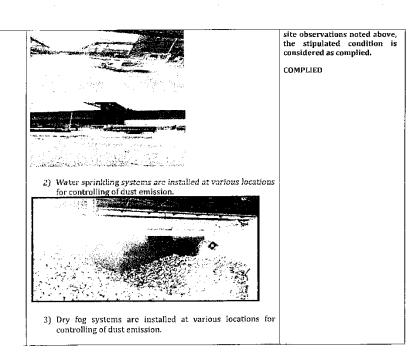
Vehicular Pollution due to transportation of raw material and finished product shall be

1) Regular cleaning of dust on roads through mechanical sweepers.



Observation during the site visit:
During visit, the PP informed
that various dust control
measures are in place. The PP
stated that regular deaning of
dust is being done on roads
through mechanical sweepers.
Water sprinkling systems are
installed at various locations
for controlling of dust emission.

In view of the information furnished by PP and as per the



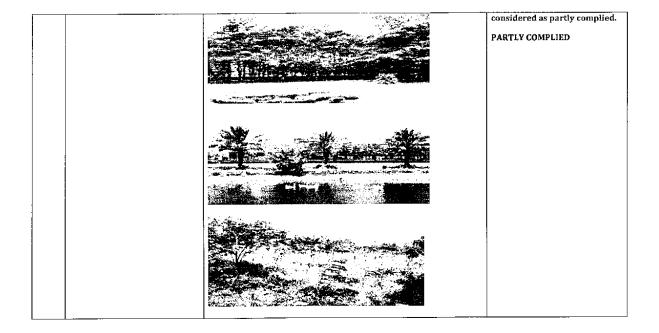
(x)	'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.	As per EC conditions, we are authorized to discharge treated cffluents through three authorized outlets at Tapi Estuary. However, we are trying for maximum usage of Treated effluents by Reusing & Recycling through gardening and plantation for attaining Zero Effluent discharge.	Observation during the site visit: During the visit, it was observed that at some locations the industrial waste water was got mixed with storm water drains.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as not complied.  NOT COMPLIED
(xi)	Regular monitoring of influent	Monthly manual monitoring is being done by Third Party (M/s.	Observation during the site visit:
	and effluent surface, sub- surface and ground water shall he ensured and treated wastewater shall meet the	Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports is being sent to GPCB & CPCB & MoEF&CC.  Monthly manual Marine monitoring of Tapi Estuary is being done	During the visit, the PP

	Pollution Control Board or described under the E(P) Act whichever are more stringent.	by Third Party (M/s. Shree Green Environmental Laboratories) NABL accredited laboratory to evaluate the marine status of the estuary due to effluent discharge and report of the same is sent to GPCB & CPCB on monthly basis. Similarly, a six monthly report is also being sent to MoEF&CC. Further 8 locations sampling and analysis of physico-chemical & biological environmental monitoring is conducted pre monsoon and post monsoon to study the overall impact on marine environment due to discharge of Treated effluent to the estuary by Third Party (M/s. Shree Green Environmental Laboratories) NABL accredited laboratory involving Marine ecology & Biodiversity expert.  Third party Effluent & Marine Monitoring Reports Results for Apr'20 – Sep'20 along with Third Party Monitoring Report for Sep'20 enclosed herewith as Annexure – 4.	Ltd. The monitoring reports were furnished by the PP. It was noted that the total residual chlorine from STP(600m³ & 400m³) is exceeding the norms.  Further, it was observed that at some locations the industrial waste water was got mixed with storm water drains.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
(xii)	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid / hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.	manner as per statutory guidelines. Hazardous waste disposal is being done at GPCB approved TSDF Site / Recyclers.	Observation during the site visit: The PP furnished the hazardous waste disposal data during the compliance period. However, during the visit it was observed that the ETP Studge was scattered near the ETP & also a huge quantity of sludge was stored in open.  In view of the information furnished by PP and as per the site observations noted above,

	1111110	1 14 12 19		
	Used Oil	41.40 KL		the stipulated condition is
	Zinc Dross	484.35 MT		considered as partly complied.
				PARTLY COMPLIED
}	TSDF Membersh	nin Cartificata		
	13DF Meinbersi	mp Certificate:		
		GPARUCH ENVIRO INFRASTRICIUM	LEMITED	
	17.7			
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(xiii) A time bound action plan	ı shall   Solid waste go	enerated during construction	is reused for	Observation during the site visit:

	be submitted to reduce solid waste generated due to the project related activities, its proper utilization and disposal.	Details are already submitted in EIA Report.	The PP stated that solid waste generated during construction is reused for backfilling and internal road making purpose. However, the PP should clarify regarding submission of time bound action plan.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
(xiv)	Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and Subsequent amendment in 2003 and 2009. All the fly ash shall be provided to cement and brick manufactures for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office at Chennai	1	Observation during the site visit. The PP stated that there is no generation of fly ash from their unit and request for deletion of this condition.  In view of the submission by PP, the stipulated condition may be considered as not complied till the needful amendment.  NOT COMPLIED
(xv)	A Risk and Disaster Management Plan shall be prepared and a copy submitted	Risk and Disaster Management Plan already submitted along with the EIA Report.	Observation during the site visit: The PP informed that Risk and Disaster Management Plan

	to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.	already submitted along with the EIA Report. However, the documentary proof is yet to be furnished by the PP. In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied. PARTLY COMPLIED
(xvi)	Green belt shall be developed in at least 33% of the project area by planting native and broad leaved species in consultation with local DFO and local communities as per the CPCB guidelines.	During the visit, the PP





At least 5% of the total cost of (xvii) the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. of Implementation such program shall be ensured by constituting a Committee

Since last 5 Years, Company was recurring losses and was under CIRP process and referred to NCALT. So, we are not falling under the norms of CSR activities because of said reason.

However, we have undertaken community development activities

for nearby villages.

Brief summary of Community Development Activities for nearby

villagers are as follows:

1) Computer Literacy skill training at Lok Vikas Kendra,
Hazira, attended by 15 students benefited every day.

Observation during the site visit:
The PP furnished some of the details of community development activities like Computer Literacy skill training, providing support to the Nav Jagruti Vidhyavihar Hazira, tailoring training to women etc.

However, the PP should submit the item-wise expenditure details for last three years &

representatives of village panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.

comprising of the proponent,



 For quality education we are supporting to the Nav Jagruti Vidhyavihar Hazira by providing two teachers, (Science and Computer Subject) around 60 students benefited every day.



3) Every day 120 village women taking tailoring training at our four Lok Vikas Kendras at

- 🗈 Hazira village,
- 2 Mora village
- 🛮 Junagam village and
- Damka village.

the fund earmarked towards the Enterprise Social Commitment. The PP should also furnish a time bound action plan.

In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.

PARTLY COMPLIED



4) The women of Lok Vikas Kendras, Hazira, Damka, Mora and Junagam village in Corona lockdown received an order from Sarpanch of Junagam village to make 10,000 masks in which they also earned about 40,000 rupees.



 Every day around 9.5 Lakh liters drinking water is supplied through pipeline to Hazira, Matafaliya and Gundardi. Around 15000 villagers benefited.



(xviii) The proponent shall prepare a detailed CSR plan for every year for the next 5 years for existing-cum-expansion the project, which includes villagewise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A Separate budget head shall be created and the annual capital and expenditure revenue various activities of the plan shall be submitted as part of the Compliance report to RO. The details of the CSR plan shall also uploaded on the company website and shall also be provided in the Annual

Since last 5 Years, Company is recurring losses and was under CIRP process and referred to NCALT. So, we are not falling under the norms of CSR activities because of said reason.

For 2020-21, if company will gain profits, we will follow the guidelines of CSR.

However, we have undertaken community development activities for nearby villages.

Brief summary of Community Development Activities for nearby villagers are as follows:

 Computer Literacy skill training at Lok Vikas Kendra, Hazira, attended by 15 students benefited every day.



 For quality education we are supporting to the Nav Jagruti Vidhyavihar Hazira by providing two teachers, (Science and Computer Subject) around 60 students benefited every day.

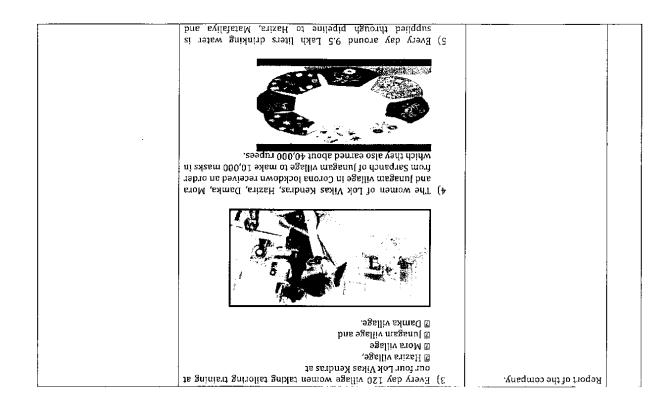


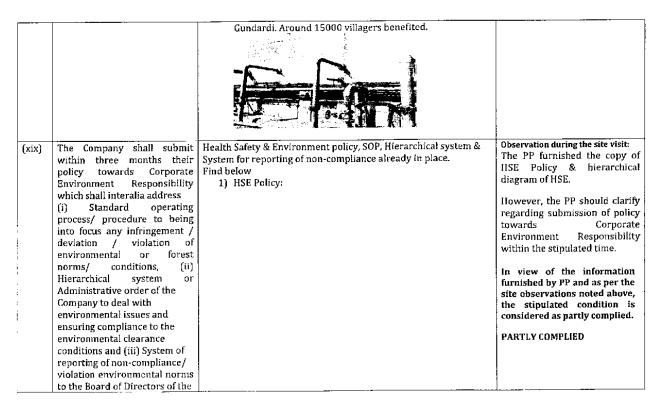
Observation during the site visit: The PP stated that since last 5 years, company is recurring losses and was under CIRP process and referred to NCALT. So, they are not falling under the norms of CSR activities because of said reason.

The PP further informed that they will follow the guidelines of CSR, if company will gain profits.

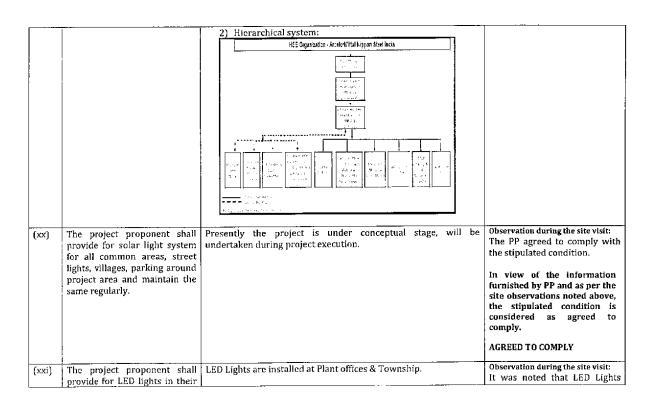
In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as agreed to comply.

AGREED TO COMPLY





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	offices and residential areas.		have been provided in offices & Township.
			In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is
			considered as complied.
(xxii)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	All necessary welfare amenities are in place for the construction workers.	OMPLIED Observation during the site visit: The PP informed that all necessary welfare amenities are in place for the construction workers.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as compliance in progress.  COMPLIANCE IN PROGRESS
В.	GENERAL CONDITIONS		
(i)	The project authorities must strictly adhere to the	We abide by the stipulations made by the Gujarat Pollution Control Board.	Observation during the site visit: The PP furnished the copy of
	stipulations made by the Gujarat Pollution Control	We are regularly submitting to Gujarat Pollution Control (GPCB) Environmental Monitoring & Analysis Report every month &	Environment Statement (Form V).
	Board (GPCB) and the State Government.	Environment Statement (Form V) every year.  Kindly find enclosed berewith the Monthly Environment Monitoring Report & Environment Statement (Form V) for all	However, the PP should furnish the point-wise compliance status of CC&A. Further, during

(ii)	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).	In past, we have followed the MoEF&CC guidelines for expansion or modifications in the plant with prior approval.  In Future for any expansion or modifications, we will apply for prior approval from MoEF&CC.	the visit various non- compliances regarding ETP Sludge disposal and industrial waste water were observed.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED Observation during the site visit: The PP agreed to comply with the stipulated condition.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as agreed to comply.  AGREED TO COMPLY
(iii)	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM <sub>10</sub> , SO <sub>2</sub> and NOx are anticipated in consultation with the SPCB.	Installed Four nos. of Continuous (24*7) Ambient Air Quality Monitoring Stations (CAAQMS).  Monthly manual monitoring is being done ambient & Stacks by Third Party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports are being sent to GPCB & CPCB every month and to MoEF&CC Regional Office at Bhopal once in six months.	Observation during the site visit: During the site visit, the PP informed that four nos. of Continuous (24*7) Ambient Air Quality Monitoring Stations (CAAQMS) have been installed. The third party ambient air monitoring & stack emission

	Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhopal and SPCB / CPCB once in six months.	Third party Ambient Monitoring Reports Results for Apr'20 – Sep'20 along with Third Party Monitoring Report for Sep'20 enclosed herewith as Annexure – 1.	monitoring reports as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. It is noted that the parameters are within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
(iv)	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Monthly manual monitoring is being done by Third Party [M/s. Pollucon Laboratories Pvt. Ltd.] approved by NABL & Recognized by MoEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports is being sent to GPCB & CPCB & MoEF&CC.  Monthly manual Marine monitoring of Tapi Estuary is being done by Third Party (M/s. Shree Green Environmental Laboratories) NABL accredited laboratory to evaluate the marine status of the estuary due to effluent discharge and report of the same is sent to GPCB & CPCB on monthly basis. Similarly, a six monthly report is also being sent to MoEF&CC.  Further 8 locations sampling and analysis of physico-chemical & biological environmental monitoring is conducted pre monsoon and post monsoon to study the overall impact on marine environment due to discharge of Treated effluent to the estuary by Third Party (M/s. Shree Green Environmental Laboratories)	OMPLIED Observation during the site visit: During the visit, the PP informed that third party monitoring is being done by NABL accredited laboratory M/s Pollucon Laboratories Pvt. Ltd. The PP informed that treated wastewater is being utilized for plantation purpose. However, it was observed that at some locations the industrial waste water was got mixed with storm water drains.

		NABL accredited laboratory involving Marine ecology & Biodiversity expert.  Third party Effluent & Marine Monitoring Reports Results for Apr'20 - Sep'20 along with Third Party Monitoring Report for Sep'20 enclosed herewith as Annexure - 4.  The treated wastewater is being utilized for plantation purpose.	In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied. PARTLY COMPLIED
(v)	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Acoustic hoods, Silencers, Enclosures etc. are already installed at various locations in the plants on all sources of noise generation. Monthly manual monitoring is being done for Noise levels by Third Party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by McEF&CC, New Delhi under Sec. 12 of Environmental Protection Act-1986 and reports is being sent to GPCB & CPCB & McEF&CC. Third party Noise Monitoring Reports Results for Apr'20 – Sep'20 along with Third Party Monitoring Report for Sep'20 enclosed herewith as Annexure – 6.	Observation during the site visit: During the site visit, the PP furnished the noise monitoring reports as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd. It is noted that the parameters are within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
(vi)	Occupational Health surveillance of the workers shall be done on a regular basis and records maintained as per Factories Act.	Occupational Health Surveillance Programme & medical checkup of all workers and employees of company are being carried out and records of the same are maintained.  Contractual Worker's & Employee's Medical Checkup working in Hazardous operations – Once in Six months.  Contractual Worker's & Employee's Medical Checkup – Once in a year.  Pre-employment Medical checkup also carried out.	Observation during the site visit: The visit to OHC was undertaken. The PP furnished the details available facilities & medical check-up programme. The records are being maintained by the PP.

			In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
(vii)	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	We are having 6 Nos. of water reservoirs for rain water harvesting. Total 8,10,081 m³ rain water harvested for the period Apr'20 – Sep'20.	Observation during the site visit. The visit to water reservoir was undertaken. The PP informed that total 8,10,081 m³ rain water harvested for the period Apr'20 - Sep'20. The treated effluent is being used for dust suppression and green belt development.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED

(viii) The project proponent shall also comply with all the protection environmental measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care etc.

Since last 5 Years, Company is recurring losses and was under CIRP process and referred to NCALT. So, we are not falling under the norms of CSR activities because of said reason.

For 2020-21, if company will gain profits, we will follow the guidelines of CSR.

However, we have undertaken community development activities

for nearby villages.

Brief summary of Community Development Activities for nearby villagers are as follows:

 Computer Literacy skill training at Lok Vikas Kendra, Hazira, attended by 15 students benefited every day.



 For quality education we are supporting to the Nav Jagruti Vidhyavihar Hazira by providing two teachers, (Science and Computer Suhject) around 60 students henefited every day.

Observation during the site visit:
The PP furnished the details of community development activities like Computer Literacy skill training, providing support to the Nav Jagruti Vidhyavihar Hazira, tailoring training to women etc.

However, the PP should also submit the point-wise compliance status of EIA/EMP report recommendations.

In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.

PARTLY COMPLIED



3) Every day 120 village women taking tailoring training at our four Lok Vikas Kendras at

- 🛮 Hazira village,
- ☐ Mora village
  ☐ Junagam village and
- Damka village.



4) The women of Lok Vikas Kendras, Hazira, Damka, Mora and Junagam village in Corona lockdown received an order from Sarpanch of Junagam village to make 10,000 masks in which they also earned about 40,000 rupees.



5) Every day around 9.5 Lakh liters drinking water is supplied through pipeline to Hazira, Matafaliya and Gundardi. Around 15000 villagers benefited.



(ix) Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change

Capital Cost spent towards installation of Air & Water pollution control measures is 557 Crores.

Recurring Cost for operation & maintenance of Pollution control

equipments:

Year	Recurring Cost
	(Rs. In Crores)
2017-18	134 Crores
2018-19	162 Crores

Observation during the site visit: The PP furnished the capital cost and recurring cost/annum for environment pollution control measures.

In view of the information furnished by PP and as per the site observations noted above,

	(MoEF&CC) as well as the State	2019-20	152 Crores	the stipulated condition is
	Government. An			considered as complied.
	implementation schedule for	Details already submitted to Ministry office.		COMPLIED
	implementing all the			Som 2122
	conditions stipulated herein			
	shall be submitted to the			
	Regional Office of the Ministry			
	at Bhopal. The funds so			
	provided shall not be diverted			
7-3	for any other purpose.  A copy of clearance letter shall	We are completed Our Ind	ustry is falling under Hazira Notified	Observation during the site visit:
(x)	be sent by the proponent to		es of Hazira Notified area we have	The PP stated that their
	concerned Panchayat, Zila		informations to the Authorities of	industry is falling under Hazira
	Parishad / Municipal	Hazira Notified areas.	informations to the realistings of	Notified Area. As per the
	Corporation, Urhan Local Body	Trabila trotinea areas.		guidelines of Hazira Notified
	and the local NGO, if any, from			area they have submitted all
! 	whom suggestions/			the required informations to
	representations, if any, were			the Authorities of Hazira
	received while processing the			Notified areas.
	proposal. The Clearance letter			However, the documentary
	shall also be put on the website			proof is yet to he furnished by
	of the company by the			the PP.
	proponent.			In view of the submission by
				PP, the stipulated condition
				may be considered as partly
				complied.
				-
				PARTLY COMPLIED
(xi)	The project proponent shall	We are complying.	<del></del> <del>.</del>	Observation during the site visit:
` ,	upload the status of		learance Condition compliance report	The Six monthly compliance
				reports are being submitted by

compliance of the stipulated environment clearance condition, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC at Bhopal. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

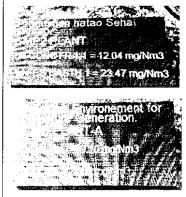
is being sent to MoEF&CC & same data uploaded on to the website of MoEF&CC regularly.

For the period of Apr'20 to Sep'20 report already submitted dated 20th Nov, 2020 on MoEF&CC website.

Also we have submitted Hard copy through Registered post along with Soft copy in CD.  $\,$ 

Online Monitoring results of pollutant levels namely; PM10, SO2, NOx (ambient levels as well as stack emissions) is being displayed near main gate of the company in the public domain.

Photographs of Online Monitoring display board given below:



the PP. The Online Monitoring results of pollutant (PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>) levels are heing displayed near main gate of the company.

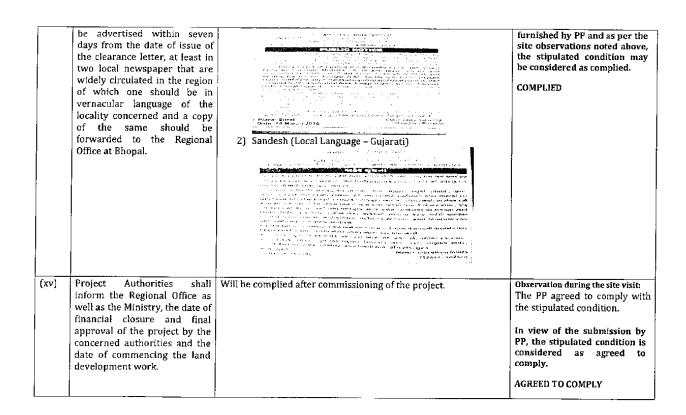
However, the PP should clarify regarding the uploading of compliance status of the stipulated environment clearance condition, including results of monitored data on their website.

In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.

PARTLY COMPLIED

		in invironement for the Generation.  In 5 TO 6  5 Bu mg/km3  At 3 64 mg/km3	
		and live	
(xii)	The Project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhopal/ CPCB/ SPCB shall	We are complying. Six monthly Environment Clearance Condition compliance report is being sent to MoEF&CC & same data uploaded on to the website of MoEF&CC regularly. For the period of Apr'20 to Sep'20 report already submitted dated 20th Nov, 2020 on MoEF&CC website. Also we have submitted Hard copy through Registered post along with Soft copy in CD.	Observation during the site visit: The Six monthly compliance reports are being submitted by the PP. In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED

	monitor the stipulated conditions.		
(xiii)	The environmental statement for each financial year ending 31st March in Form - V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also put on website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEF&CC at Bhopal by email.	We are maintaining the MoEF&CC guidelines regularly. Kindly find enclosed herewith the Environment Statement (Form V) for all divisions as Annexure 5.	Observation during the site visit: The furnished the copy of Environment Statement (Form V).  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
(xiv)	The project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http://envfor.nic.in. This shall	Clearance Letter - Public Notice dated 14th March, 2016 advertised in Two Local Newspapers on 19th March, 2016 one of which in local vernacular language (Gujarati):  1) Indian Express	Observation during the site visit: The PP furnished the copy of advertisement published in "Indian Express" & "Sandesh" newspapers. The PP informed that the Public Notice dated 14th March, 2016 advertised in above mentioned Local Newspapers on 19th March, 2016.  In view of the information



Part - II & III

#### DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF ENVIRONMENT CLEARANCE AND ENVIRONMENT MANAGEMENT

Details of project: Environment Clearance for Integrated Steel Plant (5.0 MMTPA) at Hazira, District Surat, Gujarat by M/s Arcelor Mittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

> EC No: F.No. J-11011/714-A/2008-IA II (I) dated 5<sup>th</sup> July, 2010. (Compliance Status for the period April 2020 to September 2020)

5r. No.	EC Condition	Status of Compliance as submitted by the PP	Remarks of MoEF&CC, Regional office based on the compliance status furnished by the Project Proponent and the on-field observations of the site visit
A.	SPECIFIC CONDITIONS		
i,	The Ministry's environmental clearance accorded for the existing Integrated Steel Plant (4.5 MMTPA) along with Captive Power Plant (270 MW) Vide letter nos. J – 11011/74/06 IA dated 13th June, 2006, J – 11011 / 327 / 2006 – IA.II (I) dated 25th April, 2007 and 29th May, 2008 & Integrated Steel Plant (5.0 MMTPA) along with Captive Power Plant (270 MW) vide letter no. J-11011/714/2008-IA II (I) dated 22th December, 2008 for the specified		The condition may be considered as noted.  NOTED

II.	products in the name of M/S Essar Steel(Hazira) Limited stands withdrawn and supersedes the previous environmental clearance from the date of issue of this environmental clearance. The gaseous emissions from various units shall conform the load/mass hased standards notified by the Ministry on 19th May, 1993 and standards prescribed from time to time. The Gujarat state pollution Control Board (GSPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.		Observation during the site visit: During the visit, the PP informed that continuous stack monitoring facilities for 72 stacks have been provided with effective air pollution control devices.  The third party stack emission monitoring reports/data as monitored by NABL accredited aboratory, M/s. Pollucon Laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. The reports were checked randomly and it was noted that the parameters were within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site.
			In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
1			COMPLIED
iii.	Efforts shall be made to reduce RSPM	Please refer list of APC measures implemented as	Observation during the site visit:
	levels in the ambient air and a time	Annexure - I With implementation of these measures,	During the visit, the PP informed that four nos. of Continuous (24*7)

	bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the parameters (SPM, SO2 and NOx including CO) and sufficient air pollution control devices shall be provided to keep emissions levels below 100 mg / Nm3 and data shall be submitted to Ministry's Regional Office at Bhopal, CPCB and GPCB.	Continuous stack monitoring is provided to all stacks as per consent. Monthly Monitoring of Ambient Air quality and stack emissions as per consent granted by GPCB are being carried out by Third Party Approved Lab and report of the same is sent to GPCB & CPCB on monthly basis. Similarly a six monthly report is also being sent to MoEF.	Ambient Air Quality Monitoring Stations (CAAQMS) have been installed & stack monitoring facilities for 72 stacks have been provided with effective air pollution control devices.  The third party AAQ & stack emission monitoring reports/data as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. The reports were checked randomly and it was noted that the parameters were within the stipulated norms during
iv.	Electrostatic precipitator (ESP) to pellet plant, CPP, high efficiency ventury Scrubber(auxiliary) to Hot Briquetted Iron(HBI)Plant, wet type double ventury Scrubber shall be provided to gas cleaning system of Blast Furnace(BF) and bag filters to coal	Suggested APC are provided to these plants. Please refer Annexure - 1 for list of APC measures implemented.	the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED  Observation during the site visit: The PP furnished the details of various APC measures implemented.  The third party stack emission monitoring reports/data as

iii.	blending section, dry coal screen house, cast house, stock house, lime kiln etc shall be provided to control gaseous emissions within the permissible limit. The flue gas emission through stacks attached to the boiler, furnace and heater shall conform to the standards prescribed by the GPCB and data shall be submitted to Ministry's Regional Office at Bhopal, CPCB and GPCB.  The National Ambient Air Quality	-	monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. The reports were checked randomly and it was noted that the parameters were within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED  Observation during the site visit:  The PP informed that National
	Emission Standards issued bythe Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	I I	Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No 826 (E) dated 16th November, 2009 is being followed. The PP further informed that four nos. of Continuous (24*7) Amhient Air Quality Monitoring Stations (CAAQMS) have been installed. The third party ambient air monitoring reports as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. It is noted that AAQ parameters are
			within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
iv.	In plant control measures for controlling fugitive emissions from spillage/ raw materials handling shall be provided. Further, specific measures like water Sprinklers/bag filters/cyclone dedusting system shall be provided to raw material handling section, transfer points, conveyors and hoppers, curtains etc. suitable enclosures, dust collection system and water sprinkling on haul roads shall be provided to control fugitive emissions. Dust from the induction furnace shall be collected in the hoods and dusty air will be cleaned by using cyclone and venture scrubber. Fume extraction system with bag filters shall be provided to Steel Melting Shop (SMS) and caster Steel plant (CSP). Dedusting system with bag filters shall be provided to cast house, stock house, coal injection system, hot	Please refer Annexure – I for list of measures taken for control of fugitive emission in Material Handling areas (MH). Water sprinkling on haul roads in material handling area is provided to control fugitive emissions.  Monthly monitoring of fugitive emissions are being carried out by Third Party Approved Lab and report of the same is sent to GPCB & CPCB on monthly basis. Similarly a six monthly report is also being sent to MoEF.	OMPLIED Observation during the site visit: The PP informed that monthly manual monitoring is being done for fugitive emissions by third party (M/s. Pollucon Laboratories Pvt. Ltd.) approved by NABL & Recognized by MoEF&CC, New Delhi.  The monitoring data furnished by the PP shows that parameter are within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
	stock house, coal injection system, hot metal de - sulphurization mixer of BF.		

	1		
	Data on fugitive emissions shall be		
Ī	regularly monitored and records		
<u> </u>	maintained.		
V.	Gaseous emission levels including	APCs implemented for Blast Furnace & Sinter plant for	Observation during the site visit:
:	secondary fugitive emissions from blast	fugitive emissions control.	The PP stated that APCs
	furnace and sinter plant shall be		implemented for Blast Furnace &
	controlled within the latest permissible		Sinter plant for fugitive emissions
	limits issued by the Ministry and		control. The PP further informed
ľ	regularly monitored. Guidelines / Code		that monthly manual monitoring is
	of practice issued by the CPCB shall be		being done for fugitive emissions
l	followed. The emission standards		by third party (M/s. Pollucon
	issued by the Ministry in May, 2008 for		Laboratories Pvt. Ltd.) approved
	the Sponge plants shall be followed.		by NABL & Recognized by
			MoEF&CC, New Delhi.
!			
			The monitoring data furnished by
			the PP shows that parameters are
			within the stipulated norms during
			the compliance period.
	  -		In view of the information
			furnished by PP and as per the site
			observations noted above, the
			stipulated condition is considered as complied.
			as complied.
			COMPLIED
vi.	Vehicular Pollution due to	Arrangements are in place for Dust emission control.	Observation during the site visit:
	transportation of raw material and	-	During visit, the PP informed that
	finished product shall be controlled.		various dust control measures are
	Proper arrangements shall also be made		in place. Regular cleaning of dust is
	to control dust emissions during loading		being done on roads through

	and unloading of the raw material and finished product.	mechanical sweepers. Water sprinkling systems are installed at various locations for controlling of dust emission.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
vii,	Total water requirement from Singanpore Weir shall not exceed 1, 00, 838 m3 / day. No ground water shall be used. Separate drains for domestic, process, strom water shall be provided in consultation with GPCB. All the other effluents shall be treated in plant – wise independent waste water treatment system. BF – GCP and coal washery water shall be treated in thickener and used in the pig casting machine. Acidic and alkaline effluent from DM water plant shall be neutralized and reused in the plant through ash pond. Oil traps shall be provided to remove oil and grease. All the treated waste water from process shall be treated and recycled and reused for ash handling, dust suppression and green belt	Observation during the site visit: The PP informed that they are granted approval of 45 MGD from irrigation department. The PP further informed that the unit have their own water circulation system (WCS) installed, which ensure maximum recycle and reuse of water and reduce the discharge into the Tapi estuary.  However, the PP should submit the month-wise daily max. and min. water usage data,.  Further during the visit, it was observed that at some locations the industrial waste water was got mixed with storm water drains.

	development. The domestic wastewater shall be treated in STP and treated wastewater after conforming to the prescribed standards shall be used for green belt development.		In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
viii.	An effort shall be made not to discharge any treated waste water outside the premises and adopt 'Zero' effluent discharge. An effort shall be made to recycle and reuse the maximum treated wastewater in the process itself to reduce quantity of water consumption and effluent discharge into Tapi estuary. Only excess treated waste water after meeting the norms of Gujarat Pollution Control Board or as mentioned in E(P) Act, whichever are more stringent, shall be discharged to Tapi Estuary through RCC Pucca Channels.	Efforts are being taken to maximum reuse / recycle of Treated Effluents within the system. Monthly Marine monitoring of Tapi Estuary is being conducted by Third Party Approved Lab to evaluate the marine status of the estuary due to effluent discharge and report of the same is sent to GPCB & CPCB on monthly basis. Similarly, a six monthly report is also being sent to MoEF&CC. Further 8 locations sampling and analysis of chemical & hiological environmental monitoring is conducted post monsoon and pre monsoon to study the overall impact on marine environment due to discharge of Treated effluent to the estuary by third party involving Marine ecological expert.  Water circulation systems as mentioned in Annexure—II.	Observation during the site visit: During the visit, it was observed that at some locations the industrial waste water was got mixed with storm water drains.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as not complied.  NOT COMPLIED
ix.	Prior permission for the drawl of 1, 00, 838 m3 / day water from Singanpore Weir from the concerned department shall he obtained.	Approval obtained from Irrigation department for water drawl.	Observation during the site visit: The PP informed that approval has been obtained from Irrigation department for water drawl.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered

			as complied.
			COMPLIED
x.	The Water consumption shall not exceed 16 m3 / Ton of Steel as per prescribed standard.	We comply this condition.	Observation during the site visit: The PP stated that they comply this condition.
			However, the PP should submit the water consumption data for the stipulated condition.
			In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.
			PARTLY COMPLIED
xi.	Ground water monitoring around the solid waste disposal site / secured landfill (SLF) shall be carried out regularly and report submitted to the Ministry's Regional Office at Bhopal, CPCB and GPCB.	Regular monitoring of Ground Water around the solid waste disposal site / secured landfill (SLF) are being carried out by Third Party Approved Lab and report of the same is sent to GPCB & CPCB on monthly basis. Similarly a six monthly report is also being sent to MoEF.	The PP stated that they comply this condition. The ground water monitoring
			In view of the information furnished by PP and as per the site observations noted above, the

viii.	All the char from DRI Plant shall be utilized in AFBC Boiler of power plant and no char shall be disposed off anywhere else. Lime / dolime fines, mill scales, iron ore fines, DRI Fines, scale, sinter dust etc. shall be used in sinter plant. Blast Furnace slag shall be granulated. Granulated slag, BF & Corex slag shall be provided to cement manufacturers for further utilization. As proposed, an effort shall also be made manufacture tiles from the slag. All the other solid wastes including EAF slag and broken refractory mass shall be properly disposed off in environment friendly manner. Used lube oil and oily	ore fines, DRI fines, sinter dust, BF fines, coke fines and sludge cake of gas cleaning plant are being utilized in sinter plant. Slag generated from SMS is being utilized as:  1) Substitution of quarry material for filling low laying areas as plant is closer to coastal area.  2) Internal Road making for expansion project activities.  3) Tiles making.  4) Ballast for Railway Track and Bund for Railways.	stipulated condition is considered as partly complied.  PARTLY COMPLIED  Observation during the site visit: The PP informed that BF & Corex plant is already having slag granulation facility. Slag processed in granulation plant & granulated slag is being sold to Cement manufacturers.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as agreed to comply.  AGREED TO COMPLY
		5) Load bearing platforms. 6) Compound Wall. 7) Shore protection. 8) Selling to nearby industries for above purpose.	10 000.
-		Used Oil sold to authorized recyclers / reprocessors.	
ix.	A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	Action plan for Solid waste utilization & disposal has already been submitted.	Observation during the site visit: The PP stated that action plan for Solid waste utilization & disposal has already been submitted.
<u></u>			In view of the submission by PP,

			the stipulated condition is considered as complied.  COMPLIED
x.	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid / hazardous waste shall be submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.	sent to GPCB, CPCB & MoEF&CC.	Observation during the site visit: The PP furnished the hazardous waste disposal data during the compliance period. However, during the visit it was observed that the ETP Sludge was scattered near the ETP & also a huge quantity of sludge was stored in open.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
xi.	As proposed, green belt for adequate width and density shall be provided in at least 33 % of plant area and along the boundary wall of the site as per the CPCB guidelines.	Green zones developed within the complex.	Observation during the site visit: During the visit, the PP informed that green belt is developed within the complex with native and broad leaved species. The PP further stated that they are doing plantation of 1500 to 2000 Nos. of trees per year.  However, the PP should furnish the layout diagram with green belt

xii.	The company shall undertake rainwater-harvesting measures by collecting the rainwater through drains. The water collected shall be connected to raw water pipeline for reuse in the plant. The Company shall provide proper drainage system for rain water to prevent water logging within and in the vicinity of the plant.	Rain water conservation measures has already been undertaken and practiced.	and the details of total area and the area of green helt developed so far.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED  Observation during the site visit: The visit to water reservoir was undertaken. The PP informed that total 8,10,081 m³ rain water harvested for the period Apr'20 - Sep'20. The treated effluent is being used for dust suppression and green belt development.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
xiii.	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Doing Occupational Health Surveillance programme & medical checkup of all workers and employees at Essar Hazira and records of the same are maintained.	Observation during the site visit: The visit to OHC was undertaken. The PP furnished the details of available facilities & medical check-up programme. The records are being maintained by the PP.

			In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
xiv.	The company shall comply with all the recommendations / action points made in the Charter on Corporate Responsibility for Environment Protection (CREPs) and progress report shall be submitted to MoEF/CPCB.	Report regularly submitted to CPCB.	Observation during the site visit: The PP stated that report regularly submitted to CPCB.  However, the PP should furnish point-wise compliance status of Charter on Corporate Responsibility for Environment Protection (CREPs).  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
xv.	Environmental Clearance under CRZ Notification shall be obtained for Deep Draught Berth (550 meter jetty along with channel) prior to commencement of the construction activities and the copy of environment clearance accorded shall be submitted.	. 5	Observation during the site visit: The PP informed that CRZ clearance for Deep Draught Berth has been obtained.  In view of the information furnished by PP and as per the site observations noted above, the

M/s. Arce	lorMittal Nippon Steel Indi
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xili.	Natural gas in Corex plant, Steel meiting shop, Caster shop, long product mill and Lime plant shall be used. No Coke Oven plant shall be installed.	NG & Coal used as per the condition stipulated.	stipulated condition is considered as complied.  COMPLIED  Observation during the site visit: The PP stated that NG & Coal used as per the condition stipulated.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as agreed to comply.  AGREED TO COMPLY
xiv.	The Company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	All necessary amenities are provided to the construction workers.	Observation during the site visit The PP stated that all necessary amenities are provided to the construction workers.  In view of the information furnished by PP and as per the site observations, the stipulated condition is considered as deemed complied.  DEEMED COMPLIED
B.	GENERAL CONDITIONS		
i.	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB)	CCA received by GPCB.	Observation during the site visit: The PP furnished the copy of Environment Statement (Form V).

Ji.	and the State Government.  No further, expansion or modifications in the plant sbould be carried out without prior approval of the Ministry of Environment and Forest.		However, the PP should furnish the point-wise compliance status of CC&A.  Further, during the visit various non-compliances regarding ETP Sludge disposal and industrial waste water were observed.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED  The PP stated that prior approval will be taken for expansion or modification.  In view of the submission by PP, the stipulated condition is considered as agreed to comply.  AGREED TO COMPLY
iii.	At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO2 and NOx are anticipated in consultation with the State Pollution Control Board. Data on	have been established. This is catering to the requirement of Integrated Steel Plant of ESHL also. Moreover, regular Monitoring of Ambient Air quality and stack emissions are being carried out by Third Party Approved Lab and report of the same is	During the visit, the PP informed that four nos. of Continuous (24*7) Ambient Air Quality Monitoring Stations (CAAQMS) have been

iv.	shall be regularly submitted to this Ministry including its Regional Office at Bhopal and GPCB / CPCB once in six months.  Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st	provided with effective air pollution control devices.  The third party AAQ & stack emission monitoring reports/data as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd., were furnished by the PP. The reports were checked randomly and it was noted that the parameters were within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED  Observation during the site visit: During the visit, the PP informed that third party monitoring is being done by NABL accredited laboratory M/s Pollucon
	December, 1993 or as amended form time to time.  The treated wastewater shall be utilized for plantation purpose.	laboratory M/s Pollucon Laboratories Pvt. Ltd. The PP informed that treated wastewater is being utilized for plantation purpose.  However, it was observed that at

			some locations the industrial waste water was got mixed with storm water drains.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
v.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noise abatement measures implemented as per Annexure – I.	Observation during the site visit: During the site visit, the PP furnished the noise monitoring reports as monitored by NABL accredited laboratory, M/s. Pollucon Laboratories Pvt. Ltd. It is noted that the parameters are within the stipulated norms during the compliance period.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.
	Trib.	II. J. t. l	COMPLIED Observation during the site visit:
vi.		Undertaken community development activities for nearby villages since inception. Please find enclosed	The PP furnished the details of
		socioeconomic development activities carried out by	community development activities
		ESSAR during the period Apr'20 to Sep'20 as	like Computer Literacy skill

	company must undertake socio- economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care etc.	Annexure – IV.	training, providing support to the Nav Jagruti Vidhyavihar Hazira, tailoring training to women etc.  However, the PP should also submit the point-wise compliance status of EIA/EMP report recommendations.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED
vii.	As mentioned in the EIA / EMP, Project authorities shall ensure judicious utilization of Rs. 135.00 Crores and Rs.13.00 Crores earmarked towards the capital cost and recurring expenditure / annum earmarked for the environmental pollution control to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government. An implementation schedule for complying with all the conditions stipulated herein shall be submitted to the Regional Office of this Ministry at Bhopal / CPCB / GSPCB. The funds so provided shall not	Utilization of Funds for Capital & Recurring expenditure for the environmental pollution control.	Observation during the site visit: The PP furnished the details of capital cost and recurring cost/annum for environment pollution control measures.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED

be diverted for any other purposes.		
viii. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.		The PP should provide the complete details and documentary proof for the stipulated condition.  In view of the observations noted above, the stipulated condition is considered as not complied till the submission of information.  NOT COMPLIED
ix. The project proponent shall upload the status of compliance of the stipulated environment conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF at Bhopal, the respective Zonal Office of CPCB and GPCB. The criteria pollutant levels namely: SPM, RSPM, SO2, NOX(ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	-	Observation during the site visit: The Six monthly compliance reports are being submitted by the PP. The Online Monitoring results of pollutant (PM <sub>10</sub> , SO <sub>2</sub> , NOx) levels are being displayed near main gate of the company.  However, the PP should clarify regarding the uploading of compliance status of the stipulated environment clearance condition, including results of monitored data on their website.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.

		PARTLY COMPLIED
x.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and GPCB. The Regional Office of this Ministry at Bhopal/CPCB/GPCB shall monitor the stipulated conditions.	Observation during the site visit: The Six monthly compliance reports are being submitted by the PP.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
xi.	The environment statement for each financial year ending 31st march in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection)Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Observation during the site visit: The PP furnished the copy of Environment Statement (Form V).  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as complied.  COMPLIED
xii.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance	No, information is furnished by the PP.  However, the PP should submit the

	letter are available with the GPCB and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional Office.		details of newspapers with the publication date and copy of advertisements.  In view of the above observations, the stipulated condition may be considered as partly complied.  PARTLY COMPLIED
xiii.	The Project Authorities 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 and the date of commencing the land development work.	Financial closure of the project is already completed and we have obtained Consent to Operate from GPCB.	However, the PP should provide complete details like the date of financial closure and final approval of the project, the date of commencing the land development work for the stipulated condition.  In view of the information furnished by PP and as per the site observations noted above, the stipulated condition is considered as partly complied.  PARTLY COMPLIED

#### Summary note:

#### i. Implementation of conditions:

- (a) EC No: F.No. J-11011/381/2014-IA II (I) dated 9th March, 2016:- Out of total 37 conditions, it may be seen that 16 are complied, 1 is compliance in progress, 13 are partly complied, 5 are agreed to comply and 2 are not complied.
- (b) EC No: F.No. J-11011/714-A/2008-IA II (I) dated 5th July, 2010:- Out of total 36 conditions, it may be seen that 17 are complied, 1 is noted, 12 are partly complied, 3 are agreed to comply, 1 is deemed complied and 2 are not complied.

These bave been explained in the foregoing compliance report against each of the conditions, and the PP needs to take necessary and time bound action for early compliance in respect of the relevant conditions.

## ii. Court cases and show cause/closure notices:

The PP vide email dated 06.12.2020 submitted the detail of court cases. The detail is enclosed as annexure-I. The PP submitted the details of Show Cause/Closure notice issued by CPCB/GPCB during last 3 years vide email dated 06.12.2020 (Show Cause Notices issued in Last 03 Years - 4 Nos. & Notice of Directions issued in Last 03 Years - 6 Nos). The same are enclosed as annexure-II.

(Vishwa Bandhu Mcena)

# Annexure 21: CtO compliance Report

Name: M/s. ArcelorMittal Nippon Steel India Limited (HRC Division)

Plot no: - 203-230,245-264,312-321, @27 Km Surat – Hazira Road, Post Hazira – 394270, Tal: Chorasi, Dist: Surat.

Sr.			CONDITION	STATUS					
NO. 1.	Conse	ent Order No. AWH – 107719, Da	te of issue: 07/04/2020						
2.	The co	onsents shall be valid up to 31/12/2	<b>024</b> for the use of outlet for the discharge of treat	ed effluent   Complied.					
		& air emission and to operation of industrial plant for manufacturing of the following items/products:  Sr.   Products   Total Quantity in							
	No.	Products	MT/Month						
	1	НВІ	498333						
	2	Iron Ore Fines	68604						
	3	LPG	5400						
	4	HR Coils	375000						
	5	Mill Scale	12050						
	6	Slag	98000						
	7	Iron fines	6000						
	8	Lime	40400						
	9	Lime fines	8000						
	10	Lime Stone / Do-lime Chips	10590						
	11	Off Grade Lime / Do-lime	720						
	12	Oxygen (Gaseous)	371120000						
	14	Oxygen (Liquid)	21240000						
	13	Nitrogen (Gaseous)	34520000						
	14	Argon	1058400						
	15	Hot Rolled Pickled Coils/ Sheets	170000						
	16	Cold rolled Coils / Sheets	108334						
	17	Galvanized Sheets/ Coils	54167						
	18	Off Grade Lime / Do-lime	720						
	19	Coated Sheet/Coils	8334						
	20	Spent Acid(m3/Day)	2350						
	21	Iron Oxide	1050						
	22	Captive Power(MU/Day)	744MWH (31 MW)						
	23	Extension of Existing Captive Jetty (734 Meters)							
	24	Power	25 MW						

	SUBJECT TO SPECIFIC CONDITION	
1.	The applicant shall strictly comply with all condition stipulation in environment	Complied
	Clearance issued by ministry of Environment and Forest, New Delhi in order no. J-	
	11011/74/2006 IA-II (I) dated 13/06/2016 and CRZ clearance for extension of	
	existing Captive jetty vide order no. II-65/2005-IA-II Dated 18/09/2006	
	respectively.	
2.	Industry shall comply with all specific conditions mentioned in Environmental	Complied
	Clearance issued by Govt. of India, Ministry of Environmental and Forest vide	
	their letter no. J-11011/74/2006 IA-II (I)dated 13/06/2016.	
3.	The unit shall strictly observe and comply with condition stipulation made in	Complied
	EnvironmentalClearance issued by MOEF, New Delhi in its Order No. J-	
	11011/45/2004 IA-II (I) dated 07/11/2005.	
4.	The applicant shall strictly observe and comply with various stipulation imposed	Complied
	by MOEF, NewDelhi in its Order No. J-11011/4/92 IA-II (I) dated 23/07/1992 &	
	submit compliance report thereof.	
5.	The application shall strictly have observed & comply with all condition	Complied
	Environmental Clearance granted by Ministry of Environmental and Forest vide	
	letter no. J-13011/90/2006 IA-II (I) dated20/04/2007.	
6.	Industry shall Managed Solid Waste generated from industrial activities as per	Complied
	Solid WasteManagement Rules-2016[Solid waste define in rule-3(46)].	Please find attached Annexure
7.	As per provisions of Rule 18 of Solid Waste Management Rules-2016, You are	Company is in continuous
	directed to make an arrangement in utilities to replace at least five percent (5%) of	
	your solid fuel requirement by 'refused derived fuel'.	Municipal Corporation(SMC)
		to request 5% of the fuel in
		Utilities by RDF.
8.	Industry shall obtain NOC from CGWA as per order of Hon. National Green	Not Applicable
	Tribunal for the withdrawal of ground water.	Not withdrawing Ground Water
9.	The applicant shall strictly observed and comply with all condition of Environment	
İ	Clearance granted by Ministry of Environment and Forest, vide letter no. J-	_
	11011/4/1992 IA-II (I) Dated 04/07/2005.	
10.	Applicant shall comply with the Standard Operating Procedure for acid reuse will	Complied
	be complied with judiciously.	Company has already
		installed Acid Regeneration
		Plant for maximum captive
		consumption any leftover
		Acid is being handed over to
		Rule 9 authorized recycler
I1.	Spent Acid after regeneration shall be reused in this.	Complied
		Company has already installed
		Acid Regeneration Plant for
		maximum captive consumption
		any leftover Acid is being
		handed over to Rule 9
		authorized recycler
3.	CONDITION UNDER WATER ACT:	
3.1	Source of Water-Bore well	Source of Water – Surface
		water
3.2	The quantity of fresh water consumption for industrial purpose shall not exceed	Complied.
	93966 K1/Day.	
3.3	The quantity of fresh water consumption for Domestic purpose shall not exceed	
	2711 KL/Day.	
3.4	The quantity of industrial effluent to be generated from the manufacturing process	Complied
	and other ancillaryindustrial operations shall not exceed 19672 KL/Day. However,	_
	discharge shall be within the concerned quantity mentioned in consent of the whole	
	plant.	
3.5	The quantity of Domestic wastewater (Sewage) shall not exceed 1173 KL/Day.	Complied
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ichieve the quality of		(LIDI & LID () Di ()	
he treated effluent as per GPCB n Parameters	GPCB Norms	(HBI & HRC Plant) :-	
PH	6.5 to 8.5		
Temperature	40° C		
Colour (pt.co.scale) in units	100 units		
Suspended solids	100 mg/l		
Oil and grease	10 mg/l		
Phenolic compounds	1 mg/l		
Sulphides	2 mg/l		
Ammonical Nitrogen	50 mg/l	_	
Total Chromium	2 mg/l		
Hexavalent chromium	0.1 mg/l	_	
BOD (5 days at 200 C)	30 mg/l		
COD	100 mg/l		
Cyanides	0.2 mg/l		
Fluorides	1.5 mg/l		
Lead	0.1 mg/l		
Copper	2 mg/l		
Nickel	3 mg/l		
Zinc	5 mg/l	$\overline{}$	
(B) CPP Plant: -		$\overline{}$	
Parameters	GPCB Norms		
Boiler Blow Down:-			
Suspended Solids	100 mg/l	_	
Oil and grease	10 mg/l	_	
Total Copper	1.0 mg/l		
Total Iron	1.0 mg/l	_	
	1.0 1115/1	1	
Cooling Water Blow Down:-		$\dashv$	
-	0.5 mg/l		
Free Available Chlorine	<del>-</del>		
Free Available Chlorine	0.5 mg/l		
Free Available Chlorine Zinc	0.5 mg/l 1.0 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate	0.5 mg/l 1.0 mg/l 0.1 mg/l		
Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:-	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH Suspended Solids	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH Suspended Solids Oil and Grease	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l 10 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH Suspended Solids Oil and Grease Total Copper	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l 10 mg/l 3.0 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH Suspended Solids Oil and Grease Total Copper Total Iron	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l 10 mg/l 3.0 mg/l 1.0 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH Suspended Solids Oil and Grease Total Copper Total Iron Zinc	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l 10 mg/l 1.0 mg/l 1.0 mg/l		
Free Available Chlorine Zinc  Hexavalent Chromium Total Chromium Phosphate  Combined Effluent:- pH Suspended Solids Oil and Grease Total Copper Total Iron Zinc Hexavalent Chromium	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l 10 mg/l 1.0 mg/l 1.0 mg/l 0.1 mg/l 0.1 mg/l		
Free Available Chlorine Zinc Hexavalent Chromium Total Chromium Phosphate Combined Effluent:- pH Suspended Solids Oil and Grease Total Copper Total Iron Zinc	0.5 mg/l 1.0 mg/l 0.1 mg/l 0.2 mg/l 5.0 mg/l 6.5 to 8.5 100 mg/l 10 mg/l 1.0 mg/l 1.0 mg/l		

.8			hrough one outlet only. day shall be disposed of through septic tank / soak pit system & @ 782	Complied
.0	m <sup>3</sup> /day sh plantation	all be treated separ or gardening within	rately to confirm to the following standard and utilized on land for the factory premises.	Compiled
	P	arameters	GPCB Norms	
	BOD (5 d	days at 20° C)	Less than 20 mg/l	
	Suspende	ed Solids	Less than 30 mg/l	
	Residual	Chlorine	Minimum 0.5 mg/l	
.9	Domestic	effluent shall be disp	oosed of through septic tank / soak pit system.	Complied
4.		ONS UNDER AIR		
.1		ving shall be used as		Complied
	Sr. No.	Fuel	Quantity	
	1	HBI ( Mod 1-5) :	-	
		NG (Sm3/day)	561073	
		LPG	932 TPD	
		Naphtha / NGL	376 TPD	
	2	HRC (Lime plan	t, Boiler ,EAF) :-	
		NG (Sm3/day)	9312164	
		Naphtha / NGL	7507 TPD	
	3	CRM :-		
		NG (Sm3/day)	194568	
	4	CPP (31 MW) :-		
		NG (Sm3/day)	192000	
		Naphtha / NGL	168 TPD	
.2	Applicant	shall install & Ope	rate air pollution control system in order to achieve norms prescribed	Complied

Stack No.	Stack attached to	Stack height in Meter	Air Pollution Control System	Parameter	Permissible Limit				
(A) HRC Plant									
1	Boiler of HRC Plant	30		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	50 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
2	Heat Recovery steam generator (IIRSG)-31 MW	60	Tall Chimney	Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	10 mg/Nm <sup>3</sup> 10 ppm 80 ppm				
3	Reheating furnace-1	88.5		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	100 mg/Nm <sup>3</sup> 40 ppm 125 ppm				
4	Reheating furnace-2	88.5		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 40 ppm 125 ppm				
5	Electric Arc Furnace 1 & 2	45	FES System 1 & 2 with bag filter	Particulate Matter	80 mg/Nm <sup>3</sup>				
6	Electric Arc Furnace 3	45	FES System with bag filter	Particulate Matter	80 mg/Nm <sup>3</sup>				
7	Electric Arc Furnace 4	45	FES System with bag filter	Particulate Matter	80 mg/Nm <sup>3</sup>				
8	Normalizing furnace	30		Particulate Matter SO <sub>2</sub>	80 mg/Nm <sup>3</sup> 40 ppm				
(B) CRM Plant									
1	Boiler No.1 & 2 of CRM	30	*s#	Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	50 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
2	Batch Annealing Furnace (BAF)	20		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	50 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
3	Heat Recovery Steam generator (HR SG)- 25 MW Waste Heat Recovery Based Power Plant	60		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 50 ppm 190 ppm				
There prostandards		-	tack / vent or reactor, p	rocess shall confirm	_				
No.	Stack attached to	Stack height in Meter		Parameter	Permissible Limit				
(A) H				I=					
1	HBI Reformer		Venturi Scrubber	Particulate Matter	50 mg/Nm3				
2	Reformer cun Recuperator-2		Venturi Scrubber	Particulate Matter	50 mg/Nm3				
3	Reformer curr Recuperator-3	30	Venturi Scrubber	Particulate Matter	50 mg/Nm3				
4	Reformer cun Recuperator-4	ı 40	Venturi Scrubber	Particulate Matter	50 mg/Nm3				

5	D - C				
	Reformer cum Recuperator-5	40	Venturi Scrubber	Particulate Matter	50 mg/Nm3
6	HBI Process Dust Collection system(PDCS)-1	20	Venturi Scrubber + Hydro Cyclone	Particulate Matter	40 mg/Nm3
7	Process Dust Collection system-2	20	Venturi Scrubber + Hydro Cyclone	Particulate Matter	40 mg/Nm3
8	Process Dust Collection system-3	20	Venturi Scrubber + Hydro Cyclone	Particulate Matter	40 mg/Nm3
9	Process Dust Collection system-4	20	Venturi Scrubber + Hydro Cyclone	Particulate Matter	40 mg/Nm3
10	Process Dust Collection system-5	25	Venturi Scrubber + Hydro Cyclone	Particulate Matter	40 mg/Nm3
B) Lin	ne Plant				
1	Lime plant Kiln-1	45	Bag Filter	Particulate matter	150 mg/Nm3
2	Lime plant Kiln-2	45	Bag Filter	Particulate matter	150 mg/Nm3
3	Lime plant Kiln-3	45	Bag Filter	Particulate matter	150 mg/Nm3
4	Lime plant Kiln-4	45	Bag Filter	Particulate matter	150 mg/Nm3
	M Plant				
1	HCL Scrubber	25	HCL Scrubber	HCL	20 mg/Nm3
	attached to pickling operation (Line-1)				
2	attached to pickling	25	HCL Scrubber	HCL	20 mg/Nm3
_	attached to pickling operation (Line-1)  HCL Scrubber attached to Pickling Operation (Line-2)  HCL fume Scrubber attached to Acid Regeneration Plant (ARP)	25	HCL Scrubber  HCL Scrubber	HCL HCL	20 mg/Nm3 20 mg/Nm3
3	attached to pickling operation (Line-1)  HCL Scrubber attached to Pickling Operation (Line-2)  HCL fume Scrubber attached to Acid Regeneration Plant (ARP)  Fume Extraction system attached to cold Rolling Mill (Line-1)	25	HCL Scrubber  HCL Scrubber  FES System	HCL HCL SO <sub>2</sub> NO <sub>x</sub>	20 mg/Nm3 20 mg/Nm3 40 mg/Nm3 25 mg/Nm3
3 4 5	attached to pickling operation (Line-1)  HCL Scrubber attached to Pickling Operation (Line-2)  HCL fume Scrubber attached to Acid Regeneration Plant (ARP)  Fume Extraction system attached to cold Rolling Mill (Line-1)  Fume Extraction system attached to cold Rolling Mill (Line-2)	25 25 30	HCL Scrubber  HCL Scrubber  FES System	HCL  HCL  SO <sub>2</sub> NO <sub>x</sub> SO <sub>2</sub> NO <sub>x</sub>	20 mg/Nm3 20 mg/Nm3 40 mg/Nm3 25 mg/Nm3 40 mg/Nm3 25 mg/Nm3
3	attached to pickling operation (Line-1)  HCL Scrubber attached to Pickling Operation (Line-2)  HCL fume Scrubber attached to Acid Regeneration Plant (ARP)  Fume Extraction system attached to cold Rolling Mill (Line-1)  Fume Extraction system attached to cold Rolling Mill (Line-1)	25	HCL Scrubber  HCL Scrubber  FES System	HCL HCL SO <sub>2</sub> NO <sub>x</sub> SO <sub>2</sub>	20 mg/Nm3 20 mg/Nm3 40 mg/Nm3 25 mg/Nm3

	1 F	Pickling Line		Water Scrubber	HCL	20 mg/Nm3	
4.5	Industry shal & Fly ash.	l take adequate measur	res to contro	ol dusting due to	storage t	ransportation & handling Coal	Complied
4.6		l comply with Coal har	ndling guide	line of the Board	l.		In-progress
4.7	·	l comply with fly ash n					Not Applicable No generation of Fly Ash
4.8						ne premises of the industry eed the following levels.	Complied
				Permissible Lim			
	P	arameters		Annual		Hrs. Average	
		Matter – 10 (PM10)		60		100	
		Matter – 10 (PM2.5)		40		60	
	SO <sub>2</sub>			50		80	
4.0	NO <sub>X</sub>			40		80	0 1: 1
4.9		t shall provide porthole				for monitoring the air ard's staff. The chimney(s)	Complied.
	vents attached to various sources of emission shall be designed by numbers such as S-I, S-2, etc. and these shall be painted/displayed to facilitate identification.						
4.10						n its own sources within the	Complied
						se to less than 75 dB(A)	
	auring day tii	me and 70 dB (A) duri e is reckoned between	ig night time	e. Daytime is red	konea in	between 6a.m. and 10 p.m.	
5					ment an	d transboundary) Rule,2016	Form-2
	[See rule 6(2	)]				•	
5.1	Authorization	nt of authorization fon order No.: 107719, I	r occupier o	or operator han	dling haz	zardous waste	Complied
5.2	M/s. Arcelor	Mittal Nippon Steel Inc	lia Limited	is hereby grante	d an auth	orization to operate facility	Complied
						203-230, 245-264, 312-321,	Junganu
		t - Hazira Road, Hazira	394 270, D				
	Sr. No.	Waste	Qty.	Schedule- Process N		Facility	
	1	Chemical sludge	2900	35	3	Collection, storage,	
		from waste water	MT/Year	r		transportation and disposal	
		treatment				at GPCB approved TSDF site.	
	2	Used or Spent Oil	1443	5.1		Collection, storage,	Ħ
			KL/Year			transportation and	
						disposal by selling to	
		I D I I	70.65			register re-refiners.	<u> </u>
	3	Empty Barrels / containers / Liners /	7265 Nos./Yea	33.	l	Collection, storage, transportation and disposal	
		Contaminated with	Nos./1ea	ii		top authorized	
		hazardous				decontaminator.	
		chemicals / Wastes					
	4	Spent ion exchange	11,138	35	2	Collection, Storage,	
		resins containing	Nos./Yea	ır		Transportation and	
	5	metals Zinc Dross	195	Schedule-	17/(15)	disposal at CHWIF Send to authorized	$\mathbb{H}$
	3	ZINC DIOSS	MT/Mont		14 (13)	recycler who has obtained	
			1,11,1,10,110			authorization from rulc-9	
						of Hazardous and other	
						waste management and	
						transboundary Rules,2016.	Ц

5.3	The Authorization shall be valid up to 31-12-2024.	Complied
5.4	The authorization is subject to the conditions stated below and such other condition as may be specified	
	in the rules from time to time under the Environment Protection Act -1986.	_
5.5	The authorization is granted to operate a facility for collection, storage, within factory premises	Complied
	transportation and ultimate disposal of Hazardous Waste as per condition 5.2 to the industry having	
	valid CCA of this Board.	
6	TERMS AND CONDITIONS OF AUTHORISATION	
6.1	The applicant shall comply with the provision of the Environment Protection Act, 1986 and the rules	Complied
	made there under.	-
6.2	The authorization shall be produced for inspection at the request of an officer authorized by the GPCB.	Complied
6.3	The persons authorize shall not rent, lend, sell, transfer or otherwise transport the HW without obtaining prior permission of the GPCB.	Complied
6.4	Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization	Complied
6.5	The person authorized shall comply with the provision outlined in the central pollution control board	Complied
	guidelines on "Implementing and liabilities for environmental damages due to handling and disposal	
	of handling and disposal of hazardous waste and penalty"	
6.6	The person authorized shall comply with the provisions outlined in the central pollution control board	Complied
	guidelines on "implementing liabilities for environmental damages due to handling and disposal	
6.6	of hazardous waste and penalty."  It is the duty of the authorized person to take prior permission of the GPCB to close down the facility.	Complied
0.0		_
6.8	An application for renewal of an authorization shall be made as laid down in rule 6(2) under	Complied
	Hazardous and Other Waste management and transboundary Rules, 2016.	
6.9	The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental	Complied
6.10	occurrence and its clean-up operations.  The record of consumption and fare of the imported hazardous and other waste shall be maintained.	Complied
6.11	The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-	Complied
0.11	processing or utilization of imported hazardous or other waste shall be treated and disposal of as per	Compiled
	specific condition of authorization.	
6.12	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	Complied
6.13	Any other condition for compliance as per the guidelines issued by the ministry of environment,	Complied
0120	Forest and Climate Change or Central Pollution Control Board from time to time.	
6.14	The waste generator shall be totally responsible for (i.e. Collection, Storage, Transportation, and	Complied
	Ultimate Disposal) the wastes generated.	
6.15	Records of waste generation, its management and annual return shall be submitted to Gujarat	Complied
C 1 C	Pollution Control Board in Form-4 by 30 <sup>th</sup> day of every year for the proceeding period April to March.	C1'- 1
6.16	In case of any accident, details of the same shall be submitted on form-11 to Gujarat pollution Control Board.	Complied
6.17	As per "Public Liability Insurance Act-1991" Company shall get insurance policy, If applicable.	Complied
6.18	Empty Drums and container of toxic and hazard material shall be treated as per guidelines published	Complied
	for "management & handling of discarded container". Records of the same shall be maintained	
	forwarded to Gujarat Pollution Control Board.	
6.19	In case of transport of hazardous waste to a facility for (i.e. treatment, Storage and disposal) existing in	Complied
	a state other that the state where hazardous waste wastes are generated, the occupier shall obtain 'No	
	Objection Certificate' from the state pollution control board committee of the concerned state of union	
6.20	territory administration where the facility exists.  Unit Shall take all concrete measures to show sensible result in waste generation, reduction,	Complied
0.20	avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and	Compiled
	also along with form-4.	
6.21	Industry shall have to display the relevant information with regard to hazardous waste as indicated in	Complied
	the Supreme court's order in W.P.No 657 of 1995 dated 14th October 2003.	
6.22	Industry shall have to display on-line data outside the main factory gate with regard to quantity and	Complied
	nature of hazardous chemicals being handled in the plant, including waste and air emissions and solid	
	hazardous wastes generated within the factory premises.	

7	Specific Condition	
7.1	The Authorized actual user of hazardous and other waste shall maintain records of hazardous and other wastes purchased in a passbook issued by the state pollution control board along with the authorization.	-
7.2	Handling over the hazardous and other waste to the authorized actual user shall be only after making the entry in the passbook of the actual user.	Complied
7.3	In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standard and the condition specified in the authorization for hazardous and other waste shall be submitted to SPCB.	Complied
7.4	The occupier of the facility shall comply the standard operating procedure / guidelines published by MOEF&CC or CPCB or GPCB from time to time.	Complied
7.5	Unit shall comply provision of E-Waste Management Rules-2016.	Complied
7.6	The Disposal of Hazardous waste shall be carried out as per the waste management hierarchy.	Complied
7.7	The occupier of facilities shall not store the hazardous waste and other waste for a period not exceeding ninety days. Prior permission of the board shall be obtained for extension of the storage period.	
7.8	The occupier shall maintain the records of generation, sale, storage, transport, recycling, co-processing and disposal of hazardous waste and make available during inspection.	Complied
7.9	The transportation of the hazardous waste shall be carries out in GPS mounted dedicated vehicles.	Complied
8	General Condition	
8.1	Any change in personnel, equipment or working conditions as mentioned in the in the consent should be intimated to this board	Complied
8.2	Applicant shall also comply with the general conditions as in annexure 1	Complied
8.3	occur in excess of standard laid down such information shall be forthwith reported to board, concerned police station, office of directorate of health services, department of explosives, Inspectorate of factories and local body.	Complied
8.4	Remedial actions/measures shall be implemented immediately to bring entire situation normal.	Complied
	environmental safe guards and other conditions stipulated by statutory authorities. The environmental management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environment statements.	Complied
8.6	The Environmental Audit Shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this state board latest by 30 <sup>th</sup> September every year	Complied

Name: M/s. ArcelorMittal Nippon Steel India Limited (Conarc Division),
Plot No.191 to 195,197,198,418,421,422,424 to 428, 27 Km, Surat - Hazira Road, Hazira 394 270, Dist. Surat

	191 to 19	95,197,198,418,421,422,424 to		a Road, Hazira 394	
SR. NO.			ONDITION		STATUS
1	CC&A	Order No.AWH-108150, dat			
2	treated	nsents shall be valid up to <u>31/1</u> effluent & air emission and to ollowing items/products:	for the discharge of at for manufacturing	Complied.	
	Sr. Product No.		Products	Quantity (MT/month)	
	1.	Pellet plant	Pellets	4000000	
	2.	HBI/DRI plant (1 no)	HBI/DRI	1850000	
		<b>F</b> ( )	Iron Ore Fines	268000	
	3.	Corex plant (2 nos.)	Hot Metal	1700000	
			Granulated Slag	510000	
			Granulated pigIron	68292	
	4.	Blast furnace & sinter plant	Hot Metal	2040000	
		(2 nos. replace with 1. No)	Granulated Slag	612000	
	5.	Steel melt shop (4 EAF &	Liquid Steel	5000000	
		4.1 F)	Slag	1000000	
			Iron fines	62400	
	6.	Caster & shop (4 slab & 2	Slabs from SlabCaster	4900000	
		billet caster)	Billets from Billetcaster	2370000	
	7.	CSP& Hot Rolling Mill &	Hot Rolled Coil	3500000	
		long products Mill	Mill Scale	120000	
			Rebar	1599996	
			Wire Rod	699996	
	8.	Lime plant (3 nos.)	Lime / Do-lime	450000	
			Lime Stone / Dolomite chips	110000	
			Lime fines	30000	
			Off Grade Lime / Dolime	10000	
2.1		CT TO SPECIFIC CONDIT			
1	for they	y shall obtain NOC from CGW withdrawal of ground water and ranted from CGWA.	l you shall strictly comply w	ith condition of	Not Applicable Not withdrawing Ground Water
2		y shall Manage Solid Waste g VasteManagement Rules-2016			Complied Please find attached Annexure.
3	directed	provisions of Rule 18 of Solid to make anarrangement in Ut id fuel requirement 'refused d	ilities to replace at least fiv		Company is in continuous discussion with Surat Municipal Corporation(SMC) to request 5% of the fuel in Utilities by RDF.
		shall provide dedicated storage			Not Applicable Not generating Fly Ash during Manufacturing Activities.
5	Industry	shall Comply with fly ash noti	fication 1999 as amended fre	om time to time.	Not Applicable Not generating Fly Ash during Manufacturing Activities.

3.	CONDITION UNDER WATER	RACT:		
3.1	Source of Water-Bore well			Source of Water -
			Surface water	
3.2	The quantity of fresh water con 118911 Kl/Day.	sumption for industrial purpose shall	not exceed	Complied.
3.3	The quantity of fresh water constant 1800 KL/Day.	amption for Domestic purpose shall n	ot exceed	Complied.
3.4		nt to be generated from the manufactu	ring process	Complied
	and other ancillaryindustrial ope	rations shall not exceed 27405 KL/Day cerned quantity mentioned in consent of	y .However,	
	plant.	4		
3.5		ater (Sewage) shall not exceed 1500 k	KL/Day.	Complied
3.6		dequate effluent treatment system in o		Complied
		effluent as per GPCB norms mentioned		1
		·		
	Parameters	GPCB Norms		
	PH	6.5 to 8.5		
	Temperature	40° C		
	Colour (pt.co.scale) in units	100 units		
	Suspended solids	100 mg/l		
	Oil and grease	10 mg/l		
	Phenolic compounds	1 mg/l		
	Sulphides	2 mg/l		
	Ammonical Nitrogen	50 mg/l		
	Total Chromium	2 mg/l		
	Hexavalent chromium	0.1 mg/l		
	BOD (5 days at 200 C)	30 mg/l		
	COD	100 mg/l		
	Cyanides	0.2 mg/l		] 
	Fluorides	1.5 mg/l		
	Lead	0.1 mg/l		
	Copper	2 mg/l		
	Nickel	3 mg/l		
	Zinc Chloride	5 mg/l 600 mg/l		
	Sulphate	1000 mg/l		
	Bio-Assay Test	90% Survival of fish		
	Bio-Assay Test	after 96 hours in 100 %		
		Effluent		
3.7	The Final Treated effluent confir	ming to the above standards shall be re	used in the	Complied
3.7		a land for gardening and plantation pur		Complica
	I =	ewater in to surrounding environment.	poses una	
3.8		shall be disposed of through septic ta	nk / soak pit	Complied
		treated separately to confirm to the		<b>1</b> • 1
	standard and utilized on land f	or plantation or gardening within the fa		
	premises.			
	Parameters	GPCB Norms		
	BOD (5 days at 20° C)	Less than 20 mg/l		
	Suspended Solids  Regidual Chlorina	Less than 30 mg/l		
	Residual Chlorine	Minimum 0.5 mg/l		

<i>A</i> 1	CONDITION The following	or akall	ho used se	fuel				Complied
4.1	The followin		Util		Fuel	To: Quar		Complied
	1		HBI/DRI	Plant	BG (NM3/Month)	292,72,70 Nm <sup>3</sup> /Mor		
					Reducing gas (corex off gas after CO2 absorption)	2470,00, Nm³/Mor	000 nth	
	2		COREX	Plant	Natural Gas	14,50,000 Nm <sup>3</sup> /Mor	nth	
	3		3 SMS Plant, shop & CSP Plant& long product mill		Natural Gas	10,00,000 Nm³/Mor	00 nth	
	4		Blast Fur Plant	nace	BF gas	3,01,876 Nm³/Hr		
	5		Lime Pla	nt	Natural Gas	1,950,000 Nm³/Moi		
	6		Pellet Pla	int	Natural Gas	4,20,000 Nm³/Mo		
4.2	The applicant shall install & operate comprehensive adequate air pollution controlsystem achieve prescribed norms.							
4.3	The flue ga standards.	s emiss	sion throug	n stack atta	ched to furnace co	onform to the fo		Complied.
	Stack Stac No. atta to		No. attached heighti to Meter		Air Pollutio n Control System	Parameter	Permissible Limit	
	(A) Pellet		rating	35	ESP/	Particula	150 mg/Nm3	1
		I Indurating Grinding			Bag Filter	teMatter SO <sub>2</sub> NO <sub>x</sub>	100 ppm 50 ppm	
	(B) Blast F							
	2		e andFume action m	75	Fume Extraction System (FES) with Bag Filter /	Particula teMatter SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm3 100 ppm 50 ppm	

	T a. 1 **		T. D. D.	75 .1 .1	1.50 5: 5
3	Stock House	45	De-Dusting	Particula	150 mg/Nm3
			system with	teMatter	100 ppm
			Bag Filter	SO <sub>2</sub> NO <sub>x</sub>	50 ppm
4	Turbo blower/	100		Particula	150 mg/Nm3
	Boiler 1 & 2			teMatter	100 ppm
				$SO_2$ $NO_x$	50 ppm
5	Slag	70			ents to
	granulation				ulationvessel
	plant			only	
	77 1	4.5	EEG G	during tappi	
6	Hot metal	45	FES System	Particula	150 mg/Nm3
	Transfer/Fume		with Bag	teMatter	100 ppm
	sExhaust		Filter	SO <sub>2</sub> NO <sub>x</sub>	50 ppm
7	Sinter Plant	60	ESP	Particula	150 mg/Nm3
	process stack			teMatter	100 ppm
				$SO_2$ $NO_x$	50 ppm
8	Sinter Plant	30	ESP	Particulat	150 mg/Nm3
	process stack			eMatter	100 ppm
				$SO_2$	50 ppm
				$NO_x$	
(C) SMS F					
9	FES (Fume	45	Bag Filter	Particula	150 mg/Nm3
	Extraction			teMatter	100 ppm
	System)			$SO_2$ $NO_x$	50 ppm
10	FES (Fume	45	Bag Filter	Particula	150 mg/Nm3
	Extraction			teMatter	100 ppm
	System)			$SO_2$	50 ppm
				NO <sub>x</sub>	
11	FES (Fume	45	Bag Filter	Particula	150 mg/Nm3
	Extraction			teMatter	100 ppm
	System)			$SO_2$ $NO_x$	50 ppm
12	FES (Fume	45	Bag Filter	Particula	150 mg/Nm3
12	Extraction	43	Dag riller	teMatter	100 mg/Nm3
	System)			SO <sub>2</sub>	50 ppm
	System)			$NO_x$	20 ppin
(D) Rebar	& Wire Road Mi	11			
	<del></del>		_		
	RHF	60		Particula	150 mg/Nm3
	(Reheating	60	#7 PF	Particula teMatter	100 ppm
		60		teMatter SO <sub>2</sub>	
13	(Reheating Furnace)			teMatter SO <sub>2</sub> NO <sub>x</sub>	100 ppm 50 ppm
	(Reheating Furnace)	60		teMatter SO <sub>2</sub> NO <sub>x</sub> Particula	100 ppm 50 ppm 150 mg/Nm3
13	(Reheating Furnace)  RHF (Reheating			teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter	100 ppm 50 ppm 150 mg/Nm3 100 ppm
13	(Reheating Furnace)			teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter SO <sub>2</sub>	100 ppm 50 ppm 150 mg/Nm3
13	(Reheating Furnace)  RHF (Reheating Furnace)	60		teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter SO <sub>2</sub> NO <sub>x</sub>	100 ppm 50 ppm 150 mg/Nm3 100 ppm 50 ppm
13	(Reheating Furnace)  RHF (Reheating Furnace)  RHF			teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter SO <sub>2</sub> NO <sub>x</sub> Particula	100 ppm 50 ppm 150 mg/Nm3 100 ppm 50 ppm
13	(Reheating Furnace)  RHF (Reheating Furnace)  RHF (Reheating	60		teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter	100 ppm 50 ppm 150 mg/Nm3 100 ppm 50 ppm 150 mg/Nm3 100 ppm
13	(Reheating Furnace)  RHF (Reheating Furnace)  RHF	60		teMatter SO <sub>2</sub> NO <sub>x</sub> Particula teMatter SO <sub>2</sub> NO <sub>x</sub> Particula	100 ppm 50 ppm 150 mg/Nm3 100 ppm 50 ppm

l	16:	T		1	D (1 1	150 01 0	
	16 to	Tunnel	60		Particula	150 mg/Nm3	
	18	Furnace-1			teMatter	100 ppm	
		(3Nos.)			$SO_2$	50 ppm	
					NO <sub>x</sub>		
	19 to	Tunnel	60		Particula	150 mg/Nm3	
	21	Furnace-2			teMatter	100 ppm	
		(3Nos.)			SO <sub>2</sub>	50 ppm	
					NO <sub>x</sub>		
	22 to	Tunnel	60		Particula	150 mg/Nm3	
	24	Furnace-3			teMatter	100 ppm	
		(3Nos.)			SO <sub>2</sub>	50 ppm	
		( )			NOx	''	
4.4	There prod	ess emission throu	gh various st	ack / vent or rea	ctor, process s	hall confirmto	Complied.
		ing standards.	<i>3</i>		, ,		
	Stack	Stack	Stack	Air	Parameter	Permissible	
	No.	attached	heightin	Pollutio		Limit	
	140.	to	Meter				
		lo lo	IAICICI	n			
				Control			
	(4)5.0.			System			
	(A)Pellet			I man er -	I	1.50	
	1	Feed End	33	ESP/BF	Particula	150 mg/Nm3	
					teMatter		
	2	Discharge End	30	ESP/BF	Particulate	150 mg/Nm3	
	2	Discharge End	30	ESP/BF		130 Hig/INH3	
					Matter		
	3	Hearth Layer	20	ESP/BF	Particulate	150 mg/Nm3	
		Separation			Matter	_	
		1					
	4	Additive	32	ESP/BF	Particulate	150 mg/Nm3	
		Grinding			Matter		
	(B) Blast	Furnace					
	5	Gas flare	50		# Only flarin	g excess BF gas	
	6	Pulverized	50	De-dusting	Particulate	150 mg/Nm3	
		Coal injection		System with	Matter		
		3		BF			
	7	De-dusting for	50	De-dusting	Particulate	150 mg/Nm3	
		mixer		System with	Matter		
				BF			
	(C) HBI/I	DRI Plant		1	1	1	
	8	Recuperator	40	Ventury	Particulate	150 mg/Nm3	
		1		Scrubber	Matter		
	9	Process dust	20	Dust	Particulate	150 mg/Nm3	
		collection		collection	Matter		
İ	ii .	system	İ	Scrubber		İ	
		(PDCS)					
	10	Junction	30	Dust	Particulate	150 mg/Nm3	
		House-23		collection	Matter	150 11.9/111115	
		110000		Scrubber			
	11	Junction	30	Dust	Particulate	150 mg/Nm3	
	**	house-24	30	collection	Matter	150 mg/14m5	
		210050 27		Scrubber	17144401		
				1 501 400001	I	I	

(D) COR	EX Plant				
12	FES of Cast House	30	Bag Filter	Particulate Matter	150 mg/Nm3
13	FES of Cast House	30	Bag Filter	Particulate Matter	150 mg/Nm3
14	Gas Flare	30		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm3 100 ppm 50 ppm
15	Gas Flare	30		Particulate Matter SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm3 100 ppm 50 ppm
16	FES Stock house oxide line	30	BF with De- dusting System	Particulate Matter	150 mg/Nm3
17	FES Stock house oxide line	30	BF with De- dusting System	Particulate Matter	150 mg/Nm3
18	FES Stock house coal line	30	BF with De- dusting System	Particulate Matter	150 mg/Nm3
19	FES Stock house coal line	30	BF with Dedusting System	Particulate Matter	150 mg/Nm3
20	De-Dusting Coal drying	30	BF with De-dusting	Particu late	150 mg/Nm3
21	De-Dusting	30	System  BF with De-	Matter Particu	150 mg/Nm3
2.1	Coal drying	30	dusting System	late Matter	150 mg 11m2
22	De-Dusting Coal drying	20	BF with De-dusting System	Particu late Matter	150 mg/Nm3
23	De-Dusting Coal transportation	30	BF with De-dusting System	Particu late Matter	150 mg/Nm3
24	De-Dusting Coal transportation	18	BF with De-dusting System	Particu late Matter	150 mg/Nm3
25	De-Dusting Coal Blending	18	BF with De-dusting System	Particu late Matter	150 mg/Nm3
(E) Lime					
26	Lime/Dolime Plant	45	Bag Filter	Particu late Matter	150 mg/Nm3
27	Lime/Dolime Plant	45	Bag Filter	Particu late Matter	150 mg/Nm3
28	Lime/Dolime Plant	45	Bag Filter	Particu late Matter	150 mg/Nm3

4.5	All ba	g filter shall be designed	with adequa	te filtration rat	e.	Complied.		
4.6	remov GPCB	Electronic precipitator shall be designed in such a way that they shall be capable of removal of particulate loading in the flue gas. The treated flue gas shall meet the GPCB/CPCB/MOEF specified norms of discharge.  All cyclone separator shall be adequately designed for particulate specific diametersan						
4.7	All cy	All cyclone separator shall be adequately designed for particulate specific diameters are removal efficiency.  The concentration of the following parameters in the ambient air within the						
4.8	The co		listance of fi			Complied		
	Dartie	culate Matter – 10 (PM10		Annual 60	24 Hrs. Average			
		culate Matter – 10 (1 MT)		40	60			
	SO <sub>2</sub>	Juliac Watter – 12.5 (1 Wi	2.3)	50	80			
	NO <sub>X</sub>			40	80			
	LITOX							
4.9	The ar	oplicant shall provide port	tholes ladde	er platform etc	at chimney(s) for	Complied.		
7.9					or inspection to land foruse	Complicu.		
					sources of emissionshall be			
		ed by numbers such as S-						
		d/displayed to facilitate ic						
4.10		dustry shall take adequate			oise levels from its own	Complied		
					quality standards in respect	Compiled		
		se to less than 75 dB(A) d						
				10 p.m. and ni	ghttime is reckoned			
	Daytin	ne is reckoned in betweer		10 p.m. and ni	ghttime is reckoned			
6.	Daytin betwee	me is reckoned in betweer en 10 p.m. and 6 a.m.	6a.m. and		-			
6.	Daytin betwee	ne is reckoned in betweer en 10 p.m. and 6 a.m. HORIZATION AS PER	h 6a.m. and	OUS AND OT	HER WASTE			
6.	Daytin between AUTH (MAN	ne is reckoned in betweer en 10 p.m. and 6 a.m. HORIZATION AS PER	h 6a.m. and	OUS AND OT	-			
<b>6.</b>	Daytin betwee AUTH (MAN (2)]	ne is reckoned in betweer en 10 p.m. and 6 a.m. HORIZATION AS PER	HAZARDO	OUS AND OT PARY) RULE	HER WASTE S,2016 Form-2 [See rule 6	Complied		
	Daytin between AUTH (MAN (2)]	me is reckoned in between 10 p.m. and 6 a.m. HORIZATION AS PER IAGEMENT AND TRA	HAZARDO NSBOUND	OUS AND OT DARY) RULE ssue: 20/05/20	HER WASTE S,2016 Form-2 [See rule 6	Complied Complied		
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6.1	Daytin betwee AUTH (MAN (2)] Numbo M/s. A author at plot Hazira	me is reckoned in between 10 p.m. and 6 a.m.  HORIZATION AS PER IAGEMENT AND TRA  er of authorization: 10815  ArcelorMittal Nippon Steetization to operate facility	HAZARDO NSBOUND 50, Date of i el India Lim for followin	DUS AND OT DARY) RULE ssue: 20/05/20 ited (Conarc Ing Hazardous v	THER WASTE S,2016 Form-2 [See rule 6 20 Division), is hereby granted an wastes on the premises situated			
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6.1	Daytin betwee AUTH (MAN (2)] Numbe M/s. A author at plot Hazira  Sr. No.  1	me is reckoned in betweer en 10 p.m. and 6 a.m.  HORIZATION AS PER IAGEMENT AND TRA  er of authorization: 10815 ArcelorMittal Nippon Steetization to operate facility No.191 to 195,197,198,4 a 394 270, Dist. Surat.  Waste Description  Chemical sludge from waste water treatment  Used Oil  Waste or residues	HAZARDO NSBOUND 50, Date of i el India Lim for followin 118,421,422 MT/Year 15000	Schedule- I	THER WASTE S,2016 Form-2 [See rule 6  20 Division), is hereby granted an vastes on the premises situated 7 Km, Surat - Hazira Road,  Facility  Collection, storage, transportation and disposal at GPCB approved TSDF site.  Collection, storage, transportation and disposal by selling to register re-refiners.			
6.1	Daytin betwee AUTH (MAN (2)] Numbe M/s. A author at plot Hazira  Sr. No.  1	me is reckoned in betweer en 10 p.m. and 6 a.m.  HORIZATION AS PER IAGEMENT AND TRA  er of authorization: 10813  ArcelorMittal Nippon Sterization to operate facility No.191 to 195,197,198,4 a 394 270, Dist. Surat.  Waste Description  Chemical sludge from waste water treatment  Used Oil	HAZARDO NSBOUND 50, Date of i el India Lim for followin 118,421,422 MT/Year 15000	Schedule-I 35.3	THER WASTE S,2016 Form-2 [See rule 6  20 Division), is hereby granted an vastes on the premises situated 7 Km, Surat - Hazira Road,  Facility  Collection, storage, transportation and disposal at GPCB approved TSDF site.  Collection, storage, transportation and disposal by selling to register re-refiners.  Collection, storage,			
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6.3	The authorization shall be valid up to <u>31-12-2024</u> .	Complied
6.4	The authorization is subject to the conditions stated below and such other condition as may be specified in the rules from time to time under the EnvironmentProtection Act – 1986 and Haz. Waste (M&H and TM) Rules 2008.	Complied
6.5	The authorization is granted to operate a facility for collection, storage, within factory premises, transportation and ultimate disposal of hazardous waste as per condition no 6.2 to the industry having valid CCA of this board.	Complied
7	TERMS AND CONDITIONS OF AUTHORISATION	
7.1	The applicant shall comply with the provision of the Environment Protection Act, 1986 and the rulesmade there under.	Complied
7.2	The authorization shall be produced for inspection at the request of an officer authorized by the GPCB.	Complied
7.3	The persons authorize shall not rent, lend, sell, transfer or otherwise transport the HW withoutobtaining prior permission of the GPCB.	Complied
7.4	Any unauthorized change in personnel, equipment or working conditions as mentioned in theauthorization order by the persons authorized shall constitute a breach of this authorization	Complied
7.5	The person authorized shall comply with the provision outlined in the central pollution control board guidelines on "Implementing and liabilities for environmental damages due to handling and disposal of handling and disposal of hazardous waste and penalty"	Complied
7.6	The person authorized shall comply with the provisions outlined in the central pollution control boardguidelines on "implementing liabilities for environmental damages due to handling and disposal of hazardous waste and penalty."	Complied
7.7	It is the duty of the authorized person to take prior permission of the GPCB to close down the facility.	Complied
7.8	An application for renewal of an authorization shall be made as laid down in rule 6(2) underHazardous and Other Waste management and transboundary Rules, 2016.	Complied
7.9	The imported hazardous and other wastes shall be fully insured for transit as well as for any accidentaloccurrence and its clean-up operations.	Complied
7.10	The record of consumption and fare of the imported hazardous and pother waste shall be maintained.	Complied
7.11	The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre- processing or utilization of imported hazardous or other waste shall be treated and disposal of as per specific condition of authorization.	Complied
7.12	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	Complied
7.13	Any other condition for compliance as per the guidelines issued by the ministry of environment, Forest and Climate Change or Central Pollution Control Board from time to time.	Complied
7.14	The waste generator shall be totally responsible for (i.e. Collection, Storage, Transportation, andUltimate Disposal) the wastes generated.	Complied
7.15	Records of waste generation, its management and annual return shall be submitted to GujaratPollution Control Board in Form-4 by 30 <sup>th</sup> day of every year for the proceeding period April to March.	Complied
7.16	In case of any accident, details of the same shall be submitted on form-11 to Gujarat pollution ControlBoard.	Complied
7.17	As per "Public Liability Insurance Act-1991" Company shall get insurance policy, If applicable.	Complied
7.18	Empty Drums and container of toxic and hazard material shall be treated as per guidelines publishedfor "management & handling of discarded container". Records of the same shall be maintained forwarded to Gujarat Pollution Control Board.	Complied
7.19	In case of transport of hazardous waste to a facility for (i.e. treatment, Storage and disposal) existing in a state other that the state where hazardous waste wastes are generated	Complied

	, the occupier shall obtain 'No Objection Certificate' from the state pollution control board	
	committee of the concerned state of union	
	territory administration where the facility exists.	
7.20	Unit Shall take all concrete measures to show sensible result in waste	Complied
/ ****	generation, reduction,	1
	avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three	
	months and also along with form-4.	
7.21	Industry shall have to display the relevant information with regard to hazardous waste as	Complied
7.21	indicated in the Supreme court's order in W.P.No 657 of 1995 dated 14 <sup>th</sup> October 2003.	Complicu
77.00		C1:- 1
7.22	Industry shall have to display on-line data outside the main factory gate with regard to	Complied
	quantity and nature of hazardous chemicals being handled in the plant, including waste	
	and air emissions and solidhazardous wastes generated within the factory premises.	
8	General Condition	
	Any shares in newspans, equipment or weating conditions as mentioned in the in the	Complied
8.1	Any change in personnel, equipment or working conditions as mentioned in the in the	Complied
	consent should be intimated to this board	
8.2	Applicant shall also comply with the general conditions as in annexure 1	Complied
	Whenever due to accident or other unforeseen act or ever, such emissions occur or is	Complied
8.3	apprehended to occur in excess of standard laid down such information shall be forthwith	
0.5	reported to board, concerned police station, office of directorate of health services,	
	department of explosives, Inspectorate of factories and local body.	
	In case of failure of pollution control equipment, the production process connected to it	Complied
8.4	shall be stopped. Remedial actions/measures shall be implemented immediately to bring	•
	entire situation normal.	
	The Environment Management Unit/Shell be setup to ensure implementation on and	Complied
	monitoring of environmental safe guards and other conditions stipulated by statutory	Compiled
	authorities. The environmental management Cell/Unit shall directly report to the Chief	
8.5		
	Executive of the organization and shall work as a focal point for internalizing	
	environmental issues. These cells/units also coordinate the exercise of environmental	
	audit and preparation of environment statements.	
	The Environmental Audit Shall be carried out yearly and the environmental statements	Complied
8.6	pertaining to the previous year shall be submitting to this state board latest by 30 <sup>th</sup>	
	September every year	
8.7	The Board reserves the right to review and/or revoke the consent and/or make variations	Complied
0.7	in the condition, which the board deems, fit in accordance with section 27 of the Act.	
8.8	In case of change of ownership/management the name and address of the new	Complied
0.0	owners/partners/directors/proprietor should immediately be intimated to the board.	_
0.0	Industry shall have to display the relevant information with regard to hazardous waste as	Complied
8.9	indicated in the Supreme court's order in W.P.No 657 of 1995 dated 14th October 2003.	1 -
_		
9	Specific Condition	
	The Authorized actual user of hazardous and other waste shall maintain records of	Complied
9.1	hazardous and other wastes purchased in a passbook issued by the state pollution control	
	board along with the authorization.	
0.2	Handling over the hazardous and other waste to the authorized actual user shall be only	Complied
9.2	after making the entry in the passbook of the actual user.	<b>-</b>
	In case of renewal of authorization, a self-certified compliance report in respect of	Complied
9.3	effluent, emission standard and the condition specified in the authorization for hazardous	Compiled
7.5	and other waste shall be submitted to SPCB.	
		Complicat
9.4	The occupier of the facility shall comply the standard operating procedure / guidelines	Complied
	published by MOEF&CC or CPCB or GPCB from time to time.	
9.5	Unit shall comply provision of E-Waste Management Rules-2016.	Complied

9.6	The Disposal of Hazardous waste shall be carried out as per the waste management	Complied
	hierarchy.	
9.7	The occupier of facilities shall not store the hazardous waste and other waste for a period not exceeding ninety days. Prior permission of the board shall be obtained for extension	Complied
	of the storage period.	
9.8	The occupier shall maintain the records of generation, sale, storage, transport, recycling,	Complied
	co-processing and disposal of hazardous waste and make available during inspection.	
9.9	The transportation of the hazardous waste shall be carries out in GPS mounted dedicated	Complied
1 2.3	vehicles.	

Name: M/s. ArcelorMittal Nippon Steel India Limited (Pipe Mill Division)
Plot no: - 203-230,245-264,312-321, @27 Km Surat — Hazira Road,Post Hazira — 394270,
Tal: Chorasi, Dist: Surat.

Sr.	CONDITION	STATUS	
NO. 1.	Consent Order No. AWH – 107720, Date of issue: 07/04/2020		
2.	The consents shall be <b>yalid up to 31/12/2024</b> for the use of outlet for the discharge of treated effluent& air emission and to operation of industrial plant for manufacturing of the following items/products:	Complied.	
	Sr. No.         Products         Total Quantity In MT/Month           1         H-Saw Pipes         25000           2         L-Saw Pipes         27500           3         Coating Plant         40000		
	SUBJECT TO SPECIFIC CONDITION		
1.	Industry shall Manage Solid Waste generated from industrial activities as per Solid WasteManagement Rules-2016[Solid waste define in rule-3(46)]	Complied Please find attached Annexure.	
2.	As per provisions of Rule 18 of Solid Waste Management Rules-2016, You are directed to make anarrangement in utilities to replace at least five percent (5%) of your solid fuel requirement 'refused derived fuel'.	Company is in continuous discussion with Surat Municipal Corporation(SMC) to request 5% of the fuel in Utilities by RDF.	
3.	Industry shall obtain NOC from CGWA as per order of Hon. National Green Tribunal for thewithdrawal of ground water.		
4.	Industry shall provide dedicated storage facility for fly ash	Not Applicable Not generating Fly Ash during Manufacturing Activities.	
5.	Industry shall comply with fly ash notification 1999 as amended from time to time	Not Applicable Not generating Fly Ash during Manufacturing Activities.	
6.	Please submit justification with disposal details of oily waste.	Complied Details submitted in Environment Audit Report	
7.	Industry shall provide STP since domestic waste water generation and submit documentary proof to the board within 3 month and inform Head office and Regional office.	At present we are disposing the sewage through Sock pit / Septic tank. Company is under discussion for finalization of location & technology of STP. Once it is finalized we will intimate the board.	
8.	Submit Environment Audit Report for the year 2018-2019 with compliance	Complied	
9.	Please submit the justification with disposal details Oily waste for the last '3' years	Complied Details submitted in Environment Audit Report	

3.	CONDITION UNDER WATER	ACT:	
3.1	Source of Water-Bore well	Source of Water – Surface water	
3.2	The quantity of fresh water con Kl/Day.	Complied.	
3.3	The quantity of fresh water cons KL/Day.	Complied.	
3.4		nt to be generated from the manufacturing process and ns shall not exceed 1100 KL/Day.	Complied
3.5	The quantity of Domestic waster	water (Sewage) shall not exceed 20 KL/Day.	Complied
3.6	The applicant shall provide adeq quality of the treated effluent as per GPCB	uate effluent treatment system in order to achieve the	Complied.
	Parameters	GPCB Norms	
	PH	6.5 to 8.5	
	Temperature	40° C	
	Colour (pt.co.scale) in units	100 units	
	Suspended solids	100 mg/l	
	Oil and grease	10 mg/l	
	Phenolic compounds	1 mg/l	
	Sulphides	2 mg/l	
	Ammonical Nitrogen	50 mg/l	
	Total Chromium	2 mg/l	
	Hexavalent chromium	0.1 mg/l	
	BOD (5 days at 200 C)	30 mg/l	
	COD	100 mg/l	
	Cyanides	0.2 mg/l	
	Fluorides	1.5 mg/l	
	Lead	0.1 mg/l	
	Copper	2 mg/l	
	Nickel	3 mg/l	
	Zinc	5 mg/l	
3.7	The final treated effluent shall co circulated and in case of remaining thus in no case effluent shall be d	nform to the above standards shall be recycled / reng to be utilized for irrigation / plantation within premises	Complied
3.8		ed of through septic tank / soak pit system.	Complied
4.	CONDITIONS UNDER AIR A	ст:	
l. 1		el. <b>antity</b> Nm3/Hr.	Complied
4.2	Applicant shall install & Operat prescribed below.	e air pollution control system in order to achieve norms	Complied

	followi						
	Stack No.		Stack height in Meter	Air Pollution Control System	Paramet er	Permissible Limit	
	1	De-Dusting Blower-1	30	Bag Filter	Particula te Matter	150 mg/Nm3	
	2	De-Dusting Blower-2	30	Bag Filter	Particula te Matter	150 mg/Nm3	
	3	De-Dusting Blower-3	30	Bag Filter	Particula te Matter	150 mg/Nm3	
	4	De-Dusting Blower-4	30	Bag Filter	Particula te Matter	150 mg/Nm3	
4.4		hall be no proces y process.	s emission fr	om the manufacti	uring process a	s well as any other	Complied
4.5	the ind			e source other tha	n the stack. Ve	nin the premises of ent shall not exceed	Complied
		Parameters		Permissible Li (Microgram/r			
		ulate Matter – 10		100	•		
		ulate Matter – 10	(PM2.5)	60			
	$SO_2$			80			
	NOx						
4.6	The			80			
	air emi chimne as S-I, these sl	ssions and the sa y(s) vents attaches S-2, etc. and hall be painted/di	me shall be or ed to various splayed to fac	, ladder, platform pen for inspection sources of emissi- cilitate identificati	n to land for us on shall be des ion,	y(s) for monitoring the e of Board's staff. The igned by numbers such	
4.7	air emi- chimne as S-I, these sl The ind within less tha in betwand nig	ssions and the sate of sections and the sate of sections at a construction of the section of the	me shall be o ed to various splayed to factorized to maintain ag day time a p.m.	, ladder, platform pen for inspection sources of emissi- cilitate identificati sures for control of ambient air qualit nd 70 dB (A) duri	n to land for us on shall be des ion. of noise levels by standards in ing night time.	e of Board's staff. The igned by numbers such from its own sources respect of noise to Daytime is reckoned	Complied
4.7	air emi- chimne as S-I, these sl The ind within less that in betwand nig	ssions and the sate of sections and the sate of sections at a construction of the section of the	me shall be o ed to various splayed to factorized to maintain ag day time a p.m.	, ladder, platform pen for inspection sources of emissi- cilitate identificati sures for control of ambient air qualit nd 70 dB (A) duri	n to land for us on shall be des ion. of noise levels by standards in ing night time.	e of Board's staff. The igned by numbers such from its own sources respect of noise to	Complied
	air emi- chimne as S-I, these sl The ind within less that in betwand nig Author	ssions and the sate of sections and the sate of sections at a characteristic sections and the sate of sections and the section at the section as per section	me shall be of ed to various splayed to fact dequate means to maintain ag day time at p.m. ed between 10 Hazardous at the state of the	, ladder, platform pen for inspection sources of emissi- cilitate identification sures for control of ambient air qualiting 70 dB (A) during p.m. and 6 a.m. and other waste	n to land for us on shall be des ion, of noise levels by standards in ing night time.	e of Board's staff. The igned by numbers such from its own sources respect of noise to Daytime is reckoned	Complied

5.2	facility	forfollowing Hazard	dous wastes	on the premise	by granted an authorization to operate es situated at plot No. to 203-230, a 394 270, Dist. Surat.	Complied
	Sr. No.	Waste	Qty.	Schedule -IProcess No	Facility	
	1	Chemical sludge from waste water treatment	200 MT/Year	35.3	Collection, storage, transportation and disposal at GPCB approved TSDF site.	
	2	Used or Spent Oil	0.833 KL/Year	5.1	Collection, storage, transportation and disposal by selling to register re- refiners.	
	3	Empty Barrels / containers / Liners / Contaminated with hazardous chemicals / Wastes	1500 Nos./Year	33.1	Collection, storage, transportation and disposal top authorized decontaminator.	
	4	Wastes or residues containing oil	2 MT/Year	35.2	Collection, Storage, Transportation and disposal at CHWIF	
5.3	The Au	thorization shall be	valid up to 31	-12-2024.		Complied
5.4					ow and such other condition as may vironment Protection Act -1986.	Complied
5.5	The au premise transpo	thorization is grantees	ed to operate	e a facility for Hazardous Wa	r collection, storage, within factory ste as per condition 5.2 to the	Complied
6	TERM	S AND CONDITIO	NS OF AU	THORISATIO	N	
6.1		plicant shall comply smade there under.	with the pro	vision of the E	nvironment Protection Act, 1986 and	Complied
6.2		thorization shall be zed by the GPCB.	produced fo	or inspection a	t the request of an officer	Complied
6.3		rsons authorize sha tobtaining prior perm			nsfer or otherwise transport the HW	Complied
6.4	Any un theauth	Complied				
6.5	The per board g and dis	Complied				
6.6	The per	rson authorized shall	comply with	the provision ting liabilities	s outlined in the central pollution s for environmental damages due to	Complied
6.6		duty of the authoriz			nission of the GPCB to close down the	Complied
6.8	An app				e made as laid down in rule 6(2) under ndary Rules, 2016.	Complied
6.9	The im		d other waste	s shall be fully	insured for transit as well as for any	Complied

	,	
6.10	The record of consumption and fare of the imported hazardous and pother waste shall be maintained.	Complied
6.11	The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre- processing or utilization of imported hazardous or other waste shall be treated and disposal of as per specific condition of authorization.	Complied
6.12	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	Complied
6.13	Any other condition for compliance as per the guidelines issued by the ministry of environment, Forest and Climate Change or Central Pollution Control Board from time to time.	Complied
6.14	The waste generator shall be totally responsible for (i.e. Collection, Storage, Transportation, andUltimate Disposal) the wastes generated.	Complied
6.15	Records of waste generation, its management and annual return shall be submitted to GujaratPollution Control Board in Form-4 by 30th day of every year for the proceeding period April to March.	Complied
6.16	In case of any accident, details of the same shall be submitted on form-11 to Gujarat pollution ControlBoard.	Complied
6.17	As per "Public Liability Insurance Act-1991" Company shall get insurance policy, If applicable.	Complied
6.18	Empty Drums and container of toxic and hazard material shall be treated as per guidelines publishedfor "management & handling of discarded container". Records of the same shall be maintained forwarded to Gujarat Pollution Control Board.	Complied
6.19	In case of transport of hazardous waste to a facility for (i.e. treatment, Storage and disposal) existing in a state other that the state where hazardous waste wastes are generated, the occupier shall obtain 'No Objection Certificate' from the state pollution control board committee of the concerned state of union territory administration where the facility exists.	Complied
6.20	Unit Shall take all concrete measures to show sensible result in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with form-4.	Complied
6.21	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Supreme court's order in W.P.No 657 of 1995 dated 14th October 2003.	Complied
6.22	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste and air emissions and solidhazardous wastes generated within the factory premises.	Complied
7	General Condition	
7.1	Any change in personnel, equipment or working conditions as mentioned in the in the consent should be intimated to this board	Complied
7.2	Applicant shall also comply with the general conditions as in annexure 1	Complied
7.3	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standard laid down such information shall be forthwith reported to board, concerned police station, office of directorate of health services, department of explosives, Inspectorate of factories and local body.	Complied
7.4	In case of failure of pollution control equipment, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	Complied
7.5	The Environment Management Unit/Shell be setup to ensure implementation on and monitoring of environmental safe guards and other conditions stipulated by statutory authorities. The environmental management Cell/Unit shall directly report to the Chief	Complied

	Executive of the organization and shall work as a focal point for internalizing environmental	
	ssues. These cells/units also coordinate the exercise of environmental audit and preparation of	
-	environment statements.	
	The Environmental Audit Shall be carried out yearly and the environmental statements	Complied
7.6 p	pertaining to the previous year shall be submitting to this state board latest by 30 <sup>th</sup> September	
e	every year	
7.7	The Board reserves the right to review and/or revoke the consent and/or make variations in the	Complied
/./ c	condition, which the board deems, fit in accordance with section 27 of the Act.	•
T.	n case of change of ownership/management the name and address of the new	Complied
	owners/partners/directors/proprietor should immediately be intimated to the board.	r
I,	ndustry shall have to display the relevant information with regard to hazardous waste as	Complied
	ndicated in the Supreme court's order in W.P.No 657 of 1995 dated 14th October 2003.	o o mp . r o
	•	
8 S	Specific Condition	
	The Authorized actual user of hazardous and other waste shall maintain records of hazardous	Complied
	and other wastes purchased in a passbook issued by the state pollution control board along	r
	with the authorization.	
0.0	Handling over the hazardous and other waste to the authorized actual user shall be only after	Complied
	making the entry in the passbook of the actual user.	
	In case of renewal of authorization, a self-certified compliance report in respect of effluent,	Complied
	emission standard and the condition specified in the authorization for hazardous and other	Compiled
I	waste shall be submitted to SPCB.	
	The occupier of the facility shall comply the standard operating procedure / guidelines	Complied
	published by MOEF&CC or CPCB or GPCB from time to time.	Complica
	published by MOEF&CC of CFCB of GFCB from time to time.	Committed
8.5	Unit shall comply provision of E-Waste Management Rules-2016.	Complied
	m n' 1 (11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 1: 1
	The Disposal of Hazardous waste shall be carried out as per the waste management	Complied
	hierarchy.	
	The occupier of facilities shall not store the hazardous waste and other waste for a period not	Complied
	exceeding ninety days. Prior permission of the board shall be obtained for extension of the	
	storage period.	
	The occupier shall maintain the records of generation, sale, storage, transport, recycling, co-	Complied
0.0	processing and disposal of hazardous waste and make available during inspection.	
	The transportation of the hazardous waste shall be carries out in GPS mounted dedicated	Complied

Name: M/s. ArcelorMittal Nippon Steel India Limited(Plate Mill Division)
Surat – Hazira Road, Post Hazira – 394270, Tal: Chorasi, Dist: Surat.

Sr. No.	CONDITION						STATUS
1.	Consent	Order No.: AWH-107721	. Date of Issu	e: 07/04/202	20.		
2.	The cons discharge	ents shall be valid up to of treated effluent & air manufacturing of the follow	31/12/2024 for emission and	r the use of to operation	f outlet		Complied.
	Sr. No. Product Quantity 1 Hot Rolled Plate 1,25,000 MT/Month						
	1 2	Hot Rolled Plate Mill Scale	1,25,000 MT/M				
				OHIII			
	1. The	T TO SPECIFIC CONDI unit shall maintain zero li trator shall be adequate to r	quid discharge			•	Not Applicable Company has been granted the permission to discharge the Waste water to Estuary Zone of Tapi through closed pipe line (Refer Page No.2 Condition No. 3.6 of CCA Order)
	activ	stry shall Managed So ities as per Solid Was e in rule-3(46)].					Complied
	3. As p You	er provisions of Rule 18 of are directed to make an appercent (5%) of your so	rrangement in	utilities to	replace	at least	Company is in continuous discussion with Surat Municipal Corporation(SMC) to request 5% of the fuel in Utilities by RDF.
3.	CONDIT	TON UNDER WATER A	CT:				
3.1	Source of Water – Tapi River					Complied	
3.2		ntity of fresh water consu 0000 KI/Day.	mption for in	dustrial pur	pose sha	all not	Complied
3.3	The quar	ntity of fresh water consum of KL/Day.	nption for Do	mestic purpo	se shall	not	Complied
3.4		tity of industrial effluent to nd other ancillaryindustria Day.				uring	Complied
3.5	The appli treated ef below.	cant shall operate effluent t fluent from industrial unit s	treatment systemshall conform	em efficient to the norms	ly so tha s mentio	t ned	Complied
		PARAMETER	S	GPCB NO	RMS		
		pН		6.5 to 8			
		Temperature		40° C			
		Colour (pt.co.sca		100 mg			
		Suspended Solid Oil and Grease		100 mg			
		Phenolic compound	1	l mg/			
		sulphides		2 mg/			
		Ammonical Nitro	gen	50 mg			
		Total chromium	5+	2 mg/			
		Hexavalent chromiu	m	0.1 mg			
		BOD (3 days at 25	5°C)	30 mg			
		COD		100 mg			
		Cyanide		0.2 mg			
		Fluorides		1.5 mg			
		Lead		0.1 mg			
		Copper		2 mg/			
		Nickel Zinc	+	2 mg/ 5 mg/			
1		Iron	<u> </u>	3 mg/			
	<u> </u>	Iron		3 mg/	ı		

3.6						ted effluent shall conform to the above standards shall be reulated to maximum extent & rest shall be discharged into				
		Zone of river Ta				marged mile				
3.5	The quantity of Domestic wastewater (Sewage) shall not exceed 20						Complied			
3.3.3	KL/Day.  Domestic waste water shall be disposed through Septic/Soak pit system.					nit evetem	Complied			
4.	CONDITIONS UNDER AIR ACT:					pit system.	Compiled			
4.1.		owing shall be u					Complied			
	Sr. No.		Fuel		Total Qu	ıantity				
	1	Gas fired Rehe gas/corex gas (			19,000 N 15 MT/					
	2	Heat treatment	furnaceNatu	ral Gas	7,694 N	m³/Hr				
4.2.	The app	licant shall insta system achieve p	ll & operate or rescribed nor	comprehensi ms.	ve adequate	air pollution	Complied			
4.3		e gas emission th owing standards.	rough stack a	ttached to F	urnace shall	conform to	Complied.			
	Sr. No.	Stack attached to	Stack Heightin meter	APCM	Param eters	Permissible limit				
	1.	RHF-1&2 (plate mill)	106	-	$SO_2$	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
	2.	Normalizing furnace (2 nos.) (plate	30	-	PM SO <sub>2</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
	3.	mill) Austinising furnace (2 nos.) (plate mill)	30	-	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
	4.	Tempering furnace (plate mill)	30	-	$NO_x$	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
	5.	Cold leveler Dedusting system (plate mill)	30	Bag filter	PM SO <sub>2</sub> NO <sub>x</sub>	150 mg/Nm <sup>3</sup> 100 ppm 50 ppm				
4.4		nall be no proces ely dispersed by				ated shall be	Complied.			

4.5	prem	concentration of the ises of the industry					
	stack	. Vent shall not exc					
		Parameters			mit (Microgram/		
	Part	iculate Matter – 10	(PM10)	Annual 60	24 Hrs. Avg	<u>9.                                    </u>	
		ciculate Matter – 10		40	60	<del> </del>	
	SO <sub>2</sub>		(11412.5)	50	80		
	NO:			40	80		
4.6	The applicant shall provide portholes, ladder, platform etc. at chimney(s) for monitoring the air emissions and the same shall be open for inspection to land for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-I, S-2, etc. and these shall be pointed/displayed to facilitate identification.					to	
4.7	these shall be painted/displayed to facilitate identification.  The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(A) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.						
5	(MA [Sec.	HORIZATION AS NAGEMENT AND Rule 3(c) & 5(5)]	TRANSBO	OUNDARY) F	RULES,2016 Forn	1-2	
5.1		ber of authorization				Complied	
5.2	hereb	ArcelorMittal Nip by granted an authouses on the premises 70, Tal: Chorasi, D	rization to o situated at Dist.: - Surat	perate facility Surat- Hazir	for following haza	ardous	
	No.	Type of Waste	Quantity MT/Year		Facility		
	1.	Used Oil	330	5.1	Collection, Stora Transportation, disposal by sellin toregistered Re- refiner.		
	2.	Empty Barrels/ Containers/ Liners contaminated with hazardous chemical.	1650	33.3	Collection, Storage, transportation and disposal to authorized decontaminator		
5.3	The a	uthorization shall b	e valid up 31	1/12/2024.		Complied	
5.4	cond	nuthorization is subjition as may be spectonment Protection	ifiedin the r			her Complied	
5.5	withi	authorization is gra n factory premises e as per condition	transportation	on and ultimat	e disposal of Haza	rdous	

6	TERMS AND CONDITIONS OF AUTHORISATION	
6.1	The applicant shall comply with the provision of the Environment Protection Act, 1986 and the rulesmade there under.	Complied
6.2	The authorization shall be produced for inspection at the request of an officer authorized by the GPCB.	Complied
6.3	The persons authorize shall not rent, lend, sell, transfer or otherwise transport the HW withoutobtaining prior permission of the GPCB.	Complied
6.4	Any unauthorized change in personnel, equipment or working conditions as mentioned in theauthorization order by the persons authorized shall constitute a breach of this authorization	Complied
6.5	The person authorized shall comply with the provision outlined in the central pollution control board guidelines on "Implementing and liabilities for environmental damages due to handling and disposal of handling and disposal of hazardous waste and penalty"	Complied
6.6	The person authorized shall comply with the provisions outlined in the central pollution control boardguidelines on "implementing liabilities for environmental damages due to handling and disposal of hazardous waste and penalty."	Complied
6.6	It is the duty of the authorized person to take prior permission of the GPCB to close down the facility.	Complied
6.8	An application for renewal of an authorization shall be made as laid down in rule 6(2) under Hazardous and Other Waste management and transboundary Rules, 2016.	Complied
6.9	The imported hazardous and other wastes shall be fully insured for transit as well as for any accidentaloccurrence and its clean-up operations.	Complied
6.10	The record of consumption and fare of the imported hazardous and pother waste shall be maintained.	Complied
6.11	The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre- processing or utilization of imported hazardous or other waste shall be treated and disposal of as per specific condition of authorization.	Complied
6.12	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	Complied
6.13	Any other condition for compliance as per the guidelines issued by the ministry of environment, Forest and Climate Change or Central Pollution Control Board from time to time.	Complied
6.14	The waste generator shall be totally responsible for (i.e. Collection, Storage, Transportation, andUltimate Disposal) the wastes generated.	Complied
6.15	Records of waste generation, its management and annual return shall be submitted to GujaratPollution Control Board in Form-4 by 30 <sup>th</sup> day of every year for the proceeding period April to March.	Complied
6.16	In case of any accident, details of the same shall be submitted on form-11 to Gujarat pollution ControlBoard.	Complied
6.17	As per "Public Liability Insurance Act-1991" Company shall get insurance policy, If applicable.	Complied
6.18	Empty Drums and container of toxic and hazard material shall be treated as per guidelines publishedfor "management & handling of discarded container". Records of the same shall be maintained forwarded to Gujarat Pollution Control Board.	Complied
6.19	In case of transport of hazardous waste to a facility for (i.e. treatment, Storage and disposal) existing in a state other that the state where hazardous waste wastes are generated, the occupier shall obtain 'No Objection Certificate' from the state pollution control board committee of the concerned state of union territory administration where the facility exists.	Complied
6.20	Unit Shall take all concrete measures to show sensible result in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with form-4.	Complied
6.21	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Supreme court's order in W.P.No 657 of 1995 dated 14 <sup>th</sup> October 2003.	Complied

6.22	Industry shall have to display on-line data outside the main factory gate with regard to quantity and	Complied
	nature of hazardous chemicals being handled in the plant, including waste and air emissions and solidhazardous wastes generated within the factory premises.	
7	Specific Condition	
7.1	The Authorized actual user of hazardous and other waste shall maintain records of hazardous and other wastes purchased in a passbook issued by the state pollution control board along with the authorization.	Complied
7.2	Handling over the hazardous and other waste to the authorized actual user shall be only after making the entry in the passbook of the actual user.	Complied
7.3	In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission standard and the condition specified in the authorization for hazardous and other waste shall be submitted to SPCB.	Complied
7.4	The occupier of the facility shall comply the standard operating procedure / guidelines published by MOEF&CC or CPCB or GPCB from time to time.	Complied
7.5	Unit shall comply provision of E-Waste Management Rules-2016.	Complied
7.6	The Disposal of Hazardous waste shall be carried out as per the waste management hierarchy.	Complied
7.7	The occupier of facilities shall not store the hazardous waste and other waste for a period not exceeding ninety days. Prior permission of the board shall be obtained for extension of the storage period.	Complied
7.8	The occupier shall maintain the records of generation, sale, storage, transport, recycling, co-processing and disposal of hazardous waste and make available during inspection.	Complied
7.9	The transportation of the hazardous waste shall be carries out in GPS mounted dedicated vehicles.	Complied
8.	General Condition	
8.1	Any change in personnel, equipment or working conditions as mentioned in the in the consent should be intimated to this board	Complied
8.2	Applicant shall also comply with the general conditions as in annexure 1	Complied
	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standard laid down such information shall be forthwith reported to board, concerned police station, office of directorate of health services, department of explosives, Inspectorate of factories and local body.	Complied
8.4	In case of failure of pollution control equipment, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	Complied
8.5	The Environment Management Unit/Shell be setup to ensure implementation on and monitoring of environmental safe guards and other conditions stipulated by statutory authorities. The environmental management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environment statements.	Complied
8.6	The Environmental Audit Shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this state board latest by 30 <sup>th</sup> September every year	Complied

Name: M/s. ArcelorMittal Nippon Steel India Limited (Power Division) Plot no: - 353,354 @27 Km Surat – Hazira Road,Post Hazira – 394270, Tal: Chorasi, Dist: Surat.

Sr. NO.					
1.	Consent Order No. AWH – 103	570 Date of issue: 10/08/2010			
2.		31/03/2024 for the use of outlet for the discharge of treated effluent	Complied.		
		f industrial plant for manufacturing of the following items/products:	Compiled.		
	Sr. No. Products	Total Quantity in MW			
	1 Power	525			
	SUBJECT TO SPECIFIC CON	NDITION			
1.	Industry shall strictly comply wit	h all specific conditions mentioned in Environmental Clearance issued	Complied		
	by Govt. of India, Ministry of Er IA-II (I) dated 13/06/2016.	nvironment and Forest vide their letter No. order no. J-11011/74/2006	_		
2.	The unit shall strictly observe ar	nd comply with conditions stipulation made in Environmental	Complied		
		Delhi in its Order No. J-11011/45/2004 IA-II (I) dated 07/11/2005.	G !: 1		
3.		erve and comply with various stipulation imposed by MOEF, New 92 IA-II (I) dated 23/07/1992 & submit compliance report thereof.	Complied		
3.	CONDITION UNDER WATER	• • •			
3.1	Source of Water-Tapi River		Complied		
3.2	•	tion for industrial purpose shall not exceed 17122 KL/Day.	Complied		
3.3		umption for Domestic purpose shall not exceed 25 KL/Day.	Complied		
3.4	The quantity of industrial effluent to be generated from the manufacturing process and other ancilland				
3.5		water shall not exceed 20 KL/Day.	Complied		
3.6	Domestic effluent shall be dispos	ed of through septic tank / soak pit system.	Complied		
	The applicant shall provide adeq	uate effluent treatment system in order to achieve the quality of	Complied		
		norms mentioned below. (Which are applicable):-			
	Parameters PH	GPCB Norms			
		6.5 to 8.5 40° C			
	Temperature Colour (pt.co.scale) in units	100 units			
	Suspended solids				
	Oil and grease	100 mg/l 10 mg/l			
	Phenolic compounds	1 mg/l			
	Sulphides	2 mg/l			
	Ammonical Nitrogen	50 mg/l			
3.7	Total Chromium	2 mg/l			
	Hexavalent chromium	0.1 mg/l			
	BOD (5 days at 200 C)	30 mg/l			
	COD	100 mg/l			
	Cyanides	0.2 mg/l			
	Fluorides	1.5 mg/l			
	Lead	0.1 mg/l			
	Copper	2 mg/l			
	Nickel	3 mg/l			
	Zinc	5 mg/l			

	Boiler R	low Down: -					
	Suspende		100	mg/l			
	Oil & Gr		20 n	U			
	Total Co			mg/l			
	Total Iro			mg/l			
		Water Blow D					
		ilable Chlorine		mg/l			
	Zinc			mg/l			
	Total Ch	romium	0.2				
	Phosphat	e	5.0	mg/l			
	Combine	ed Effluent: -					
ļ	<u>Сошона</u>   рН	ed Elliuent: -	651	to 8.5			
	Suspende	ed Solide		mg/l			
	Oil & Gr		10 r				
	Total Co			mg/l			
	Total Iro			mg/l			
	Zinc			mg/l			
	Hexavale	ent Chrominm	0.1				
	Total Ch	romium	0.2 1				
	Phosphat	e	5.0 1	mg/l			
3.8	The final	treated effluor	at confirming	to the above standards	shall be discharged into	Fetuary Zone of	Complied
3.8				one outlet only.	shan or discharged like	Latuary Zone of	Compiled
3.9					soak pit system & shal	l be treated	Complied
5.7					zed on land for plantati		Compile
		e factory prem		- <b>6</b>	<b>F</b>		
		Parameters		GPCB Norms			
		5 days at 20° C	(2)	Less than 20 mg/l			
		nded Solids		Less than 30 mg/l			
	Residu	al Chlorine		Minimum 0.5 mg/l			
4.		IONS UNDER					
4.1		wing shall be t					
	Sr. No.			Quantity			
	11	Natural	Gas   25,0	00,000 Sm3/day			
4.2				nprehensive adequate	air pollution control sys	tem in order to	Complied
12		orescribed norr		ttached to boiler/ furn	ace/ heater shall conform	a to the following	
4.3	standards		mough stack a	mached to Donet/ Rillia	acci neater shall comon.	n to the following	
	Stack	Stack	Stack heigh	Air Pollution	Parameter	Permissible	
	No.	attached to	in Meter	Control System	* W. W. I. C. C.	Limit	
				Low NOx	Particulate Matter	50 mg/Nm <sup>3</sup>	
	1	HRSG-1	65	generating	SO <sub>2</sub>	200 mg/Nm <sup>3</sup>	
				burners	NO <sub>x</sub>	300 mg/Nm <sup>3</sup>	
				Low NOx	Particulate Matter	50 mg/Nm <sup>3</sup>	
	2	HRSG-2	65	generating	$SO_2$	200 mg/Nm <sup>3</sup>	
				burners	$NO_x$	300 mg/Nm <sup>3</sup>	
				Low NOx	Particulate Matter	50 mg/Nm <sup>3</sup>	
	3	HRSG-3	65	generating	$SO_2$	200 mg/Nm <sup>3</sup>	
				burners	NO <sub>x</sub>	300 mg/Nm <sup>3</sup>	
				Low NOx	Particulate Matter	50 mg/Nm <sup>3</sup>	
	4	GT-1	30	generating	$SO_2$	200 mg/Nm <sup>3</sup>	
				burners	NO <sub>x</sub>	300 mg/Nm <sup>3</sup>	
				Low NOx	Particulate Matter	50 mg/Nm <sup>3</sup>	
	5	GT-2	30	generating	$SO_2$	200 mg/Nm <sup>3</sup>	
				burners	NO <sub>x</sub>	300 mg/Nm <sup>3</sup>	
	6	GT-3	30	Low NOx	Particulate Matter	50 mg/Nm <sup>3</sup>	
				generating	$SO_2$	200 mg/Nm <sup>3</sup>	

			burners		NO <sub>x</sub>	300 mg/Nm <sup>3</sup>				
4.4	There s	hall be no process emission:	from the manufa	cturing process	as well as any	other ancillary	Complied			
4.5	The concentration of the following parameters in the ambient air within the premises of the industry									
	and a d	istance of 10 meters from the			3.50	0)				
		Parameters		nissible Limit (						
	Dortio	ulate Matter – 10 (PM10)	Annu 60	21	24 Hrs. Av 100	erage				
		ulate Matter – 10 (PM2.5)	40		60					
	SO <sub>2</sub>	10 (1 1412.3)	50		80					
	NO <sub>X</sub>		40		80					
4.6	emissio	olicant shall provide porthologies and the same shall be operated to various sources of tall be painted/displayed to find	n for inspection emission shall b	to land for use e designed by n	of Board's staff	f. The chimney(s)	Complied			
4.7	The ind	ustry shall take adequate me es so as to maintain ambient daytime and 70 dB (A) durin	asures for contro air quality standa	ol of noise level ards in respect o	of noise to less	than 75 dB(A)	Complied			
		httime is reckoned between			ed in between	ou.m. unu 10 p.m.				
6	Author	ization as per Hazardous			nt and transb	oundary) Rule,2016	Form-2			
	[See ru			, , ,	, .					
		f grant of authorization for			ng hazardous v	waste	G			
6.1		zation order No.: 103579, D			. 6 32	0 0 11 1	Complied			
6.2	Hazard	nander Power Limited is here ous wastes on the premises , Tal: Chorasi, Dist:Surat.					Complied			
	Sr. No.	Details of Waste	Qty.	Schedule-I Process No		Facility				
	1	Used Oil	54 MT/Year	5.1	Collection, s transportation disposal by re-refiners.					
	2	Empty Barrels / containers Liners / Contaminated with hazardous chemicals / Was	MT/Year	33.1		storage, on and disposal top decontaminator.				
6.3	The Au	thorization shall be valid up	to 31-03-2024.				Complied			
6.4	*						Complied			
6.5	The authorization is granted to operate a facility for collection, storage, within factory premises transportation and ultimate disposal of Hazardous Waste as per condition 6.2 to the industry having valid CCA of this Board.						Complied			
7		S AND CONDITIONS OF								
7.1	The applicant shall comply with the provision of the Environment Protection Act, 1986 and the rules made there under.						Complied			
7.2	Gujarat Pollution Control Board.						Complied			
7.3	Waste v	rsons authorize shall not re withoutobtaining prior permi	ssion of the Guja	rat Pollution C	ontrol Board.		Complied			
7.4	authori	authorized change in persons a	uthorized shall c	onstitute a brea	ch of this author	orization	Complied			
7.5	authori: fire etc.	erson authorized shall imp zation is being granted consid- and their possible impacts a	lering all site-spe nd also carry out	ecific possible s t mock drill in t	cenarios such a this regard at re	s spillages, leakages, egular interval time.	Complied			
7.6		son authorized shall comply nes on "implementing liabilit					Complied			

	hazardous waste and penalty."	
7.6	It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility.	Complied
7.8	An application for renewal of an authorization shall be made as laid down in rule 6(2) under Hazardous and Other Waste management and transboundary Rules, 2016.	Complied
7.9	The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operations.	Complied
7.10	The record of consumption and fare of the imported hazardous and other waste shall be maintained.	Complied
7.11	The hazardous and other wastes which gets generated during recycling or reuse or recovery or pre- processing or utilization of imported hazardous or other waste shall be treated and disposal of as per specific condition of authorization.	Complied
7.12	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	Complied
7.13	Any other condition for compliance as per the guidelines issued by the ministry of environment, Forest and Climate Change or Central Pollution Control Board from time to time.	Complied
7.14	The waste generator shall be totally responsible for (i.e., Collection, Storage, Transportation, and Ultimate Disposal) the wastes generated.	Complied
7.15	Records of waste generation, its management and annual return shall be submitted to GujaratPollution Control Board in Form-4 by 30 <sup>th</sup> day of every year for the proceeding period April to March.	Complied
7.16	In case of any accident, details of the same shall be submitted on form-11 to Gujarat pollution Control Board.	Complied
7.17	As per "Public Liability Insurance Act-1991" Company shall get insurance policy, If applicable.	Complied
7.18	Empty Drums and container of toxic and hazard material shall be treated as per guidelines published for "management & handiing of discarded container". Records of the same shall be maintained & forwarded to Gujarat Pollution Control Board regularly.	Complied
7.19	In case of transport of hazardous waste to a facility for (i.e., treatment, Storage and disposal) existing in a state other that the state where hazardous waste wastes are generated, the occupier shall obtain 'No Objection Certificate' from the state pollution control board committee of the concerned state of union territory administration where the facility exists.	Complied
7.20	Unit Shall take all concrete measures to show sensible result in waste generation, reduction, avoidance, reuse and recycle. Actions taken in this regard shall be submitted within three months and also along with form-4.	Complied
7.21	Industry shall have to display the relevant information with regard to hazardous waste as indicated in the Supreme court's order in W.P.No 657 of 1995 dated 14th October 2003.	Complied
7.22	Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste and air emissions and solid hazardous wastes generated within the factory premises.	Complied
8	GENERAL CONDITIONS	•
8.1	Any change in personnel, equipment or working conditions as mentioned in the in the consent should be intimated to this board	Complied
8.2	Applicant shall also comply with the general conditions as in annexure 1	Complied
8.3	Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standard laid down such information shall be forthwith reported to board, concerned police station, office of directorate of health services, department of explosives, Inspectorate of factories and local body.	Complied
8.4	In case of failure of pollution control equipment, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.	Complied
8.5	The Environment Management Unit/Shell be setup to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The environmental management Cell/Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environment statements.	Complied
8.6	The Environmental Audit Shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this state board latest by 30th September every year	Complied
8.7	The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems, fit in accordance with Section 27 of the Act.	Complied
8.8	In case of change of ownership/management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the board.	Complied
8.9	Industry shall have to display the relevant information with regards to hazardous waste as indicated in the Hon. Supreme order in w.p.no. 657 of 1995 dated 14th October 2003.	Complied
	· · · · · ·	

9	SPECIFIC CONDITIONS: -	
9.1	The Authorized actual user of hazardous and other waste shall maintain records of hazardous and other	Complied
9.1	wastes purchased in a passbook issued by the state pollution control board along with the authorization.	_
9.2	Handling over the hazardous and other waste to the authorized actual user shall be only after making the	Complied
9.2	entry in the passbook of the actual user.	_
	In case of renewal of authorization, a self-certified compliance report in respect of effluent, emission	Complied
9.3	standard and the condition specified in the authorization for hazardous and other waste shall be	
	submitted to SPCB.	
9.4	The occupier of the facility shall comply the standard operating procedure / guidelines published by	Complied
2,4	MOEF&CC or CPCB or GPCB from time to time.	
9.5	Unit shall comply provision of E-Waste Management Rules-2016.	Complied
9.6	The Disposal of Hazardous waste shall be carried out as per the waste management hierarchy.	Complied
9.7	The occupier of facilities shall not store the hazardous waste and other waste for a period not exceeding	Complied
9.7	ninety days. Prior permission of the board shall be obtained for extension of the storage period.	_
9.8	The occupier shall maintain the records of generation, sale, storage, transport, recycling, co-processing,	Complied
9.6	and disposal of hazardous waste and make available during inspection.	_
9.9	The transportation of the hazardous waste shall be carries out in GPS mounted dedicated vehicles.	Complied

## Annexure 22: Linkage for Iron Ore



# एन एम डी सी लिमिटेड NMDC Limited

(भारत सरकार का उद्यम) (A GOVT, OF INDIA ENTERPRISE)

पंजीकृत कार्यालय : 'खनिज मयन', 10-3-311/ए, कैसल हिल्स, मासाब टॅंक, हैदराबाद - 500 028. Regd. Office : 'Khanij Bhavan' 10-3-311/A, Castle Hills, Masab Tank, Hyderabad - 500 028. नैगम पहचान संख्या / Corporate Identity Number : L13100TG1958 GOI 001674

COM/Essar/2019-20

19-04-2020

Shri, Hrishikesh Kamat
Chief Procurement Officer
Arcelor Mittal Nippon Steel India Ltd.
(Formerly Essar Steel India Limited)

2nd Floor, Birla Centurion, Worli Century Mills Compound

Pandurang Bhudkar Marg

Worli, MUMBAI - 400 030 E-mail: Hrishikesh.Kamat@amns.in; Vivek.Nath@amns.in

Dear Sir.

Sub: Supply/sale of iron ore lump (DRCLO/B.ROM/Baila Lump) from Bailadila Sector.

Ref: Agreement dated 28-03-2016 for sale of iron ore lump from Bailadila Sector.

The agreement dated 28-03-2016 signed between M/s Essar Steel India Limited (currently Arcelor Mittal Nippon Steel India Limited) for supply / sale of iron ore lump (DRCLO/B.ROM/Baila lump) from Bailadila Sector for a period of 3 years from 01-04-2015 to 31-03-2018 was valid till 31-03-2018. M/s Essar Steel India Limited vide letter dated 31-03-2018 has given an undertaking that in order to maintain continuity in supplies, pending renewal / signing of agreement w.e.f. 01-04-2018, iron ore lump (DRCLO/B.ROM/Baila Lump) supplies to M/s Essar Steel India Limited will be continued at long term prices w.e.f. 01-04-2018 as per the terms and conditions of the agreement dated 28-03-2016 for sale of iron ore lump.

In view of the Resolution plan of Arcelor Mittal India Private Limited (AMIPL) for Essar Steel India Limited has been approved by the Hon'ble Supreme Court of India vide its order dated 15th November 2019 in respect of the corporate insolvency resolution process, the name of the company has been changed from Essar Steel India Limited to Arcelor Mittal Nippon Steel India Limited on 8th January 2020 as ordered by Registrar of Companies, Ahmedabad. In view of the change of name, M/s Arcelor Mittal Nippon Steel India Limited do hereby undertake that pending renewal / signing of agreement w.e.f. 08-01-2020 (from the date of change of name), iron ore lump supplies to Arcelor Mittal Nippon Steel India Limited (formerly M/s Essar Steel India Limited) will be as per the terms and conditions of the agreement dated 28-03-2016 for supply of iron ore lump (DRCLO/B.ROM/Baila Lump) till signing of new agreement.

The letter is being sent in duplicate. You may kindly return us a copy duly signed as a token of your acceptance.

Thanking you

Yours faithfully

Dr G Sreenivasa Setty

Jt. General Manager (Commercial)

दूरभाष / Phones : 040-23538713-21 (9 Lines), 23538723, 23538767 फैक्स / Fax : +91-40-23538711 ई-मेल / E-mail : hols@nmdc.co.in वेबसाइट / Website : www.nmdc.co.in



No. 466

\_/OMC/S&M/2021 Dt. OS /01/2021

SPEED POST

To M/s. Arcelor Mittal Nippon Steel India Ltd. (Essar Steel) 27 KM Surat Hazira Road, Choryasi Dist-Surat, Gujarat-394270

Sub: Signing of Long Term Linkage (LTL) Agreement as per Govt. Notification No. 7009 dtd17.09.2014 (As amended vide notification dated 30.04.2015, 18.11.2015 and 10.08.2018) & Notification No. 1896 dtd. 20.02.2020.

Sir,

With reference to the subject matter cited above, this is to infrom you that basing on the decision of the Allotment Committee meeting held at Industries Deptt., Kharavela Bhawan on 29.12.2019, the annual eligible quantity of your plant for supply of Iron Ore for the calendar year from Jan'2021 to Dec'2021 will be as follows.

	Product	(Iron Ore)
Name of the Mine		Fig (in MT)
	CLO	Fines
Gandhamardan Iron Ore Mines	mel	4,85,704

The allotment as per the above eligible quantity shall be effective from 01.01.2021. Further, the quantity agreed to be sold and delivered as indicated above is subject to availability of the product at OMC's Mines.

In view of the above, you are requested to sign the revised LTL Sales Agreement soon, failing which no allotment shall be made in your favourw.e.f 01.01.2021.

Th

Yours faithfully,

Chief General Manager (Min.)

THE Odisha Mining Corporation Ltd.

(A Gold Category State PSU)
Registered Office: OMC House, Bhubaneswar -751001, India
Tel: 0674-2377400/2377401, Fax: 0674-2396889, www.omcltd.com

CIN: U131000R1956SGC000313

+1 403 767 8500 Tel www.teck.com

## Annexure 23: Linkage of Coal and Coke



ArcelorMittal Nippon Steel India Limited 27Km Surat Hazira Road, Hazira Surat, Gujarat-394720, India.

### Sub: Supply of Raw Materials to ArcelorMittal Nippon Steel plant at Hazira, Gujarat.

Dear Sir,

We, Teck Coal Limited, are one of the leading miner / producer & sellers in the world for supply of metallurgical coal catering to the steel industry across the globe.

In relation to your intended steel expansion project at Hazira, India, we intend to supply below products of steel grade coal.

We hereby tender our concurrence to supply this below mentioned tonnages on regular basis on commercial terms and condition as may be mutually agreed in the future.

Product	Tonnage Mio Ton
Pulverised injection Coal	0.20*
Metallurgical Coal	6.50*

<sup>\*</sup> Subject to agreeing on qualities/tonnage per grade and commercial terms.

We shall formalize commercial terms and conditions in the form of agreement as and when your plant intends to commence commercial production.

Sincerely,

Colin W. Petryk Director, Marketing Teck Coal Limited +1(403)767-8581



Ref: 050722

To: ArcelorMittal Nippon Steel India Limited

27Km Surat Hazira Road, Hazira Surat, Gujarat-394720, India.

Sub: Supply of Raw Materials to ArcelorMittal Nippon Steel plant at Hazira, Gujarat.

Dear Sirs,

We KRU OVERSEAS DMCC is the subsidiary of one of the leading miner / producer and being the sellers in the world for supply of Russian coal catering to steel industry across globe.

Please refer to our web-site for more information about our activity https://kru-overseas.ae/

In relation to your intended steel expansion project at Hazira , India facility, we intend to supply below products of steel grade.

We hereby tender our concurrence to supply this below mentioned tonnages on regular basis on commercial terms and condition as may be mutually agreed in future.

Product	Tonnage Mio Ton
Pulverised injection Coal	2.44
Metallurgical Coal	6.50

We shall formalize commercial terms and conditions in the form of agreement as and when your plant intend to commence commercial production.

Yours Sincerely,

Mr Tolstikov Maxim

Manager/Director of KRU OVERSEAS DIACONCO