BEFORE THE NATIONAL GREEN TRIBUNAL

WESTERN BENCH, PUNE

Appeal NO. 27 OF 2022(WZ)

IN THE MATTER OF:

Thakorbhai Vallabhbhai Khalasi .....Appellant

Vs

Ministry of Environment, Forest and Climate Change and Ors

....Respondents

NDOH: 17.08.2023

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Place: Pune
Date:14.08.2023

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BEFORE THE NATIONAL GREEN TRIBUNAL

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Appeal NO.27 OF 2022(WZ)

IN THE MATTER OF:

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REJOINDER ON BEHALF OF THE APPELLANT TO THE REPLY TO THE APPEAL BY RESPONDENT NO.5

MOST RESPECTFULLY SHOWETH AS UNDER:

REJOINDER TO PARAWISE REPLY

1. That the contents of paragraph 1 are matter of record and need no reply.
2. That the contents of paragraph 2 need no reply.
3. That the contents of paragraph 3 need no reply.
4. That the contents of paragraph 4, are denied as incorrect and the appellant wishes to place reliance on the contents of the appeal in support of the challenge to the impugned EC dated 02.03.2022.
5. That the contents of paragraph 5, are denied as incorrect and the appellant wishes to place reliance on the contents of the appeal in support of the challenge to the impugned EC dated 02.03.2022.
6. That the contents of paragraph 6, are denied as incorrect and false. The material placed on record shows that the R-5 has been violating environmental statutes and the same is evidenced from the

Thakor V. Khalasi

inspection reports of GPCB, notice of directions and show cause notices issued by GPCB. The operation of the plant of R-5 has caused air, water, coastal, land and soil pollution.

7. That the contents of paragraph 7, are denied as incorrect and false as the track record of R-5 paints a different picture and as such an extract from the Annual report 2019-2020 is no consequence.
8. That the contents of paragraph 8 are matter of record and need no reply.
9. That the contents of paragraph 9 are matter of record and need no reply.
10. That the contents of paragraph 10, are denied as incorrect and false.

REJOINDER TO PRELIMINARY SUBMISSIONS

11. That the contents of paragraph 11 are matter of record and need no reply.
12. That the contents of paragraph 12 are matter of record and need no reply.
13. That the contents of paragraph 13, are denied as wrong and incorrect. The Final EIA report has not addressed the keys issues relating to the operation of the Steel Plant that has resulted in air, water, coastal, land and soil pollution of the area and affected the health of the residents of Village Hazira. In and around the plant, there has been increased incidence of cancer related ailments and deaths in the last few years. The data from Primary Health centre (PHC) shows the deaths that have resulted from cancer in the years from 2012-2020 of residents in and around

Thakor V. [illegible]

the plant. The true copy of the health Data is annexed herewith and marked as **Annexure RA/1.**

14. That in reply to the contents of paragraph 14 it is submitted that the baseline environmental monitoring studies were conducted from 01.10.2020 to 31.12.2020 and it is important to keep in mind that this was the lockdown phase on account of covid pandemic and there was reduced economic activity and as such these baselines would not give a proper and correct picture of the environmental and socio-economic parameters. The answering respondent has outlined potential impacts and mitigation measures and especially of consequence are the measures concerning air pollution. It is important to note that the present is a modernization project and the earlier EC had similar potential impacts and mitigation measures were proposed but the same have not resulted in any improvement on the ground and the same is evident from the inspection reports of GPCB which have been highlighted over a period of time. issue of air pollution emanating from the plant is persistent and is in focus since 2011 and all measures proposed in the subsequent EC of 2014 and 2016 have not led to any improvement so it required a thorough study and overall assessment of the operation of the plant from an agency to suggest measures to tackle the problem of air pollution. The R-3/GPCB conducted inspections and some of the observations were as follows:

Date of the Inspection	Observations	Proposed Action to R-5
25.04.2013	Unit inspected on account of complaint by Hazira Gram Panchayat Sarpanch	Preparation of Action Plan to control dusting

Thakor V. Khetsi

	Dusting in and around the plant Dusting around SMP Plant and Sinter Plant	especially dusting from fine coal
09.07.2013	Coal Dusting Issues	Action plan preparation
20.09.2014	Fugitive emission from within the plant premises is noticed and also on account of vehicle movement	Partial compliance of instruction of necessary measures to control large amount of dusting from SMP-I plant and fugitive emission from FES SMP-I of the electric arc furnace 1 and 2. Measures to clean the dust on the internal roads of the plant to prevent dusting during transportation
27.01.2015	• Dusting in and around Sinter Plant • Particle emission during the de-sulphuration process from the furnace of steel melting plant • Particle emission from heaps dumped around Sinter Plant. • Particles have accumulation on account of Iron mineral spillage and from the Sinter Plant at the jetty	• Measures for controlling particle emission from sinter plant • Immediate action to control particle emission from de-sulphuration process • Immediate measures to control iron mineral spillage
27.01.2015	• Emission of brownish dust from ventilation openings of the shed • Housekeeping around the Sinter Plant is not in a good condition	• Control emissions • To improve the housekeeping around the shed
30.08.2017	• PH is found alkaline in storm water drain near SMP-I plant	• To stop contamination of storm water drain by treating wastewater in ETP •
11.01.2018	• Complaint regarding air pollution	• Corrective measures to prevent dusting of Hot metal into furnace, as heavy fugitive emission is observed prior to FES

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		(Fume Extraction System) • Check out the efficiency of Bag Filters (APCM) in FES • Take required precautionary measures to prevent fugitive emission in Slag coolong year • Heavy dust deposition on the factory shed of production plants like SMP&Sinter Plant. • Expedite upgradation of APCM in Sinternand FES plant • Instal CAAQMS
16.01.2018	• Complaint in illegal disposal of HW material powder	• Storm water drain contamination to be stopped • Necessary action to be taken for dusting/fugitive emission
03.09.2019	• CTE amendment application	• 500 MT of Gypsum and iron mix stored in open • ETP sludge dumped in open • ETP waste water into storm water drain • Based upon IR and ARS application maybe rejected
05.09.2019	• Complaint of Hazira villagers regarding iron slag dumping on the land of Smashan Bhoomi	• To provide details of waste generation and disposal
23.09.2020	• To check up on fly ash storage	• 500 MT of Gypsum and iron mx still stored in open • Storage of 300 MT of ETP sludge near SMP II -to transfer to safe storage

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		• Details as to disposal of slag • Acidic waste water discharge into storm water drains. ETP sludge dumped near Conarc plant • Submit 3 month of HW disposal, generation details

From the above it is clear, that even after the application for seeking EC was made, the violations continued. The true copy of the Form-1 submitted by R-5 is annexed herewith and marked as **Annexure RA/2.** The water and air analysis report of the GPCB also shows that the prescribed parameters were not met by the R-5. The true copy of the Analysis Report of GPCB is annexed herewith and marked as **Annexure RA/3(Colly).**

15-18 That the contents of paragraph 15-18 are vehemently denied as wrong and false. The EIA report prepared is sketchy in its socio-economic profiling and has not incorporated the basic economic activity of traditional fishing undertaken by the residents of the village Hazira that is adjacent to the plant. As is evident from the EIA report there are 15 villages in the study area (10 Km around the plant) and one aspect that is also reported in the EIA report is the problem of pollution. The relevant aspect is reflected in the heading under Socio - Economic Environment (3.12) and specifically under Findings of Social Impacts and Community Consultation (3.12.8) to state as "*Most people reported environmental pollution in their locality. Many surrounding*

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industries have provided their contributions towards adopting measures to reduce pollution. However, people expressed that major problem is air pollution especially at night time and crops get affected as a consequence." The very basis for identifying the baseline is to anticipate the impacts on an activity, process or livelihood so that mitigation measures can be adopted and proposed. Though, in the present, there is no identification of traditional fishing in Tapi estuary as an activity and as such there is no attempt to understand the impacts of the operation of the plant over the fishing activity in Tapi estuary. Further, the unhindered flow of untreated wastewater from the plant has been flowing into the Tapi estuary contrary to the environment clearance condition in 2016 EC as to have "zero discharge" unit. The appellant and others have brought the attention to the violations and illegalities in the environmental clearance process. Some of the issues raised by the appellant are as follows:-

- R-5/ANMS has made another EC application for expansion of the plant capacity from 9.5 MMTPA to 15 MMTPA, though this information is not disclosed in the Form I where information is sought for interlinking project.
- As per EIA, 2006 provisions, information as regards the EIA report etc. have to be made available on the website of R-5/ANMS, but the same is not available and this fact is admitted in their reply to EDS queries that the website is being prepared so it is a violation of the provisions of EIA, 2006

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- Perusal of the Google Images and its comparison with the proposed auxiliary facilities would show that it is already constructed and in operation.
- ATIRA report shows that the water being discharged from the plant is not meeting the CCA norms.
- Despite EC 2016 having a condition of zero discharge, there is 27 MLS wastewater being released into Tapi estuary.
- It was demanded that a site visit of the entire plant along with the village be undertaken with notice to appellant and the same should be video graphed, samples should be taken from ETP outlet and final outlet. The entire route of effluent pipeline should eb physically checked for any illegal interceptions.
- Air pollution issues have not been addressed and continue unabated.

19. That the contents of paragraph 19 are vehemently denied as wrong and false. The concerns raised at the Public Hearing and post the public hearing have not been addressed in the Final EIA and the information as regards to Slag Management Plan remains sketchy and devoid of any particulars. This is of importance as the photographs and Google images shows that there is dumping of Slag and ETP sludge in the premises of the R-5, so its management is of importance from an environmental standpoint. It had been submitted by the appellant with the evidence that there is improper disposal of slag. The prescribed ToR provided at Sl No. 8- Plan for Slag utilization (Page 839 of appeal paper book) and the final EIA report only shows a Table in response to addressing this ToR and the same has no

particulars (Page 1043 of appeal paper book) as to its management and disposal. Another ToR was as regards to conducting of cumulative impact assessment and its compliance in Final EIA report is shown as a table which just outlines the impact identification matrix (page 1049 of appeal paper book) and is not a cumulative impact assessment of the activities and its impacts on all aspects.

20. That the contents of paragraph 20 is vehemently denied as wrong and false. The entire purpose of undertaking socio-economic survey is to assess the economic activity being undertaken. It has not taken into account that traditional fishing is prevalent in the area and for the same license is issued by the government. The EIA consultant has not undertaken this exercise to ascertain the actual economic activity of the impacted persons.

21-22. That the contents of paragraph 21-22 is vehemently denied as wrong and false. The violations highlighted by the appellant have not been addressed by the R-5. The grant of CCA for discharge of waste water into Tapi is in violation of the EC-2016 condition and the EC condition will override the CCA conditions. Any conditions prescribed in CCA which is contradictory to conditions specified in EC has to be struck down.

23-25. That the contents of paragraph 23-25 is vehemently denied as wrong and false. In the present case, the 21 "proposed" auxiliary projects stood constructed and were operational on the day of grant of EC as has been specifically highlighted by the appellant by way of Google Images at the time of Public Hearing and also

by way of representation to EAC after the public hearing, but the same has not been adverted to by EAC in its meeting to appraise the present project. The EAC has glossed over the violations highlighted by the appellant and others as regards to the project.

26-28 That in response to the contents of paragraph 26-28, it is submitted that the reliance on the judgments under reply will be made at the time of hearing.

29-31. The impugned EC is vitiated as EAC has failed to consider despite it being brought to their attention that it is a case of violation as the facilities that are proposed are already constructed and Google Images was submitted to show this aspect. In form-I the R-5 ought to have submitted it as a violation case and it ought to have been appraised as such. The EAC/R-1 has failed to consider the MoEFCC notification SO 804 (E) Dated 14.3.2017 stipulated the procedure for consideration of such cases where construction of projects was carried out without obtaining EC, treating such cases as violation cases. These violations are primarily related to initiating the project work or carrying out the project activities without obtaining the mandatory EC. the R-1/EAC has erred in accepting the Compliance Report of EC and CCA even though there were 13 EC conditions that were partly complied for 2016 EC and 12 conditions 'partly complied' for 2010 EC so in such a scenario cannot be granted as it can be seen that the EC conditions transcend from one EC to another without compliance. There is admission by R-5 as regards to non-compliance and the same is accepted by EAC at the

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appraisal stage and it is evident from the condition imposed in impugned EC as regards to zero discharge to be implemented by 2023, a condition that was imposed in EC of 2016 so it essentially amounts to accepting non-compliance by R-5 which is not countenanced in EIA process. The EAC has not considered that the CCA issued by the R-3/GPCB is in contravention to the condition imposed in 2016 EC as regards to 'zero discharge' a situation that has led to discharge of 27 MLD of untreated waste water flowing into Tapi estuary harming and destroying the fragile marine environment.

32-35. That the contents of paragraph 32-35 are vehemently denied as wrong and false. In response to the same, the appellant wishes to place reliance on the averments in the Appeal and its documents.

36-38. That the contents of paragraph 36-38 are vehemently denied as wrong and false. . In the present case, the 21 "proposed" auxiliary projects stood constructed and were operational on the day of grant of EC as has been specifically highlighted by the appellant by way of Google Images at the time of Public Hearing and also by way of representation to EAC after the public hearing, but the same has not been adverted to by EAC in its meeting to appraise the present project. The EAC has glossed over the violations highlighted by the appellant and others as regards to the project.

39-54. That the contents of paragraph 39-54 are vehemently denied as wrong and false. The R-5 has not complied with the conditions of EC and CCA, as it has resulted in air, water, soil pollution. The

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Report of a reputed NABL laboratory, and a reputed Scientific Institute– Ahmedabad Textile Industry's Research Association (ATIRA), which is also a Schedule I Environmental Auditor under the Environmental Audit Scheme of GPCB (being followed under a Hon'ble High Court of Gujarat order) that conducted sampling and analysis of effluents coming out of the Steel Plant, going unhindered into the fragile estuarine ecosystem of the river Tapi. The effluent quality analysis proves beyond doubt that the R-5/ANMS is discharging untreated effluent into the river, which is a clear case of violation of EC and CCA. The values of COD, BOD, TSS, TDS and all other parameters relevant to industrial effluents (Sample-1) are very high, which indicates that the effluent is being disposed without any treatment, and the ETPs claimed to be operated by R-5/ANMS are non-functional. The Report also mentions about another extremely acidic, hazardous and toxic stream observed to be illegally discharged across the north-west boundary of the Iron and Steel Plant, which visually appeared to be contaminated with industrial oil.

55-62. That the contents of paragraph 55-62 are vehemently denied as wrong and false. The appellant wishes to place reliance on the compliance report submitted in the present case for its correct reference and also to highlight that some of the aspects have not been considered which are of consequence. ZLD condition was specified in 2016 EC which has not been compiled by the R-5 and the non-availability of funds is not a reason for non-compliance. If that is taken to be a plausible reason the all the

units can pollute and on being hauled up for violation, can take refuge in such a reason which is untenable.

63-67 That the contents of paragraph 63-67 are vehemently denied as wrong and false. The reports post issuance of EC are of no consequence and are to be disregarded as the material that led to the decision is the only one that needs to be considered in the present appeal.

68-75. That the contents of paragraph 68-75 are vehemently denied as wrong and false. The OA 27/2020 was on the issue of indiscriminate dumping of Fly Ash and slag by Hazira Container Freight Ltd and the respondent-5 on a plot outside the premises that was under possession of Hazira Container Freight Ltd. The appellant was not a party to the OA which was on a different issue altogether and an appeal can only be challenged after the order is passed which has been done presently. In the final order this Hon'ble Tribunal has stated that *"However, if fly ash supplied by ESIL to HCFS is not as per permitted norms, it will be open to GPCB to look into this aspect as per law, including the consent conditions.'*

Further, the continued violations of EC and CCA conditions that have impacted the environment and persons living in and around the plant has prompted filing of various litigations and the petitioners/applicants respectively have legal right to fight for the environment and the people dependent and affected by the operations of R-5. The undersigned counsel has serious objections to the contents of the para under reply and the insinuations

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contained therein which needs to be withdrawn by the answering respondent.

76-92 That in response to the contents of the paras 76-92 it is submitted that the contents of the corresponding paras of the appeal are reiterated as true and correct and anything contrary to the same is denied as wrong and false. The averments made in the foregoing paras are reiterated in response to the paras under reply and the same are not repeated for sake of brevity.

In view of the submissions made herein above, the appeal of the appellant deserves to be allowed.

APPELLANT

Place: New Delhi
Date:16.08.2023

Filed By:-

(Shilpa Chohan, Shawahiq Siddiqui)
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BEFORE THE NATIONAL GREEN TRIBUNAL

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Ministry of Environment, Forest and Climate Change and Ors ....Respondents

AFFIDAVIT

I, Thakorbhai Vallabhbhai Khalasi, Aged about 68 years, S/o Shri Vallabhbhai Mithbhai Khalasi R/o Asha Street At & Post Hazira.Ta Choryasi Dist Surat, Gujarat- 394270, Gujarat do hereby solemnly affirm and state as under:

1. That I am the appellant in the above-mentioned matter and as such am competent to depose the present affidavit.
2. That the accompanying rejoinder to reply of R-5 has been drafted by my counsel upon my instructions and the contents of same have been explained to me in the vernacular and are true and correct to the best of my knowledge and understanding.
3. That the annexures are the true copy of the originals.

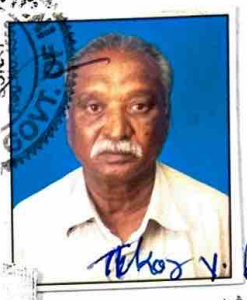
Thakor V. Khalasi

DEPONENT

VERIFICATION:

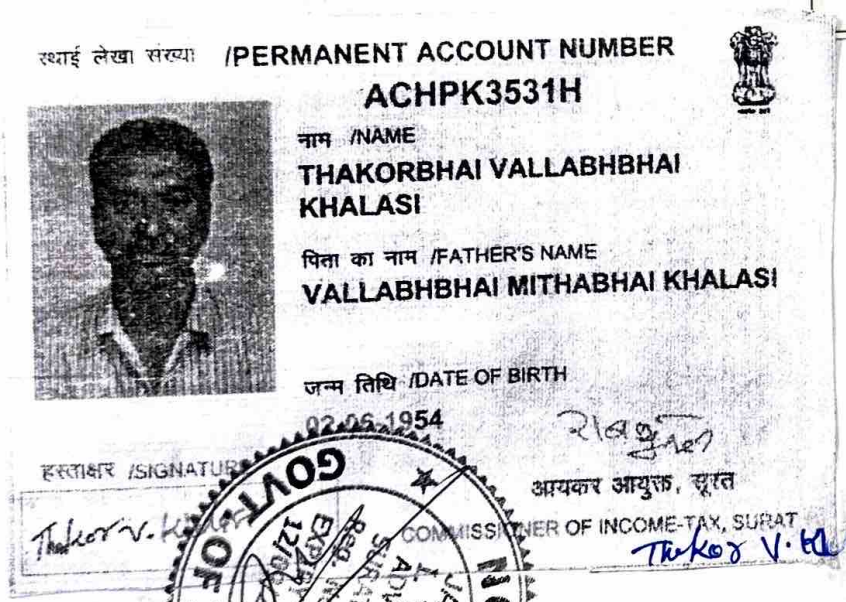
Verified at Surat on 16th day of August, 2023 that the contents of above affidavit are true and correct to the best of my knowledge and understanding and nothing material has been concealed there from.

Place: Surat, Gujarat.
Date : 16.08.2023



Thakor V. Khalasi

DEPONENT



स्थाई लेखा संख्या /PERMANENT ACCOUNT NUMBER
ACHPK3531H

नाम /NAME
THAKORBHAI VALLABHBHAI KHALASI

पिता का नाम /FATHER'S NAME
VALLABHBHAI MITHABHAI KHALASI

जन्म तिथि /DATE OF BIRTH
02.06.1954

हस्ताक्षर /SIGNATURE

आयकर आयुक्त, सूरत
COMMISSIONER OF INCOME-TAX, SURAT

Thakor V. Khalasi

GOVT. OF INDIA NOTARY JAGRUTI I. YADAV ADVOCATE SURAT (Guj.) 4590 Reg. No. NTR/4590/07 EXPIRY 12/08/2027

SOLEMNLY AFFIRMED SIGNED / DECLARED BEFORE ME

J. I. YADAV
Advocate & Notary
SURAT (Gujarat)
Govt. of India
Reg. No. NTR/4590/07

Identify the Signatory Person & Explain Document by me
Advocate / Witness

Attested
Advocate
Kamala R. Roy
G-1100/2002
Kesar Court, Surat

SR. No.: 4915
Date: 16/08/2023
Reg. No.: 13
Page No.: 07

M.: 99090 09122
JAGRUTI I. YADAV
ADVOCATE & NOTARY
Pariwar Appt., Sayan Road,
Amroli, SURAT. (Guj.) INDIA

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RPAD

ANNEXURE RA/1

નમુનો ધ

(જુઓ નિયમ ૪ (૨))

બીજા જાહેર સત્તા મંડળને લગતી અરજીની તબદીલી

3647/37

નં.જી.પં./આરટીઆઇ/આઈડી નં.૪૫/૨૦

જીલ્લા પંચાયત કચેરી, આરોગ્ય શાખા,

સુરત. તા. 21 /11/2020.

પ્રતિ,

(૧)તાલુકા હેલ્થ ઓફીસરશ્રી, તાલુકા હેલ્થ કચેરી,

ચોર્યાસી જી. સુરત.

માહિતીનો અધિકાર અધિનિયમ, ૨૦૦૫ હેઠળ અરજદાર **શ્રી.પટેલ દિપકભાઈ ધનસુખભાઈ મુ.પોઃદામકા (નાગર સ્ટ્રીટ)તા.ચોર્યાસી જી.સુરત ની તા/ ૦૨/૧૧/૨૦૨૦** ની અરજી અત્રે **તા/ ૦૨/૧૧/૨૦૨૦** ના રોજ મળેલ છે. જે આઈ.ડી. નં. **૪૫ તા/ ૦૨/૧૧/૨૦૨૦** થી નોંધાયેલ છે તે જોવા વિનંતિ છે.

* ૨. જરૂરી માહિતી / દસ્તાવેજની વિષય વસ્તુની માહિતી આપના જાહેર સત્તા મંડળ/વિભાગ/કચેરીના કાર્યો સાથે સંકળાયેલ હોવાથી તે અંગે આગળની કાર્યવાહી માટે આ સાથે આપણે સંપૂર્ણ/અંશતઃ તબદીલ કરવામાં આવે છે.

* ૪. આથી, પ્રમાણિત કરવામાં આવે છે કે અરજદારે નિયમ-૫(ક) પ્રમાણે અરજદારે જરૂરી માહિતી મેળવવા માટે રૂ. ૨૦/- **ની કોર્ટ ફી સ્ટેમ્પ લગાવેલ છે.**

બીડાણ:- આરટીઆઇ અરજી

જાહેર માહિતી અધિકારી

અને વહીવટી અધિકારીશ્રી,

(આરોગ્ય) જિલ્લા પંચાયત, સુરત.

નકલ રવાના :-**અરજદાર શ્રી.પટેલ દિપકભાઈ ધનસુખભાઈ મુ.પોઃદામકા (નાગર સ્ટ્રીટ) તા.ચોર્યાસી જી.સુરત**

૨/- આપશ્રીની રાટુઈ-૨૦૦૫ હેઠળની અરજીમાં માંગેલ માહિતીનું કાર્યક્ષેત્ર ઉક્ત જાહેર માહિતી અધિકારીશ્રી ધરાવતા હોય આપશ્રીની અરજી ઉક્ત જાહેર માહિતી અધિકારીશ્રીને તબદીલ કરી હોય ઉપર દર્શાવેલ જાહેર માહિતી અધિકારીશ્રીનો સંપર્ક કરવા વિનંતિ કરવામાં આવે છે.

TRUE COPY

પ્રા આ કેન્દ્ર સુંવાલી

તા.ચોર્યાસી જી.સુરત

કેન્સરન રોગનાં દર્દીઓનાં નામ ગામ હજીરા

અ.નં	નામ	ઉમર	મોબાઇલ નંબર	સરનામુ	રિમાર્કસ
૧	જસવંતભાઇ ડાહ્યાભાઇ ગોવિંદભાઇ પટેલ	૫૧	૯૯૯૮૪૮૯૦૨૬	માતા ફળીયુ,જોગણમાતાનું મંદિર	૨૦૧૧ માં આનંદ હોસ્પિટલમાં કરાવ્યુ,૨૦૧૪ માં ભરતભાઇ કેન્સર હોસ્પિટલ સુરતમાં કરાવ્યું.
૨	મનોજભાઇ વનમાળી દિયાળભાઇ પટેલ	૩૨		સુરત,પાલ સાંઇ રચના સોસાયટી,માતા ફળીયુ રોડ પર	૨૦૧૩ માં આનંદ હોસ્પિટલમાં કરાવ્યુ.
૩	રાકેશભાઇ છગનભાઇ પટેલ	૩૩		સુરત ઉગત પ્રભુદર્શનમાં	આનંદ હોસ્પિટલમાં કરાવ્યુ
૪	પાલીબેન ચીમનભાઇ ભાકાભાઇ પટેલ	૭૨		માતા ફળીયુ,નવો મહોલ્લો	ભારત કેન્સર કુંવર કુભાડિયા
૫	પ્રદિપભાઇ બાબુભાઇ ભુલીયા	૪૮	૯૫૧૨૨૨૯૩૯૪	નવો મહોલ્લો,હજીરા	નવસારી એસા સુપર કલીનીક હોસ્પિટલ
૬	બાબુભાઇ કીકાભાઇ સિપાહી	૭૩		નવો મહોલ્લો,હજીરા	બોમ્બે હોસ્પિટલમા
૭	સીતાબેન ઇશ્વરભાઇ દુર્લભભાઇ ખલાસી	૬૦	૯૯૦૯૨૮૨૬૮૦	નવો મહોલ્લો,હજીરા	નવસારી એસા સુપર કલીનીક હોસ્પિટલ તા.૨૧/૭/૨૦૧૪
૮	રોલેન્દ્રભાઇ ચંપકભાઇ છગનભાઇ ખલાસી	૪૨		ઘંતીશેરી,હજીરા	ભારતીમૈયા હોસ્પિટલામાં
૯	લાલુભાઇ જયંતીભાઇ મગનભાઇ પટેલ	૫૮		પટેલ મહોલ્લો,હજીરા	નવસારી એસા સુપર કલીનીક હોસ્પિટલ
૧૦	દિપકભાઇ રતિલાલભાઇ લાલુભાઇ પટેલ	૪૮		પટેલ સ્ટ્રીટ,હજીરા	
૧૧	કાંતિભાઇ હીરાભાઇ મૈસુરીયા	૬૦		મંદિર મહોલ્લો,હજીરા	
૧૨	ભરતભાઇ વલ્લુભાઇ પટેલ	૫૮		મેઇન રોડ શ્રીરામ રેસ્ટોરન્ટની સામે,હજીરા	
૧૩	હેમંતભાઇ રણછોડભાઇ બગુભાઇ પટેલ	૪૮	૮૯૮૦૮૬૭૩૫૫	નવો મહોલ્લો,હજીરા	મરણ તા.૧૮/૯/૨૦૧૪ કેન્સર
૧૪	કિશોરભાઇ મગનભાઇ જેરામભાઇ ખલાસી	૫૬		નવો મહોલ્લો,હજીરા	
૧૫	હેમંતભાઇ ડી પટેલ		૯૮૭૯૩૧૮૦૨૬	ખોડિયાળ નગર,અડાજણ,સુરત	
૧૬	દિનેશભાઇ રાકેશભાઇ પટેલ	૧૩	૯૦૯૯૪૨૦૭૬૮	વાપર સ્ટ્રીટ	ધો.૮ માં ભણતો વિદ્યાર્થી.

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o/c Taluka Health Officer
Choryasi, Surat

MEDICAL OFFICER,
PRIMARY HEALTH CENTER,
SUVALI,
TA. CHORYASI, DIST. SURAT.

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PHC ICHHAPORE CANCER DEATH INFORMATION

SR.NO	NAME OF PT	SEX	VILLAGE	DATE OF DEATH
1	HASMUKHBHAI CHHAGANBHAI BHANDARI	M	BHANDARIVAD ICHHAPOR	22/08/2020
2	ILABEN MAHENDRA PATEL	F	MOTI FALI ICHHAPORE	13/12/2020
3	NAYANABEN SURESHBHAI PATEL	F	TALAV MOHALLO ICHHAPOR	19/01/2021
4	KIRITBHAI RANGEELBHAI PATEL	M	SADAK MOHOLLO ICHHAPORE	18/05/2019
5	GANPATBHAI DAHYABHAI PATEL	M	SADAK MOHOLLO ICHHAPORE	23/11/2013
6	KAMLESHBHAI SHANKARBHAI PATEL	M	SADAK MOHOLLO ICHHAPORE	08/10/2019
7	RAJESHBHAI MAVJIBHAI PATEL	M	PARATNAGAR BHTAHA	25/09/2020
8	KANIYALAL VASUDEV PATEL	M	TALAV MOHALLO BHATHA	19/07/2019
9	HARISH MOHANBHAI PATEL	M	NAGAR FALIYU BHATHA	16/03/2020
10	KALPANA BHAGUBHAI PATEL	F	NAGAR FALIYU BHATHA	27/08/2016
11	KANJIBHAI LALABHAI PATEL	M	NAGAR FALIYU BHATHA	15/08/2019
12	BHAGUBHAI BHIKHABHAI PATEL	M	DUTIYO MOHALLO BHATHA	11/10/2016
13	HASMUKHBHAI NARANBHAI PATEL	M	PARSI FALKIYU BHATHA	22/11/2012
14	DAHYABHAI RAMUBHAI PATEL	M	NAGAR FALIYU BHATHA	
15	DEVJIBHAI RAMJIBHAI PATL	M	KHADKI FALIYU BHATHA	07/02/2015
16	PUSHPABEN KAMLESHBHAI PATEL	F	NAVI ORI BHATHA	27/08/2016
17	ARVIND JADAVBHAI PATEL	M	KHADI MOHALLO BHATHA	10/04/2015
18	RAMILABEN BALVANT MODI	F	KUMBHAR FALIYU BHATHA	08/04/2019
19	MAHENDRA ISHWERBHAI PRAJAPATI	M	KUMBHAR FALIYU BHATHA	
20	NAYANABEN JASWANTBHAI PATEL	F	BARELO MOHALLO BHATHA	14/09/2019
21	MAHESHBHAI BHAGUBHAI PATEL	M	PRANAVNAGAR BHATHA	25/01/2017
22	KANCHAN BALUBHAI DHODIYA	F	BOMBAY COLONY BHATHA	23/01/2020
23	SANGEETA BALUBHAI AAHIR	F	BOMBAY COLONY BHATHA	24/02/2020
24	MANJULA SURESH PATEL	F	MOTE GHER BHATPOR	15/01/1971

o/c Taluka Health Officer
Choryasi, Surat

PHC ICHHAPORE CANCER INFORMATION				
SR.NO	NAME OF PT	SEX	AGE	VILLAGE
1	SHANKAR DEVABHAI PATEL	M	69	KARSHAN FALIYU KAWAS
2	CHETABNBHAI BHAVANBHAI PATEL	M	46	MANDIR FALIYU KAWAS
3	MAMTA DILIP KESHARVANI	F	30	MANDIR FALIYU KAWAS
4	USHA CHANDRASHEKHAR PILLAI	F	42	SAI SITARAM KAWAS
5	BHANUBEN ISHWARBHAI PATEL	F	64	BHARAMAN MOHOLLO ICHHAPORE
6	BHADRESHBHAI MOHANBHAI PATEL	M	52	BHARAMAN MOHOLLO ICHHAPORE
7	YOGESHBHAI CHHABILBHAI PATEL	M	46	BHARAMAN MOHOLLO ICHHAPORE
8	VIJAYBHAI RANGEELBHAI PATEL	M	43	SADAK MOHOLLO ICHHAPORE
9	KISHORBHAI JERAMBHAI PATEL	M	44	KUMBHAR MOHOLLO ICHHAPORE
10	PRAVINBHAI ISHWARBHAI PATEL	M	50	SADAK MOHOLLO ICHHAPORE
11	KHANDU GOVIND PATEL	M	65	MOTI FALI ICHHAPORE
12	DEVANG BHIKHUBHAI PATEL	M	46	NISHAL FALIYU BHATPORE
13	BHOGILAL RAMU PATEL	M	55	DARJI FALIYU BHATPORE
14	HARSHIDA NATWARBHAI PATEL	F	48	NANDALAY BHATPORE
15	KALPANA KIRIT PATEL	F	47	BNAVI VASAHAT BHATPORE
16	SUMAN BALLU AAHIR	F	41	RAKHAL NAGAR BHATHA
17	DILIP KESHAV PANCHAL	M	58	LUHAR FALIYU BHATAHA
18	DHARMISHTHA PRAVIN MESURIYA	F	56	PARSI FALKIYU BHTHA
19	SHANTA MOHAN PATEL	F	67	NAGAR FALIYU
20	PARVATI BHAGU PATEL	F	69	NAGAR FALIYU
21	NIRMALA GANPAT PATEL	F	63	NAGAR FALIYU
22	JAGDISH MANEK PATEL	M	57	KHADKI FALIYU BHTHA
23	MESHWA PRAGNESH PATEL	F	30	KHADKI FALIYU BHTHA
24	MINA NALIN PATEL	F	58	KHADKI FALIYU BHTATHA
25	DHARMISHTHA CHANDU PATEL	F	39	NAVI ORI BHATHA
26	KIRIT JAGJIVAN MESURIYA	M	44	KUMBHAR FALIYU BHATHA
27	DEVI RAMAN PATEL	F	71	KHETAR BHATHA
28	BHAVNA MUKESH DALAL	F	51	VAISHNODEVI SKY OKHA
29	SHASHIKANT PARBHU VARIYAVA	M	38	VAISHNODEVI SKY OKHA

o/c Taluka Health Officer
Choryasi, Surat

ANNEXURE RA/2

Form – I

for

Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity

By

M/s. ArcelorMittal Nippon Steel India Limited
(Formerly Essar Steel India Limited)
27th km, Notified Hazira Industrial Area, Surat Hazira Road,
Surat-394270, Gujarat

TRUE COPY

(I) Basic Information:

S. NO.	ITEM	DETAILS
1.	Name of the projects	M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)
2.	Sr.No.in the schedule	3
3.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number wells to be drilled	The production capacity will remain same. Please refer additional document.
4.	New/Expansion/Modernization	Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity
5.	Existing Capacity/Area etc.	The production capacity will remain same. Please refer additional document.
6.	Category of Project i.e. 'A' or 'B'	A
7.	Does it attract the general Condition? If yes, please specify.	No
8.	Does it attract the specific condition? If yes, Please Specify.	No
9.	Location	Hazira Notified Industrial Area
	Plot/Survey No.	Survey no. 353,354,179/P, 262P, 263P, 310P, 550P, 561P, 568P, 569P, 602P
	Village	Hazira,
	Tehsil/Taluka	Choryasi
	District	Surat.
	State	Gujarat
10.	Nearest railway station/airport along with distance in kms	Surat Railway Station: 27 km in North-East direction. Surat Airport: 20 km in South-East direction
11.	Nearest Town, city, District Headquarters Along with distance in kms.	Town, city, District Headquarters: Surat is around 27 km in North-East direction
12.	Village Panchayats, Zilla Parishad Municipal Corporation, Local body (complete postal addresses with telephone no's to be given)	Village: Hazira, Village Panchayats: Hazira, 27 KM Surat-Hazira Road, Hazira. Pin Code: 394270
13.	Name of the applicant	Mr. Rajiv Bhatnagar
14.	Registered address	M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited) 27th km, Notified Hazira Industrial Area, Surat Hazira Road, Surat-394270, Gujarat.
15.	Address for correspondence	
	Name	Mr. Rajiv Bhatnagar
	Designation(Owner/Partner/CEO)	Executive Director-Projects
	Address	27th km, Notified Hazira Industrial Area,

S. NO.	ITEM	DETAILS
		Surat Hazira Road, Surat-394270, Gujarat
	Pin Code	394270
	E-mail	Rajiv.Bhatnagar@amns.in
	Telephone No.	9879100063
	Fax No.	-
16.	Details of Alternative Sites examined if any. Location of these sites should be shown on a topo sheet.	Alternative site not considered, as the proposed modification and installation of additional facility will be done in existing premises.
17.	Interlinked Project	Not Applicable
18.	Whether separate application of interlinked project has been submitted?	Not Applicable
19.	If yes, date of submission	Not Applicable
20.	If no, reason	
21.	Whether the proposal involves approval/clearance under: if yes, details of the same and their status will be given (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972? (c) The C.R.Z. Notification, 1991?	Not Applicable
22.	Whether there is any Government Order/Policy relevant/relating to the site?	Not Applicable
23.	Forests land involved (hectares)	No
24.	Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up? (a) Name of the Court (b) Case No. (c) Order/Directions of the Court, if any and its relevance with the proposed project.	Not Applicable
25.	Project cost in Cr	Rs. 6216.58 Crores

(II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited) is located in Hazira Notified Industrial Area
1.2	Clearance of existing land, vegetation and buildings?	No	No
1.3	Creation of new land uses?	No	No additional land is required.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	No
1.5	Construction works?	Yes	Minor Construction activity is required.
1.6	Demolition works?	No	No
1.7	Temporary sites used for construction works or housing of construction workers?	No	Local personnel will be employed for the construction works.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	Construction and Replacement of equipment's is required.
1.9	Underground works including mining or tunneling?	No	Not applicable
1.10	Reclamation works?	No	Not Applicable
1.11	Dredging?	No	Not Applicable
1.12	Offshore structures?	No	Not Applicable
1.13	Production and manufacturing processes?	Yes	Refer Additional attachment**.**
1.14	Facilities for storage of goods or materials?	Yes	The dedicated area is allotted for the storage of finished goods or raw materials.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	Please refer additional document
1.16	Facilities for long term housing of operational workers?	No	Operational Staff will be housed in the existing Township or from Local area.
1.17	New road, rail or sea traffic during construction or operation?	No	Raw material will be imported and unloaded at Port/Road/rail.
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	None
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	Not Applicable.
1.20	New or diverted transmission lines or pipelines?	No	Not Applicable.
1.21	Impoundment, damming, culverting, realignment or other changes to the	No	Not Applicable.

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
	hydrology of watercourses or aquifers?		
1.22	Stream crossings?	No	Not Applicable
1.23	Abstraction or transfers of water form ground or surface waters?	No	Water is sourced from Tapi river.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	Not Applicable
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	By Road/Sea/Rail
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not Applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not Applicable
1.28	Influx of people to an area in either temporarily or permanently?	Yes	People will come for permanent and temporary employment during construction and operation and to avail business opportunity.
1.29	Introduction of alien species?	No	Not applicable
1.30	Loss of native species or genetic diversity?	No	Not Applicable
1.31	Any other actions?	No	Not Applicable

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S. No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	Yes	Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity.
2.2	Water (expected source & competing users) unit**:** KLD	Yes	Additional Water requirement will be 38856.00 KLD. (Water is being sourced from existing sources – Tapi river)
2.3	Minerals (MT)	No	Not Applicable
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	Minor Construction activity will be required, for that, material will be purchased from the local market.
2.5	Forests and timber (source – MT)	No	None
2.6	Energy including electricity and fuels (source, competing users) Unit**:** fuel (MT), energy (MW)	Yes	Electricity Requirement Total power requirement will be sourced from captive power plant and transmission line (national Grid)
2.7	Any other natural resources (use appropriate standard units)	No	Not Applicable

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	No	In-built safety features of the plant and machinery would be made adequate in order to avoid hazardous events causing damage to the life and property.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	None
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	The project will benefit the people living in the neighboring areas by providing them with direct and indirect employment opportunities associated with the construction of a plant.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	Not Applicable
3.5	Any other causes	No	Not Applicable

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	None
4.2	Municipal waste (domestic and or commercial wastes)	No	Municipal waste (domestic and or commercial wastes) will be disposed as per current practice.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	Please refer hazardous waste details in Additional Attachment
4.4	Other industrial process wastes	No	None
4.5	Surplus product	No	Not Applicable
4.6	Sewage sludge or other sludge from effluent treatment	Yes	The sludge from the existing STP after drying will be used as manure for vegetation.
4.7	Construction or demolition wastes	Yes	The Construction debris from the project site during the construction phase would be re-used as land filling material
4.8	Redundant machinery or equipment	No	None
4.9	Contaminated soils or other materials	No	None
4.10	Agricultural wastes	No	Not Applicable
4.11	Other solid wastes	No	Not Applicable

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr).

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Please refer air emission details in Additional Attachment.
5.2	Emissions from production processes	Yes	Please refer air emission details in Additional Attachment.
5.3	Emissions from materials handling including storage or transport	Yes	Fugitive dust will be generated from the material handling activities. Dust suppression or dust extraction systems with water sprinklers will be provided to prevent the fugitive dust emissions.
5.4	Emissions from construction activities including plant and equipment	Yes	During construction work, there will be air emission. However, emission shall be low in magnitude, temporary in nature and reversible.
5.5	Dust or odours from handling of materials including construction materials, sewage & waste	Yes	Dust will generate during construction and handling of materials but due care would be taken.
5.6	Emissions from incineration of waste	No	Not Applicable
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Not Applicable
5.8	Emissions from any other sources	No	Not Applicable

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, Wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Appropriate PPEs would be provided to the employees.
6.2	From industrial or similar processes		
6.3	From construction or demolition	Yes	During construction, minor noise will be generated proper due care will be taken.
6.4	From blasting or piling	No	Not Applicable
6.5	From construction or operational traffic	Yes	During construction, minor noise will be generated proper due care will be taken.
6.6	From lighting or cooling systems	No	Not Applicable
6.7	From any other sources	No	Not Applicable

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

Sr. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	Material is handled, stored & used as per Standard Guidelines.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	Effluent generated shall be treated in Effluent Treatment Plant. The treated effluent will conform to the statutory norms and then it will be discharged in to Tapi estuary through existing outlets. Domestic waste water is discharged through Septic tank & Soak pit.
7.3	By deposition of pollutants emitted to air into the land or into water	No	Not Applicable
7.4	From any other sources	No	Not Applicable
7.5	Is there a risk of long term buildup of pollutants in the environment from these sources?	No	Not Applicable

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	Fire hazard from operations: Existing Emergency response plan will be followed.
8.2	From any other causes	No	Not Applicable
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No	The project site is located in Zone III in the seismic zonation map as demarcated by the bureau of Indian standards (BIS) 2000. Construction will be as per the above requirement.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.**:** • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • Housing development • Extractive industries • Supply industries • Other	No	Not applicable
9.2	Lead to after-use of the site, which could have an impact on the environment	No	Not applicable
9.3	Set a precedent for later developments	No	Not applicable
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	Yes	Major industries are in the vicinity of the Hazira Industrial area.: 1. Adani Port 2. Cairn Energy: Oil Transmission 3. Reliance Industries: Petrochemical Complex 4. L&T Industries: Engineering Manufacturing Unit 5. NTPC: Gas Based Thermal Power Plant 6. KRIBHCO fertilizer

(III) Environmental Sensitivity

Sr. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1.	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	None	There are no protected forests (Sanctuary, Biosphere Reserve and National Park) or any wetlands of national or international significance (Ramras site, Marine Sanctuary) within a radius of 15 km around the project site.
2.	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	None	There is reserve forest within the 15 km radius area of the project site. There is Arabian sea more than 1 Km away from the site. There is no designated ecologically sensitive area (Biosphere Reserve, National Park, Ramsar Convention) within a radius of 15 km around the project site.
3.	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	None	There are no protected floral species (rare and endangered species) in and around the proposed project site. Again, there are no established breeding, nesting or foraging sited for any endangered animals or migratory bird habitats in the study area.
4.	Inland, coastal, marine or underground waters	Arabian Sea	Arabian Sea: More than 1 km away in the south direction from the site.
5.	State, National boundaries	None	None
6.	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	None	None
7.	Defense installations	None	None
8.	Densely populated or built-up area	Surat	Nearest densely populated city is Surat which is about 27 km to the east of the proposed location.
9.	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Yes	Hospitals, schools, places of worship, community facilities are present within 15 km radius
10.	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	None	--
11.	Areas already subjected to pollution or environmental damage. (Those where existing legal environmental standards are exceeded)	None	--
12.	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	None	--

(IV). Proposed Terms of Reference for EIA studies: - For detail please refer **Additional attachment.**

I hereby given under taking that the data and information given in the application and enclosure are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be reject and clearance given, if any to the project will be revoked at our risk and cost.

Date: 24.12.2020

Place: Hazira, Surat

Mr. Rajiv Bhatnagar
(Executive Director - Projects)
M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)

Additional Attachments

for

Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity

By

M/s. ArcelorMittal Nippon Steel India Limited
(Formerly Essar Steel India Limited)
27th km, Notified Hazira Industrial Area, Surat Hazira Road,
Surat-394270, Gujarat

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01. Plant Capacity

02. Previous EC letter of Existing premises

03. Google Image

04. Solid/Hazardous waste details

05. Air Emission Details

06. Proposed TOR

Annexure-1

List of Products and Production Capacity

Sr. No.	Name of Product	Unit	Capacity			Status of Existing Units in 2016	Status of Existing Units in 2020
			Existing	Proposed	Total		
1.	HBI Plant (DRI Mod. I to VI)	MTPA	7.83	-4.0	3.83	Only Mod V & VI are in operation	Mod I to VI "7.83" in operation
2.	Blast Furnace	MTPA	2.04	3	5.04	In operations	"2.04" in operations
3.	Sinter Plant	MTPA	1.48	7	8.48	In operations	"1.48" in operations
4.	Coke Oven (Recovery Type)						
	Gross Coke	MTPA	1.2	1.35	2.55	Under construction	Under construction
	Crude Tar (By – Product)	TPA	52,200	63,000	1,15,200		
	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						
	Oxygen Gaseous	Nm^3/hr	3,60,544	64,200	4,24,744	In operations	"3,60,544" in operations
	Oxygen Liquid		2,950	500	3,450		"2950" in operations
	Nitrogen		1,19,944	25,700	1,45,644		"1,19,944" in operations
	Argon		3,470	1,500	4,970		"3,470" in operations
6	Steel Melt Shop-1(EAF) (4Nos.)	MTPA	4.6	-4.6	0	In operations (partial)	"4.6" in operations
7	Basic Oxygen Furnace(BoF) (3Nos.)	MTPA	0	4.6	4.6	proposed	proposed
8	Steel Melt Shop-2 (4 EAF& 4LF)	MTPA	5.0	0	5.0	In operations	"5.0" in operations
9	Corex Plant(2 Nos.)	MTPA	1.7	0	1.7	In operations	"1.7" in operations
10	Lime Plant (Lime/ Dolime)	MTPA	0.93	0.27	1.2	In operations	"0.93" in operations
11	CPP	MW	31	0	31	In operations (partial)	In operations
		MW	48	0	48	Not yet established	Not yet established
		MW	525	0	525	Not in operation	In operations
12	Plate Mill	MTPA	1.5	0	1.5	In operations	In operations
13	Pellet Plant	MTPA	4.0	0	4.0	Not yet established	Not yet established
14	CSP, Hot Rolling Mill & Long Product -HRC	MTPA	3.5	0	3.5	In operations	In operations
	Rebar		1.6	0	1.6	Not yet	Not yet

Sr. No.	Name of Product	Unit	Capacity			Status of Existing Units in 2016	Status of Existing Units in 2020
			Existing	Proposed	Total		
	Wire Rod		0.7	0	0.7	established	established
15	Caster Shop						
	Slab From Slab Caster	MTPA	4.9	0	4.9	In operations	In operations
	Billets From Billet Caster	MTPA	2.37	0	2.37	Not yet established	Not yet established
16	CRM						
	Hot Rolled Pickled Coils/Sheets	MTPA	1.5	0.54	2.04	In operations	In operations (Consent To Operate received from SPCB)
	CR Coils/Sheet		1.3	0.65	1.95		
	Galvanized Coils/Sheets		0.65	0	0.65		
	Coated Sheets/Coil		0.1	0	0.1		
	Any Other Lines						
17	Extension Of Existing Jetty	Meters	734	0	734	In operations	In operations
18	Waste Heat Recovery Based Power Plant	MW	25	20	45	In operations	"25" in operations
19	Pipe Mill						
	H Saw Pipes	MTPA	0.15	0.15	0.30	In operations	In operations (Consent To Operate received from SPCB)
	L Saw Pipes	MTPA	0.33	0	0.33		
	Coating Plant	MTPA	0	0.48	0.48		
Proposed Facility							
20	Coal briquetting Plant - (1000 TPD)	TPD	0.0	1000	1000		
21	BF – PCI Project-Pulverized coal	T/Hr	0.0	80	80		
22	Ladle furnace - Existing Liquid Steel 4.6 MTPA (Standby LF-5 for Special grades)	MTPA	-	4.6	4.6		
23	Lime Kiln (500 TPD) - Lime and Dolime	MT / Month	0.0	15000	15000		
24	Rotary Kiln (200 TPD) - Calcined Lime	MT/Month	0.0	6000	6000		
25	Additional Ladle Furnace (LF7) – Standby for Special grades	MTPA	-	5.0	5.0		
26	Blast Furnace Dust Catcher /Dust separation unit-150 TPD	TPD	0.0	150	150		
27	Acid Regeneration Plant - 100 KL and Picking Line-3	KL/Day	0.0	100	100		
28	Tank Farm-2 with interconnection between PKL-3 & ARP-2	-	-	-	-		

Sr. No.	Name of Product	Unit	Capacity			Status of Existing Units in 2016	Status of Existing Units in 2020
			Existing	Proposed	Total		
29	BF slag grinding mill (BOO) - 50 TPD	TPD	0.0	50	50		
30	New Cooling towers for						
	Mod-1 and 2	M3/HR		3900	3900		
	Mod-3 and 4	M3/HR		5300	5300		
	Mod-5 and 6	M3/HR		2000	2000		
31	Mod 4 additional VPSA to utilize Corex gas and going forward Coke oven gas	-	-	-	-		
32	Slag Conditioning & Metal Recovery plant	TPD	0.0	7500	7500		
33	Hot metal Pretreatment Station Outside Shop (KR Technology)	-	-	-	-		
34	Thick Plate Normalizing Furnace	Tons/year	0.0	15000	15000		
35	Shot blasting machine	Tons/year	0.0	300,000	300,000		
36	VD Cooling Tower	m3/hr	0.0	3x 500m3/hr,	3x 500m3/hr,		
37	RHD Cooling Tower	m3/hr	0.0	3x 1065m3/hr,	3x 1065m3/hr,		
38	Water Treatment Plant for 500 MW CCPP	m3/hr	0.0	2 x 500 m3/hr	2 x 500 m3/hr		
39	CRM-2						
	Hot Rolled Pickled Coils/Sheets	MTPA	0.0	3.2	3.2		
	CR Coils/Sheet		0.0	2.2	2.2		
	Galvanized Coils/Sheets		0.0	1.0	1.0		
	Annealing coils/Sheets		0.0	1.0	1.0		

Annexure-2

Previous EC letter

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 25th 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 9th 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 12th 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

Recd on 22/03/16

No.	Name of Production Unit/Products	Unit	Capacity			Status of Existing Units
			Existing	Proposed	Total	
1.	HBI Plant (DRI Mod. I to VI)	MTPA	7.83	-4.0	3.83	Only Mod V & VI are in operation.
2.	Blast Furnace	MTPA	2.04	3	5.04	In operation
3.	Sinter Plant	MTPA	1.48	7	8.48	In operation
4.	Coke Oven (Recovery Type)					
	Gross Coke	MTPA	1.2	1.35	2.55	Under construction.
	Crude tar (by-product)	TPA	52,200	63,000	1,15,200	
	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					
	Oxygen Gaseous	Nm^3/hr	3,60,544	64,200	4,24,744	In operation
	Oxygen liquid		2,950	500	3,450	
	Nitrogen		1,19,944	25,700	1,45,644	
	Argon		3,470	1,500	4,970	
6.	Steel Melt Shop-1(EAF) (4 Nos)	MTPA	4.6	- 4.6	0	In operation (Partial)
7.	Basic Oxygen Furnace (BoF) (3 Nos)	MTPA	0	4.6	4.6	Proposed
8.	Steel Melt Shop-2 (4 EAF & 4 LF)	MTPA	5.0	0	5.0	In operation
9.	Corex Plant (2 Nos)	MTPA	1.7	0	1.7	In operation
10.	Lime Plant (Lime /Dolime)	MTPA	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	MTPA	1.5	0	1.5	In operation
13.	Pellet plant	MTPA	4.0	0	4.0	Not yet established

No.	Name of Production Unit/Products	Unit	Capacity			Status of Existing Units
			Existing	Proposed	Total	
14.	CSP, Hot Rolling Mill & Long Product - HRC	MTPA	3.5	0	3.5	In operation
	Rebar		1.6	0	1.6	Not yet established
	Wire Rod		0.7	0	0.7	
15.	Caster Shop					
	Slabs from slab caster	MTPA	4.9	0	4.9	In operation
	Billets from Billet caster		2.37	0	2.37	Not yet established
16.	CRM					
	Hot Rolled Pickled Coils/Sheets	MTPA	1.5	0	1.5	In operation
	CR Coils/Sheets		1.3	0	1.3	
	Galvanized Coils/Sheets		0.65	0	0.65	
	Coated Sheets/Coils		0.1	0	0.1	
17.	Extension of Existing Jetty	Meters	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	

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 21^0 6'15.07" to 21^0 7'26.78" N Latitude and 72^0 38'28.24" to 72^0 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 Material	Requirement (MTPA)			Source	Mode of Transpor-tation
		Existing	Proposed	Total		
1	DR Grade Pellets	83,91,000	- 44,03,000	39,88,000	**Essar's Pelletization Plant located at Visakhapatnam & Paradeep**	Sea Route
2	BF Grade Pellets	45,00,000	1,72,000	46,72,000		
3	Calibrated Lump Ore	21,65,000	- 11,47,000	10,18,000	NMDC mines in Kirandul, Dist Dantewada, CG.	Sea Route
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 m^3/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 m^3/hr. Total water requirement of complex will be 8,499 m^3/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 2nd meeting held on 28th -30th 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 14th September, 2006, as amended, subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITION:

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.

ii. 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^3 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 31st 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 16th 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 30th 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:

i. 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_{10}, $PM_{2.5}$, SO_2 and NO_X 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 19th May, 1993 and 31st 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_{10}, SO_2, 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.

09/3/2016

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

Copy to:-

1. The Secretary, Department of Environment, Government Gujarat.
2. 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-3

Google Image

Annexure-4

Solid/Hazardous waste details

A. Solid Waste

Sr. No.	Plant	Solid Waste	Quantity (MTPA)			Disposal/ Management
			Existing	Proposed	Total	
1.	HBI (Module I-V) & HBI (Module VI)	Iron Ore Fines	10,91,248*	-5,53,769	5,37,479	Consumed in Sinter Plant.
		DRI Fines	1,69,000*	-85,761	83,239	Consumed in SMP & Sales.
		Sludge Pond Fines	2,16,060*	-1,09,642	1,06,418	Consumed in Sinter Plant
2.	HBI (Module I-IV)	LPG	64,800*	-64,800	-	No generation
3.	HRC Plant -Caster, HSM, CSP & Plate Mill	Mill Scale	3,00,600	0	3,00,600	Consumed in Sinter Plant
4.	SMP -1 (EAF)	Slag	11,76,000*	-11,76,000	0	Filling in Low lying area
		Iron Fines	72,000*	-72,000	0	Using in Corex & Micro Pelletization
			0	24000	24000	Used in sinter plant
5.	BOF	BOF Slag	0	5,52,000	5,52,000	Will be used for land filling and road construction
		BOF Sludge and Fines	0	69,000	69,000	Will be used as input material in sinter plant
6.	SMP- 2 - (Conarc)	Slag	10,00,000	0	10,00,000	Being used for land filling and road construction
		Iron Fines	62,400	0	62,400	Using in Corex & Micro Pelletization.
7.	Lime Plant	Lime Stone/Dolomite Chips	2,37,080	0	2,37,080	Using in Sinter Plant, BF & Corex
		Lime Fines	1,26,000	0	1,26,000	Using in Corex SAP, CRM ETP , SP ,HBI & Sales.
		Off Grade Lime/Dolomite	18,640	0	18,640	Using in Sinter Plant, CRM & Corex.
8.	Corex Plant	Granulated Slag	5,10,000	0	5,10,000	Being used as input material in cement plant
		Granulated Pig Iron	68,292	0	68,292	No generation
		De-dusting Dust	8,208	0	8,208	Consumed in Sinter Plant
		Limestone/Dolomite Fines	39,746	0	39,746	Consumed in Sinter Plant
		Ore + Pellet Fines	1,62,034	0	1,62,034	Consumed in Sinter Plant
		Sludge	87,004	0	87,004	Using in SAP Micro Pelletization plant.
		Coal Fines	7,20,000	0	7,20,000	Coal Briquetting/ PCI for BF & Corex/Power Plant/Sinter Plant
		Coke Fines	54,000	0	54,000	Consumed in BF & Sinter Plant
		CDP Dust	82,080	0	82,080	Consumed in PCI in BF.
9.	Blast Furnace	Granulated Slag	6,12,000	12,30,000	18,42,000	Being used as input material in cement plant
		BF Return Fines	3,60,000	0	3,60,000	Consumed in Sinter Plant
		Lump + Pellet	41,000	0	41,000	Consumed in Sinter Plant
		Bag Filter Dust	12,000	18,000	30,000	Consumed in Corex Plant
		Sludge	12,000	18,000	30,000	Consumed in Sinter Plant
		Flue Dust (Dust Catcher Fines)	36,000	19,500	55,500	Consumed in Sinter Plant
		Gas Cleaning Plant Fines	36,000	0	36,000	Consumed in Sinter Plant
		Coke Fines	1,26,000	0	1,26,000	Consumed in BF & Sinter Plant
10.	CRM	Spent Acid (M^3/Year)	7,66,500	1,87,250	9,53,750	Selling to outside party

Sr. No.	Plant	Solid Waste	Quantity (MTPA)			Disposal/ Management
			Existing	Proposed	Total	
		Iron Oxide	4,200	26,650	30,850	Consumed in Sinter Plant
11.	Coke Oven	Tar Sludge	266	300	566	Tar sludge shall be mixed with coal blend before feeding it to coke oven batteries
		ETP (BOD Plant) Sludge	253	285	538	ETP (BOD Plant) sludge will be mixed with coal blend for charging in the coke oven batteries.
12	Acid Regeneration Plant 100 KL	Iron Oxide in form of dry granulate	0.0	850 Kg/Hr	850 Kg/Hr	Will be used in sinter
13	Shot blasting machine	Shots Dust	0.0	65 t/p.a.	65 t/p.a.	Disposal in environment friendly manner

* - Proposed changes not done in premises. Hence existing quantities being generated.

B. Hazardous Waste

Sr. No	Name of Hazardous Waste	Unit	Quantity	Disposal/ Management
1	Chemical Sludge from Waste Water Treatment	MT/Year	30,000	Disposal at GPCB approved TSDF site.
2	ETP Sludge (Solid Waste)	MT/Year	28440	Collection, Storage, Transportation and Reused in Sinter Plant as Iron bearing material by the way of micro pellets.
3	Used Oil	KL/Year	3075.50	Collection, Storage, Transportation and Disposal by selling to Registered Vendors.
4	Oily Waste (Waste oily water + sludge + Magnetic sludge + Grinding Sludge + Coolant Sludge)	MT/Year	3824	Collection, Storage, Transportation and Disposal by selling to Registered Vendors.
5	Discarded Container/Barrels/Liners / Paint Drums	Nos/Year	36100	Collection, Storage, Transportation and Disposal by selling to Authorized vendor.
6	Discarded Resin	Ltrs/once in 4 years	11,138	Collection, Storage, Transportation and Disposal at GPCB approved CHWIF.
7	Zinc Dross	MT/Year	6000	Selling to registered recycler.
8	Contaminated cotton rags (Oily socked cotton waste)	MT/Year	504.44	Collection, Storage, Transportation and Disposal by selling to Registered Vendor or disposal at GPCB approved TSDF site.
9	Paint Dust & Sludge	MT/Year	1000	Collection, Storage, Transportation and Disposal by selling to Registered Vendor or disposal at GPCB approved TSDF site
10	Ceramic based fiber waste (Glass wool)	MT/Year	100	Collection, Storage, Transportation and Disposal at GPCB approved TSDF site
11	Waste photographic film disposal	Packets /Year	350 Packets (1 packet 100 sheet)	Collection, Storage, Transportation and disposal by selling to Registered Vendor.
12	Waste photographic solution	MT/Year	2	Collection, Storage, Transportation and disposal by selling to Registered Vendor.
13.	Oil Emulsion Waste	Lit/Year	95,000	ETP for treatment
14.	Alkali Waste	Kg/year	5000	ETP for treatment
15.	Ash	MT/Month	2.5	Sold
16.	Chromic Sludge	Kg/Month	650	Sold

Annexure-5

Air Emission Details

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
1.	HRC	Boiler of HRC Plant	30	1.25	Adequate stack height	PM : 50 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
2.	HRC	Heat Recovery Steam Generator (HRSG) – 31 MW	60	3.36	Tall Chimney	PM : 10 mg/Nm^3 SO_2 :10 ppm NOx : 80 ppm	Existing	
3.	HRC	Reheating Furnace-I	88.5	4.017	Adequate stack height	PM : 100 mg/Nm^3 SO_2: 40 ppm NOx : 125 ppm	Existing	
4.	HRC	Reheating Furnace-II	88.5	4.017	Adequate stack height	PM : 150 mg/Nm^3 SO_2: 40 ppm NOx : 125 ppm	Existing	
5.	HRC	Electric Arc Furnace I & II	45	4	FES System 1& 2 with Bag Filter	PM: 80 mg/Nm^3	Existing	
6.	HRC	Electric Arc Furnace III	45	5.7	FES System with Bag Filter	PM: 80 mg/Nm^3	Existing	
7.	HRC	Electric Arc Furnace IV	45	5.8	FES System with Bag Filter	PM : 80 mg/Nm^3	Existing	
8.	HRC	Normalizing Furnace	30	1.6	Adequate stack height	PM : 80 mg/Nm^3 SO_2: 40 ppm	Existing	
9.	HRC	Boiler-VDVOD	30	1.25	Adequate stack height	-	Proposed	For Flue gas exhaust
10.	HRC	Stack for Coal Feeding (Ferro Alloy Store)	20	0.5	Adequate stack height	-	Proposed	To arrest Secondary Emission
11.	HRC	Caster 1 : Steam Fan Exhaust	35	1.4	Adequate stack height	-	Proposed	For Steam exhaust
12.	HRC	Caster 2 : Steam Fan Exhaust	35	1.4	Adequate stack height	-	Proposed	For Steam exhaust
13.	HRC	Caster 3 : Steam Fan Exhaust-01	35	1.4	Adequate stack height	-	Proposed	For Steam exhaust
14.	HRC	Caster 3 : Steam Fan Exhaust-02	35	1.4	Adequate stack height	-	Proposed	For Steam exhaust
15.	HRC	Gas Turbine – 31 MW	30	2.5	Adequate stack height	-	Proposed	For Flue gas exhaust
16.	HBI	Reformer cum Recuperator- I	30	3.7	Venturi Scrubber	PM : 50 mg/Nm^3	Existing	
17.	HBI	Reformer cum Recuperator- II	30	3.7	Venturi Scrubber	PM : 50 mg/Nm^3	Existing	
18.	HBI	Reformer cum Recuperator- III	30	3.7	Venturi Scrubber	PM : 50 mg/Nm^3	Existing	
19.	HBI	Reformer cum Recuperator- IV	40	3.46	Venturi Scrubber	PM : 50 mg/Nm^3	Existing	
20.	HBI	Reformer cum Recuperator-V	40	4.31	Venturi Scrubber	PM : 50 mg/Nm^3	Existing	
21.	HBI	Reformer cum Recuperator -VI	40	4.31	Venture Scrubber	PM : 150 mg/Nm^3	Existing	
22.	HBI	Process Dust Collection System (PDCS) - I	20	0.9	Venture Scrubber + Hydro Cyclone	PM : 40 mg/Nm^3	Existing	
23.	HBI	Process Dust Collection System (PDCS) – II	20	0.9	Venture Scrubber + Hydro Cyclone	PM : 40 mg/Nm^3	Existing	
24.	HBI	Process Dust Collection System (PDCS) – III	20	0.9	Venture Scrubber + Hydro Cyclone	PM : 40 mg/Nm^3	Existing	
25.	HBI	Process Dust Collection System (PDCS) – IV	20	0.7	Venture Scrubber + Hydro Cyclone	PM : 40 mg/Nm^3	Existing	

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
26.	HBI	Process Dust Collection System (PDCS) – V	25	0.7	Venture Scrubber + Hydro Cyclone	PM : 40 mg/Nm^3	Existing	
27.	HBI	Process Dust Collection System (PDCS) - VI	20	0.7	Dust collection scrubber	PM : 150 mg/Nm^3	Existing	
28.	HBI	Junction House – 23	30	0.7	Dust collection scrubber	PM : 150 mg/Nm^3	Existing	
29.	HBI	Junction House – 24	30	0.7	Dust collection scrubber	PM : 150 mg/Nm^3	Existing	
30.	HBI	Process Dust Collection System - DRI	20	0.7	Venturi Scrubber	-	Proposed	For Process Dust Collection
31.	HBI	Module 2 Process Dust Collection Bubbler	60	1	Water Quenching	-	Proposed	For Pressure Control
32.	HBI	Module 2 Hot DRI Surge Bin Bubbler	30	0.5	Water Quenching	-	Proposed	For Pressure Control
33.	HBI	Module 3 Process Dust Collection Bubbler	60	1	Water Quenching	-	Proposed	For Pressure Control
34.	HBI	Module 3 Hot DRI Surge Bin Bubbler	30	0.5	Water Quenching	-	Proposed	For Pressure Control
35.	HBI	Module 4 Process Dust Collection Bubbler	60	1	Water Quenching	-	Proposed	For Pressure Control
36.	HBI	Module 4 Hot DRI Surge Bin Bubbler	30	0.5	Water Quenching	-	Proposed	For Pressure Control
37.	HBI	Module 5 Process Dust Collection Bubbler	60	1	Water Quenching	-	Proposed	For Pressure Control
38.	HBI	Module 5 Hot DRI Surge Bin Bubbler	30	0.5	Water Quenching	-	Proposed	For Pressure Control
39.	HBI	Turbo Expander Heater Stack	20	0.5	-	-	Proposed	For Flue gas exhaust
40.	CRM	Boiler No.1&2 of CRM	30	1.4	-	PM : 50 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
41.	CRM	Batch Annealing Furnace (BAF)	20	0.7	-	PM : 50 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
42.	CRM	HCL Scrubber attached to Pickling operation - Line 1	25	1.2	HCL Scrubber	HCL: 20 mg/Nm^3	Existing	
43.	CRM	HCL Scrubber attached to Pickling operation - Line 2	25	1.2	HCL Scrubber	HCL: 20 mg/Nm^3	Existing	
44.	CRM	Pickling Line 3	30	0.8	Water Scrubber	HCL: 20 mg/Nm^3	Existing	
45.	CRM	HCL Fume Scrubber attached to Acid Regeneration Plant (ARP)	25	0.6	HCL Scrubber	HCL: 20 mg/Nm^3	Existing	
46.	CRM	Fume Extraction System Attached to Cold Rolling Mill - Line 1	30	2	FES System	SO2: 40 mg/Nm3 NOx : 25mg/Nm3	Existing	
47.	CRM	Fume Extraction System Attached to Cold Rolling Mill - Line 2	30	2	FES System	SO2: 40 mg/Nm3 NOx : 25mg/Nm3	Existing	

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
48.	CRM	Gas Scrubber attached to Galvanizing operation - Line 1	30	0.6	Gas Scrubber	SO_2 : 40 mg/Nm^3 NOx : 25 mg/Nm^3	Existing	
49.	CRM	Gas Scrubber attached to Galvanizing operation - Line 2	20	0.6	Gas Scrubber	SO_2 : 40 mg/Nm^3 NOx : 25 mg/Nm^3	Existing	
50.	CRM	Heat Recovery Steam Generator (HRSG) – 25 MW	60	5	-	PM : 150 mg/Nm^3 SO_2 : 50 ppm NOx : 190 ppm	Existing	
51.	CRM	Chromic Dryer Blower - 01 for Galvanizing Line 1	30	0.5	-	-	Proposed	For Flue gas exhaust
52.	CRM	Chromic Dryer Blower - 02 for Galvanizing Line 2	20	0.5	-	-	Proposed	For Flue gas exhaust
53.	CRM	Alloy Furnace Fume Vent Common Facility for Galvanizing Line 1&2	30	0.2	-	-	Proposed	For Flue gas exhaust
54.	CRM	Hot Skin Pass Mill Vent	20	0.5	Scrubber	-	Proposed	For Flue gas exhaust
55.	CRM	PKL-3 (Boiler)	32	0.5	-	-	Proposed	For Flue gas exhaust
56.	Lime	Kiln – I	45	1.061	Bag Filter	PM: 150 mg/Nm^3	Existing	
57.	Lime	Kiln – II	45	1.061	Bag Filter	PM: 150 mg/Nm^3	Existing	
58.	Lime	Kiln – III	45	1.061	Bag Filter	PM: 150 mg/Nm^3	Existing	
59.	Lime	Kiln – IV	45	1.061	Bag Filter	PM: 150 mg/Nm^3	Existing	
60.	Lime	Kiln – V	45	1.2	Bag Filter	PM: 150 mg/Nm^3	Existing	
61.	Lime	Kiln – VI	45	1.2	Bag Filter	PM: 150 mg/Nm^3	Existing	
62.	Lime	Kiln – VII	45	1.2	Bag Filter	PM: 150 mg/Nm^3	Existing	
63.	Lime	Rotary Kiln	30	1	-	PM: 150 mg/Nm^3	Existing	
64.	Lime	Kiln silo Dedusting system	10	1	-	PM: 150 mg/Nm^3	Existing	
65.	Lime	Limestone silo Dedusting system	10	1	-	PM: 150 mg/Nm^3	Existing	
66.	Lime	Kiln 1&2 Feeding and Storage	30	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
67.	Lime	Kiln 1&2 Feeding and Storage	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
68.	Lime	Kiln 3&4 Feeding and Storage	15	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
69.	Lime	Kiln 3&4 Feeding and Storage	15	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
70.	Lime	Kiln 3&4 Feeding and Storage	15	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
71.	Lime	Kiln 3&4 Feeding and Storage	12	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
72.	Lime	Kiln 3&4 Feeding and Storage	12	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
73.	Lime	DE System for Kiln 5 & 6 Feeding	25	0.7	Bag Filter	-	Proposed	To arrest Secondary Emission

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
74.	Lime	DE System for Kiln 7 & 8 Feeding	25	0.7	Bag Filter	-	Proposed	To arrest Secondary Emission
75.	Lime	DE System for Kiln 5 & 6 Product Junction House PJH-1	25	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
76.	Lime	DE System for Kiln 7 & 8 Product Junction House PJH-3	25	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
77.	Lime	Kiln – VIII	55	1.2	Bag Filter	-	Proposed	
78.	Blast Furnace	Stove and Fume Extraction	75	6.3	Fume Extraction System(FES) with Bag filter (BF)/ Cyclone (Dust Suppression System)	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
79.	Blast Furnace	Stock House	45	5	De-dusting system with Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
80.	Blast Furnace	Turbo blower / Boiler 1 & 2	100	4	Adequate stack height	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
81.	Blast Furnace	Slag Granulation Plant	70	-	# Air Vents to slag granulation vessel only during tapping.		Existing	
82.	Blast Furnace	Hot Metal Transfer / Fumes Exhaust (Cast House)	45	5.5	FES System with Bag filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
83.	Blast Furnace	Gas Flare	50	4	# Only Flaring of excess BF Gas		Existing	
84.	Blast Furnace	Pulverized Coal Injection	50	-	De-dusting system with Bag filter	PM: 150 mg/Nm^3	Existing	
85.	Blast Furnace	De – dusting for mixer	50	4.1	De-dusting system with Bag filter	PM: 150 mg/Nm^3	Existing	
86.	Blast Furnace-2	Stove	80	7	Adequate Stack Height	PM: 50 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
87.	Blast Furnace-2	Pulverized Coal Injection (PCI)	100	1.5	Bag Filter	PM: 10 mg/Nm^3 SO_2: 10 ppm NOx: 80 ppm	Existing	
88.	Blast Furnace-2	Slag Granulation Plant Stack-1	100	1.5	Adequate stack height	PM: 100 mg/Nm^3 SO_2: 40 ppm NOx: 125 ppm	Existing	
89.	Blast Furnace-2	Slag Granulation Plant Stack-2	80	1.5	Adequate stack height	PM: 150 mg/Nm^3 SO_2: 40 ppm NOx: 125 ppm	Existing	
90.	Blast Furnace-2	Stock house & Coke Bunker De-Dusting System	45	3.35	De-dusting System with Bag Filter	PM: 80 mg/Nm^3	Existing	
91.	Blast Furnace-2	Caste house Fume Extraction Stack-1	45	4.35	Fume Extraction System with Bag Filter	PM: 80 mg/Nm^3	Existing	
92.	Blast Furnace-2	Caste house Fume Extraction Stack-2	45	4.35	Fume Extraction System with Bag Filter	PM: 80 mg/Nm^3	Existing	
93.	Blast Furnace-2	Back draft	80	1	Adequate stack height	PM: 80 mg/Nm^3 SO_2: 40 ppm	Existing	
94.	Blast Furnace-2	Gas Flare	50	2.5	Dry Cyclone + Bag Filter for BF Top gas cleaning	-	Existing	
95.	Blast	Slag Granulation	70		# Air Vents to slag granulation vessel		Proposed	

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
	Furnace	Plant (SGP-2)			only during tapping.			
96.	Sinter Plant	Sinter plant process stack (De-dusting)	30	4.5	ESP	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
97.	Sinter Plant	Sinter plant process stack (Wastegas)	60	3	ESP	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
98.	Sinter Plant-2	De-dusting Stack	33.5	3.5	De-dusting System with Bag Filter	PM: 50 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
99.	Sinter Plant-2	Waste gas Stack	120	3.5	ESP	PM: 50 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
100.	Sinter Plant-3	De-dusting Stack	33.5	3.5	De-dusting System with Bag Filter	PM: 50 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
101.	Sinter Plant-3	Waste gas Stack	120	6.5	ESP	PM: 10 mg/Nm^3 SO_2: 10 ppm NOx: 80 ppm	Existing	
102.	Sinter Plant	Product Bag Filter	36	1.45	Bag Filter	-	Proposed	To arrest Secondary Emission
103.	Sinter Plant	Mixer Bag Filter	40	2	Bag Filter	-	Proposed	To arrest Secondary Emission
104.	Sinter Plant	Cooler Stack	35	3.4	Nil	-	Proposed	For Flue gas exhaust
105.	Sinter Plant	Mixing Drum Steam Vent	20	2	Nil	-	Proposed	For Steam exhaust
106.	Conarc Plant	FES (Fume Extraction System - Conarc 1.1)	45	5.7	Bag Filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
107.	Conarc Plant	FES (Fume Extraction System - Conarc 1.1)	45	6.13	Bag Filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
108.	Conarc Plant	FES (Fume Extraction System - Conarc 2.1)	45	7.2	Bag Filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
109.	Conarc Plant	FES (Fume Extraction System - Conarc 2.2)	45	7.2	Bag Filter	PM: 150 mg/Nm^3 SO_2: 100 ppm NOx: 50 ppm	Existing	
110.	Conarc Plant	Boiler-RHTOB	32	1.55	-	-	Proposed	For Flue gas exhaust
111.	Conarc Plant	CSP Caster 1 : Steam Fan Exhaust	60	1.2	-	-	Proposed	For Steam exhaust
112.	Conarc Plant	CSP Caster 2 : Steam Fan Exhaust	30	1.2	-	-	Proposed	For Steam exhaust
113.	Conarc Plant	CSP Caster 3 : Steam Fan Exhaust	60	1.2	-	-	Proposed	For Steam exhaust
114.	Conarc Plant	INI Caster : Steam Fan Exhaust	30	1.2	-	-	Proposed	For Steam exhaust
115.	CSP	Tunnel Furnace – A Stack 1	60	2.1	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
116.	CSP	Tunnel Furnace – A Stack 2	60	2.1	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
117.	CSP	Tunnel Furnace – A Stack 3	60	2.1	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
118.	CSP	Tunnel Furnace – B Stack 1	60	2.2	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
119.	CSP	Tunnel Furnace – B Stack 2	60	2.2	Adequate stack Height	PM : 150 mg/Nm3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
120.	CSP	Tunnel Furnace – B Stack 3	60	1.93	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
121.	CSP	Tunnel Furnace – C Stack 1	60	1.93	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
122.	CSP	Tunnel Furnace – C Stack 2	60	1.93	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
123.	CSP	Tunnel Furnace – C Stack 3	60	1.93	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
124.	Corex	FES of Cast House 1	30	4.2	Bag Filter	PM : 150 mg/Nm^3	Existing	
125.	Corex	FES of Cast House 2	30	4.2	Bag Filter	PM : 150 mg/Nm^3	Existing	
126.	Corex	Gas Flare – 1	30	2.4	Adequate stack Height	PM : 150 mg/Nm3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
127.	Corex	Gas Flare - 2	30	2.4	Adequate stack Height	PM : 150 mg/Nm3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
128.	Corex	FES Stock house oxide line -1	30	1.9	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
129.	Corex	FES Stock house oxide line- 2	30	1.9	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
130.	Corex	FES Stock house Coal line -1	30	1.9	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
131.	Corex	FES Stock house Coal line -2	30	1.9	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
132.	Corex	De – dusting Coal Drying line no - 123	30	2.3	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
133.	Corex	De – dusting Coal Drying line no - 456	30	2.3	Bag Filter with De- dusting system	PM : 150 mg/Nm^3	Existing	
134.	Corex	De – dusting Coal Drying line no - 789	20	2.3	Bag Filter with De- dusting system	PM : 150 mg/Nm^3	Existing	
135.	Corex	De – dusting Coal Transportation - 1	30	1.388	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
136.	Corex	De – dusting Coal Transportation - 2	18	1.388	Bag Filter with De- dusting system	PM : 150 mg/Nm^3	Existing	
137.	Corex	De – dusting Coal Blending	18	1.4	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
138.	Coal Briquetting Plant	Dust Extraction System of Rotary drier	30	1.2	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
139.	Coal Briquetting Plant	Dust Extraction system for transfer points of belt conveyors	21	2.5	Bag Filter with De-dusting system	PM : 150 mg/Nm^3	Existing	
140.	Corex	Corex 1 Tower Top De-dusting	30	0.5	De-dusting System	-	Proposed	To arrest Secondary

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
								Emission
141.	Corex	Corex 2 Tower Top De-dusting	30	0.5	De-dusting System	-	Proposed	To arrest Secondary Emission
142.	Corex	Corex 1 Slag Granulation Plant (SGP)	30	1	NIL	-	Proposed	For Steam exhaust
143.	Corex	Corex 2 Slag Granulation Plant (SGP)	30	1	NIL	-	Proposed	For Steam exhaust
144.	Plate Mill	RHF 1 & 2	106	3.64	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
145.	Plate Mill	Normalizing Furnace 1	30	1.7	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
146.	Plate Mill	Normalizing Furnace 2	30	1.7	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
147.	Plate Mill	Austinizing Furnace 1	30	1.6	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
148.	Plate Mill	Austinizing Furnace 2	30	1.6	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
149.	Plate Mill	Tempering Furnace	30	1.42	Adequate stack Height	PM : 150 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
150.	Plate Mill	Cold leveler De – dusting system	30	1.4	Bag Filter	PM : 150 mg/Nm^3	Existing	
151.	Pipe Mill	De-dusting Blower 1	30	0.64	Bag Filter	PM : 150 mg/Nm^3	Existing	
152.	Pipe Mill	De-dusting Blower 2	30	1.4	Bag Filter	PM : 150 mg/Nm^3	Existing	
153.	Pipe Mill	De-dusting Blower 3	30	0.64	Bag Filter	PM : 150 mg/Nm^3	Existing	
154.	Pipe Mill	De-dusting Blower 4	30	0.64	Bag Filter	PM : 150 mg/Nm^3	Existing	
155.	Pipe Mill	Smoke Unit - Extruder Fume Stack (Coating Plant)	15	0.95	Screen Filter	-	Proposed	To Steam exhaust
156.	Pipe Mill	Epoxy Booth Stack (Coating Plant)	15	0.5	Screen Filter	-	Proposed	To arrest Secondary Emission
157.	Pipe Mill	De-dusting Blower 1 (New Coating Plant)	32	0.5	Bag-Filter	-	Proposed	To arrest Secondary Emission
158.	Pipe Mill	De-dusting Blower 2 (New Coating Plant)	32	0.5	Bag-Filter	-	Proposed	To arrest Secondary Emission
159.	Pipe Mill	De-dusting Blower (New Coating Plant)	-	0.7	Bag-Filter	-	Proposed	To arrest Secondary Emission
160.	Pipe Mill	Epoxy Stack Vent (New Coating Plant)	20	0.5	Screen Filter	-	Proposed	To arrest Secondary Emission
161.	Pipe Mill	Smoke Unit - Suction Blower (H-Saw 1)	12	0.65	-	-	Proposed	To Steam exhaust
162.	Coke Oven Plant	Battery chimney - 1	125	5	Adequate stack height	PM : 50 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
163.	Coke Oven Plant	Battery chimney - 2	125	5	Adequate stack height	PM : 50 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
164.	Coke Oven Plant	Coke pushing ground de-dusting chimney	125	5.13	Bag Filter	PM : 100 mg/Nm^3 SO_2 : 40 ppm NOx : 125 ppm	Existing	
165.	Coke Oven Plant	Environmental de-dusting system stack for CDQ	125	5.13	Bag Filter	PM : 150 mg/Nm^3 SO_2 : 40 ppm NOx : 125 ppm	Existing	
166.	Coke Oven Plant-2	Battery chimney – 1 & 2	145	5	Adequate stack height	PM : 50 mg/Nm^3 SO_2 : 100 ppm NOx : 50 ppm	Existing	
167.	Coke Oven Plant-2	Coke pushing side de-dusting chimney	30	2.5	Bag Filter	PM : 10 mg/Nm^3 SO_2 : 10 ppm NOx : 80 ppm	Existing	
168.	Coke Oven Plant-2	Coke pushing ground de-dusting chimney	30	2.5	Bag Filter	PM : 100 mg/Nm^3 SO_2 : 40 ppm NOx : 125 ppm	Existing	
169.	Coke Oven Plant-2	Environmental de-dusting system stack for CDQ	50	1.8	Bag Filter	PM : 150 mg/Nm^3 SO_2 : 40 ppm NOx : 125 ppm	Existing	
170.	MH ECR1	CSH - Wet Coal Screen House	25	0.7	Bag Filter	-	Proposed	To arrest Secondary Emission
171.	MH ECR1	OSS - Oxide Screen House	25	0.7	Bag Filter	-	Proposed	To arrest Secondary Emission
172.	MH ECR1	NJH 22 - CC25 Head End	25	0.7	Cyclone Separator	-	Proposed	To arrest Secondary Emission
173.	MH ECR1	JH23 - CC115 Tail End	25	0.7	Cyclone Separator	-	Proposed	To arrest Secondary Emission
174.	MH ECR1	JH9A - CC 27, 28 Head End	25	0.7	Cyclone Separator	-	Proposed	To arrest Secondary Emission
175.	MH BF	NJH-10 : GJ3 Conveyor for Handling BF Coke	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
176.	MH BF	NT-20-A: BF1 Conveyor for Handling BF Sinter Feeding.	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
177.	MH BF	NT20-1-NC47 Conveyor for Handling Oxide to BF	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
178.	MH Jetty	Junction House JH3A : Coal Feeding to Corex	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
179.	MH Jetty	Junction House JH4A : Coal Feeding to Corex	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
180.	MH Plant B	Junction House 2	20	0.5	Bag Filter	-	Proposed	To arrest Secondary Emission
181.	CPP – 525 MW	HRSG - 1	65	-	Low NOx Generating Burners	PM : 10 mg/Nm^3 SO_2 : 10 ppm NOx : 80 ppm	Existing	
182.	CPP – 525 MW	HRSG - 2	65	-	Low NOx Generating Burners	PM : 10 mg/Nm^3 SO_2 : 10 ppm NOx : 80 ppm	Existing	
183.	CPP – 525 MW	HRSG - 3	65	-	Low NOx Generating Burners	PM : 10 mg/Nm^3 SO_2 : 10 ppm NOx : 80 ppm	Existing	
184.	CPP – 525	GT-1	30	-	Low NOx	PM : 10 mg/Nm^3	Existing	

Sr. No.	Name of Plant	Stack Name	Stack Height (M)	Stack Dia. (M)	APCM	Permissible limits	Existing / Proposed	Remarks
	MW				Generating Burners	SO_2 : 10 ppm NOx : 80 ppm		
185.	CPP – 525 MW	GT-2	30	-	Low NOx Generating Burners	PM : 10 mg/Nm^3 SO_2 : 10 ppm NOx : 80 ppm	Existing	
186.	CPP – 525 MW	GT-3	30	-	Low NOx Generating Burners	PM : 10 mg/Nm^3 SO_2 : 10 ppm NOx : 80 ppm	Existing	
187.	Basic Oxygen	Gas Flare - 1	80	2.25	ESP	PM : 150 mg/Nm^3	Existing	
188.	Basic Oxygen	Gas Flare - 2	80	2.25	ESP	PM : 150 mg/Nm^3	Existing	
189.	Basic Oxygen	Gas Flare - 3	80	2.25	ESP	PM : 150 mg/Nm^3	Existing	
190.	Basic Oxygen	Fume & Dust Extraction System - 1	45	5.25	Bag Filter	PM : 150 mg/Nm^3	Existing	
191.	Basic Oxygen	Fume & Dust Extraction System - 2	45	5.25	Bag Filter	PM : 150 mg/Nm^3	Existing	
192.	Basic Oxygen	Fume & Dust Extraction System - 3	45	5.25	Bag Filter	PM : 150 mg/Nm^3	Existing	
193.	Basic Oxygen	Fume & Dust Extraction System - 4	45	5.25	Bag Filter	PM : 150 mg/Nm^3	Existing	
194.	Basic Oxygen	Fume & Dust Extraction System - 5	45	3.8	Bag Filter	PM : 150 mg/Nm^3	Existing	
195.	Acid Regeneration Plant - 100 KL	ARP-2 stack	35	1.2	Adequate height stack	HCl < 20 mg/Nm^3	Proposed	
196.	BF slag grinding mill (BOO) - 50 TPD	Chimney	5-8 m	600 – 750 mm	Adequate height stack	SOx – 100 mg/Nm3 NOx – 50 mg/Nm3	Proposed	
197.	Thick Plate Normalizing Furnace	Thick plate Normalizing Chimney	30	1.2 at Top	Adequate height stack	PM- 150 mg /Nm3	Proposed	
198.	SMP-1	EAF Secondary Emission Control System	45	6.5	Adequate height stack	PM- 150 mg /Nm3	Proposed	
199.	CRM-2	Pickling Section	25	-	HCl Scrubber	HCL: 20 mg/Nm^3	Proposed	
200.	CRM-2	Pickling Section	30	-	Water Scrubber	HCL: 20 mg/Nm^3	Proposed	
201.	CRM-2	Acid Regeneration Plant	25	-	HCl Scrubber	HCL: 20 mg/Nm^3	Proposed	
202.	CRM-2	Tandem Mill Section in PLTCM	About 5m + building height	-	Fog Exhaust System	mist	Proposed	
203.	CRM-2	Furnace of Galvanizing Lines (CGL#3 & CGL#4) and Annealing Lines	30		Gas Scrubber	PM : 150 mg/Nm^3 SO_2 : 50 ppm NOx : 190 ppm	Proposed	

Note: the highlighted are the proposed stack to arrests the secondary emission

No Additional D.G. Set Proposed

Annexure-6

Proposed TOR

1. Introduction.

- Information about the project proponent
- Importance and benefits of the project

2. Project Description

- Type and nature of the project
- Products with capacities and mass balance/process flow diagram
- Location of the project site covering village, Taluka/Tehsil, District and State,
- Justification for selecting the site, whether other sites were considered.
- A toposheet of the study area of radius of 10km and site location on 1:50,000/1: 25,000 scales on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).
- Details w.r.t. option analysis for selection of site
- Google Earth image and Co-ordinates (lat-long) of all four corners of the site.
- Layout maps 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.
- Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- 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).
- A list of major industries with name and type within study area (10km radius) shall be incorporated.
- Land use details of the study area.
- Geological features and Geo-hydrological status of the study area shall be included.
- 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 rainfall 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)
- Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- R&R details in respect of land in line with state Government policy.
- List of raw materials required and their source along with mode of transportation.
- Other chemicals and materials required with quantities and storage capacities.
- Resource requirements
- Details of Pollution – Emission, effluents, hazardous waste generation and their management.
- Impact and aspect of proposed project.
- Cost of project and project completion schedule.
- Cost towards CSR/ESC and EMP

3. Baseline Environmental Studies

- Collection of site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- AAQ data (except monsoon) at 6 locations for PM_{10}, $PM_{2.5}$, SO_2, NOx 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.
- Determination of atmospheric inversion level at the project site.
- 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.
- Ground water and Surface water quality of study area as per CPCB/MoEF & CC guidelines.
- Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF & CC, if yes give details.
- Noise levels monitoring at 6 locations within the study area.
- Soil characteristic as per CPCB guidelines.
- Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

- 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.
- Socio-economic status of the study area.

4. Impacts Identification and Environment Management Plan

- Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be 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.
- 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.
- Details of stack emission and action plan for control of emissions to meet standards.
- Measures for fugitive emission control
- Measures for water pollution control
- Measures for land pollution control
- Details of hazardous waste generation and their storage, utilization and management.
- Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- Action plan for the green belt development plan. 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.
- 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.
- Action plan for post-project environmental monitoring shall be submitted.

5. 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.

6. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers

7. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. socio-economic development activities need to be elaborated upon.

8. 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.

9. The project is located in 27 km, Hazira which is cover under Notified Industrial Area. Based on that, Public Hearing is not applicable.

10. A tabular chart with index for point wise compliance of above TOR.

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APPENDIX I

(See Paragraph-6)

FORM 1

Note : If space provided against any parameter is inadequate, Kindly upload supporting document under 'Additional Attachments if any' at the last part of the Form1. Please note that all such Annexures must be part of single pdf document.

(I) Basic Information

S.No.	Item	Details
	Is your project Comes under Notified Industrial Area	Yes
	Whether it is a violation case and application is being submitted under Notification No. S.O.804(E) dated 14.03.2017 ?	No
1.	Name of the Project/s	Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity by M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited)
	Brief summary of project	Annexure-Brief summary of project
	Proposal Number	IA/GJ/IND/189821/2020
	Project Cost	6216.58 cr
2.	S. No. in the schedule	3(a) Metallurgical industries (ferrous & non ferrous)
	Project Sector	Industrial Projects - 1
3.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number or wells to be drilled	50.163 ha ha.
4.	New/Expansion/Modernization	Modernization
	Proposal Number	IA/GJ/IND/28848/2014
	MoEFCC file number(Previous EC)	J-11011/44/2004-IA.II (I)
	Uploaded EC letter	Annexure-Uploaded EC letter
5.	Existing Capacity/Area etc.	50.163 ha.
6.	Category of project i.e. 'A' or 'B'	A
7.	Does it attract the general condition? If yes, please specify	No
8.	Does it attract the specific condition? If yes, please specify	No
9.	Location of the project	27th km, Notified Hazira Industrial Area, Surat Hazira Road, Surat-394270, Gujarat
	Shape of the project land	Block (Polygon)
	Uploaded GPS file	Annexure-GPS file
	Uploaded copy of survey of India Toposheet	Annexure-Survey of india toposheet
	Plot/Survey/Khasra No.	Survey No. 353,354,179/P, 262P, 263P, 310P, 550P, 561P, 568P, 569P, 602P
	Town / Village	Hazira

	State of the project	Gujarat

Details of State of the project

S.no	State Name	District Name	Tehsil Name
NIL			

10.	Nearest railway station along with distance in kms	surat, 27 km
	Nearest airport along with distance in kms	Surat, 20 km
11.	Nearest Town/City/District Headquarters along with distance in kms	Surat , 27 km
12.	Village Panchayats, Zila Parishad, Muncipal Corporation, Local body (Complete postal address with telephone nos. to be given)	Village Panchayats: Hazira, 27 KM Surat-Hazira Road, Hazira. Pin Code: 394270
13.	Name of the Applicant	Rajiv
14.	Registered Address	survey no. 353,354,179/P,262P,263P,310P,550P,561P,568P,569P,602P ,village.hazira,taluka.choryasi,district.surat
15.	**Address for correspondance:**	
	Name of the Company	M/S. AMNS INDIA LIMITED
	Name of the Applicant	Rajiv
	Designation (Owner/ Partner/ CEO)	Executive Director Project
	Pin code	394270
	E-mail	dr.anil.jain@amns.in
	Telephone No.	0-
	Fax No.	0-
	Copy of documents in support of the competence/authority of the person making this application to make application on behalf of the User Agency .	NIL
16.	Details of Alternative Sites examined, if any. Location of these sites should be shown on a toposheet	No
17.	Whether part of Interlinked projects?	No
18.	Whether separate application of Interlinked project has been submitted?	N/A
19.	If Yes, MoEF file number	N/A
	Date of submission	N/A
20.	If No, Reason	N/A
21.	**Whether the proposal involves Approval/ Clearance under: if yes, details of the same and their status to be given**	
	(i) Whether the proposal involves approval/clearance under the Forest (Conservation) Act,1980?	No
	(ii) Whether the proposal involves approval/clearance under the wildlife (Protection) Act,1972?	No
	(iii) Whether the proposal involves approval/clearance under the C.R.Z	No

	notification, 2011?	
22.	Whether there is any Government Order/Policy relevant/relating to the site?	No
23.	Whether any Forest Land Involved?	No
	Area of Forest land Involved (hectares)	N/A
24.	Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up?	No
	(a) Name of the Court	N/A
	(b) Name of the Sub court	N/A
	(c) Case No.	N/A
	(d) Orders/directions of the court, if any and relevance with the proposed project	N/A

(II) Activity

1 Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No	Information/Checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity M/s. ArcelorMittal Nippon Steel India Limited (Formerly Essar Steel India Limited) is located in Hazira Notified Industrial Area
1.2	Clearance of existing land, vegetation and buildings?	No	No
1.3	Creation of new land uses?	No	No additional land is required
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	No
1.5	Construction works?	Yes	Minor Construction activity is required
1.6	Demolition works?	No	No
1.7	Temporary sites used for construction works or housing of construction workers?	No	Local personnel will be employed for the construction works
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations and fill or excavations	Yes	Construction and Replacement of equipment's is required
1.9	Underground works including mining or tunnelling?	No	Not applicable
1.10	Reclamation works?	No	Not applicable
1.11	Dredging?	No	Not applicable
1.12	Offshore structures?	No	Not applicable
1.13	Production and manufacturing processes?	Yes	Refer Additional attachment

1.14	Facilities for storage of goods or materials?	Yes	The dedicated area is allotted for the storage of finished goods or raw materials
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	Please refer additional document
1.16	Facilities for long term housing of operational workers?	No	Operational Staff will be housed in the existing Township or from Local area
1.17	New road, rail or sea traffic during construction or operation?	No	Raw material will be imported and unloaded at Port/Road/rail
1.18	New road, rail, air water borne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	None
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	Not Applicable.
1.20	New or diverted transmission lines or pipelines?	No	Not Applicable.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	Not Applicable.
1.22	Stream crossings?	No	Not Applicable.
1.23	Abstraction or transfers of water from ground or surface waters?	No	Water is sourced from Tapi river
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	Not Applicable
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	By Road/Sea/Rail
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not Applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not Applicable
1.28	Influx of people to an area in either temporarily or permanently?	Yes	People will come for permanent and temporary employment during construction and operation and to avail business opportunity
1.29	Introduction of alien species?	No	Not Applicable
1.30	Loss of native species or genetic diversity?	No	Not Applicable
1.31	Any other actions?	No	Not Applicable

2 Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	Yes	Modification in Existing Plant by Installing Auxiliary Facilities without Increasing Plant Capacity

2.2	Water (expected source & competing users) unit: KLD	Yes	Additional Water requirement will be 38856.00 KLD. (Water is being sourced from existing sources – Tapi river)
2.3	Minerals (MT)	No	Not Applicable
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	Minor Construction activity will be required, for that, material will be purchased from the local market
2.5	Forests and timber (source – MT)	No	None
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT),energy (MW)	Yes	Electricity Requirement Total power requirement will be sourced from captive power plant and transmission line (national Grid
2.7	Any other natural resources (use appropriate standard units)	No	Not Applicable

3 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies	No	In-built safety features of the plant and machinery would be made adequate in order to avoid hazardous events causing damage to the life and property
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	None
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	The project will benefit the people living in the neighboring areas by providing them with direct and indirect employment opportunities associated with the construction of a plant
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.	No	Not Applicable
3.5	Any other causes	No	Not Applicable

4 Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	None
4.2	Municipal waste (domestic and or commercial wastes)	No	Municipal waste (domestic and or commercial wastes) will be disposed as per current practice
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	Please refer hazardous waste details in Additional Attachment

4.4	Other industrial process wastes	No	None
4.5	Surplus product	No	Not Applicable
4.6	Sewage sludge or other sludge from effluent treatment	Yes	The sludge from the existing STP after drying will be used as manure for vegetation
4.7	Construction or demolition wastes	Yes	The Construction debris from the project site during the construction phase would be re-used as land filling material
4.8	Redundant machinery or equipment	No	None
4.9	Contaminated soils or other materials	No	None
4.10	Agricultural wastes	No	Not Applicable
4.11	Other solid wastes	No	Not Applicable

5 Release of pollutants or any hazardous, toxic or noxious substances to air(Kg/hr)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Please refer air emission details in Additional Attachment
5.2	Emissions from production processes	Yes	Please refer air emission details in Additional Attachment
5.3	Emissions from materials handling including storage or transport	Yes	Fugitive dust will be generated from the material handling activities. Dust suppression or dust extraction systems with water sprinklers will be provided to prevent the fugitive dust emissions
5.4	Emissions from construction activities including plant and equipment	Yes	During construction work, there will be air emission. However, emission shall be low in magnitude, temporary in nature and reversible
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	Dust will generate during construction and handling of materials but due care would be taken
5.6	Emissions from incineration of waste	No	Not Applicable
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Not Applicable
5.8	Emissions from any other sources	No	Not Applicable

6 Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Appropriate PPEs would be provided to the employees

6.2	From industrial or similar processes	Yes	Appropriate PPEs would be provided to the employees
6.3	From construction or demolition	Yes	During construction, minor noise will be generated proper due care will be taken
6.4	From blasting or piling	No	Not Applicable
6.5	From construction or operational traffic	Yes	During construction, minor noise will be generated proper due care will be taken
6.6	From lighting or cooling systems	No	Not Applicable
6.7	From any other sources	No	Not Applicable

7 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	Material is handled, stored & used as per Standard Guidelines
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	Effluent generated shall be treated in Effluent Treatment Plant. The treated effluent will conform to the statutory norms and then it will be discharged in to Tapi estuary through existing outlets. Domestic waste water is discharged through Septic tank & Soak pit.
7.3	By deposition of pollutants emitted to air into the land or into water	No	Not Applicable
7.4	From any other sources	No	Not Applicable
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	Not Applicable

8 Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	Fire hazard from operations: Existing Emergency response plan will be followed
8.2	From any other causes	No	Not Applicable
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No	The project site is located in Zone III in the seismic zonation map as demarcated by the bureau of Indian standards (BIS) 2000. Construction will be as per the above requirement

9 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: ◦ Supporting infrastructure (roads, power supply,waste or waste water treatment, etc.) ◦ housing development ◦ extractive industries ◦ supply industries ◦ Other	No	Not applicable
9.2	Lead to after-use of the site, which could have an impact on the environment	No	Not applicable
9.3	Set a precedent for later developments	No	Not applicable
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	Yes	Major industries are in the vicinity of the Hazira Industrial area.: 1. Adani Port 2. Cairn Energy: Oil Transmission 3. Reliance Industries: Petrochemical Complex 4. L&T Industries: Engineering Manufacturing Unit 5. NTPC: Gas Based Thermal Power Plant 6. KRIBHCO fertilizer

(III) Environmental Sensitivity

S.No	Areas	Name/Identity	Aerial distance (within 15km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	There are no protected forests (Sanctuary, Biosphere Reserve and National Park) or any wetlands of national or international significance (Ramras site, Marine Sanctuary) within a radius of 15 km around the project site
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	No	There is reserve forest within the 15 km radius area of the project site. There is Arabian sea more than 1 Km away from the site. There is no designated ecologically sensitive area (Biosphere Reserve, National Park, Ramsar Convention) within a radius of 15 km around the project site.
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	There are no protected floral species (rare and endangered species) in and around the proposed project site. Again, there are no established breeding, nesting or foraging sited for any endangered animals or migratory bird habitats in the study area
4	Inland, coastal, marine or underground waters	Yes	Arabian Sea: More than 1 km away in the south direction from the site.
5	State, National boundaries	No	None
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	None

7	Defence installations	No	None
8	Densely populated or built-up area	Yes	Nearest densely populated city is Surat which is about 27 km to the east of the proposed location
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Yes	Hospitals, schools, places of worship, community facilities are present within 15 km radius
10	Areas containing important, high quality or scarce resources.(ground water resources,surface resources,forestry,agriculture,fisheries,tourism,minerals)	No	None
11	Areas already subjected to pollution or environmental damage.(those where existing legal environmental standards are exceeded)	No	None
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions) similar effects	No	None

(IV) Proposed Terms of Reference for EIA studies

1	**Uploaded Proposed TOR File**	Annexure-TOR file
2	**Uploaded scanned copy of covering letter**	Annexure-scanned copy of covering letter
3	**Uploaded Pre-Feasibility report(PFR)**	Annexure-PFR
4	**Uploaded additional attachments(only single pdf file)**	Annexure-Additional attachments

Essential Detail Sought : NIL

Additional Detail Sought : NIL

(V) Undertaking

I hereby give undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

V. (i)	**Name of Applicant**	Rajiv
	Designation	Executive Director Project
	Name of Company (Applicant Name should not be given here)	M/S. AMNS INDIA LIMITED
	Address	survey no. 353,354,179/P,262P,263P,310P,550P,561P,568P,569P,602P ,village.hazira,taluka.choryasi,district.surat

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Gujarat Pollution Control Board, Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:288084 - Analysis Completion:16/09/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 39198

TEST REPORT

Test Report No. : 39198 **Date: 16/09/2020**

1. Name of the Customer	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Roa 270
3. Nature of Sample	: REP-Representative/Grab, (Insp Type : APP-On Application)
4. Sample Collected By	: J.D.OZA, Lab Head
5. Quantity of Sample Received	: 5 Lit
6. Code No. of the Sample	: 288084
7. Date & Time of Collection & Inwarding	: 03/09/2020 , (1015 to 1015) & 05/09/2020
8. Date of Start & Completion of Analysis	: 05/09/2020 & 16/09/2020
9. Sampling Point	: From outlet of central lab in Conarac Divsion ~
10. Flow Details (Remarks)	: -
11. Mode of Disposal	: into nearby storm water drain Conarc div
12. Ultimate Receiving Body	: No generation of industrial wastewater
13. Temperature on Collection	: 28 & pH Range on pH Strip :2-4 on ph strip
14. Carboys Nos for	: 2 & Color & Appearance :Colurless (Slight turbid)
15. Water Consumption & W.W.G (KLPD)	: Ind :118911.000 , Dom :1800.000 & Ind :27405.000 , Dom :1500.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	28
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	2.34
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	20
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	6854
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	22
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standai	1 - 2000 mg/l.	1.68
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	1042
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	1767
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	330
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	5.8
11	Iron	mg/l	(3111 B APHA Standard methods 21st edi)	0.02-150mg/l	BDL
12	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmec	05–50000 mg/l	70

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 16/09/2020

J.D.OZA, Lab Head

TRUE COPY

Field Observation :

Note :
1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:149051 - Analysis Completion:16/10/2014

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 19433

Gujarat Pollution Control Board, Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

TEST REPORT

Test Report No. : 19433 **Date: 17/10/2014**

1. Name of the Customer : Essar Steel India Limited(Plate Mill Division) - 22968
2. Address : SURAT-HAZIRA ROAD,,POST HAZIRA, HAZIRA-394270, Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab, (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : A.J. Rathod,DEE
5. Quantity of Sample Received : 0
6. Code No. of the Sample : 149051
7. Date & Time of Collection & Inwarding : 20/09/2014 , (1520 to 1520) & 23/09/2014
8. Date of Start & Completion of Analysis : 23/09/2014 & 16/10/2014
9. Sampling Point : Inlet of ETP ~
10. Flow Details (Remarks) : yes
11. Mode of Disposal : -
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 30 & pH Range on pH Strip :7 to 8 on PH strip
14. Carboys Nos for : 8 & Color & Appearance :blackish
15. Water Consumption & W.W.G (KLPD) : Ind :10000.000 , Dom :30.000 & Ind :1920.000 , Dom :20.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	30
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	7.85
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	20
4	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	258
5	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	1.68
6	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	263
7	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	1.6
8	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	62

Laboratory Remarks : Checked By:274-lab_274 Dt.: 17/10/2014

Dr. A H Sharma, Lab Head

Field Observation :

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
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5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:230185 - Analysis Completion:16/04/2018

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 33668

Gujarat Pollution Control Board, Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

TEST REPORT

Report No. : 33668 Date: 17/04/2018

1. Name of the Customer : Essar Steel India Limited(Plate Mill Division) - 22968
2. Address : SURAT-HAZIRA ROAD,,POST HAZIRA, HAZIRA-394270, Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab, (Insp Type : HOR-H.O.Reference)
4. Sample Collected By : D. M. Rathod,DEE
5. Quantity of Sample Received : 5 lit
6. Code No. of the Sample : 230185
7. Date & Time of Collection & Inwarding : 26/03/2018 , (1415 to 1415) & 27/03/2018
8. Date of Start & Completion of Analysis : 27/03/2018 & 16/04/2018
9. Sampling Point : From treated w/w holding sump (before dual media filter) ~
10. Flow Details (Remarks) : -
11. Mode of Disposal : Into estuary of river Tapi
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 31 & pH Range on pH Strip :7 to 8 on pH Strip
14. Carboys Nos for : SUR-CP99M9 & Color & Appearance :Brownish Tinge
15. Water Consumption & W.W.G (KLPD) : Ind :10000.000 , Dom :30.000 & Ind :1920.000 , Dom :20.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	31
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	8.05
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	10
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Methoc	10 – 200000 mg/L	950
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Methoc	2 – 10000 mg/L	38
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	2.24
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	314
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	13
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	154
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	1.2
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.15
12	Cyanide	mg/l	Titrimetric method. (4500 - CN? D APHA Standard M	1-10 mg/l	BDL
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	25

Laboratory Remarks : Approved By:274-lab_274 Dt.: 17/04/2018

Dr. A H Sharma, Lab Head

Field Observation : sample is collected as per is:3025 method

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582 Part-2 2001; Reaffirmed 2007.

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:280859 - Analysis Completion:27/05/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : **38614**

1. Name &	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : COM-On Complaint)
4. Sample Collected By	: S.S.Valvi,SO
5. Date & Time of Collection & Receipt	: 20/05/2020, (1330 to 1400)
6. Date of Start & Completion of Analysis	: 26/05/2020 & 27/05/2020
7. Sampling Point	: Stack attached to Stock house-Oxide line 1 of Corex plant through APCM. ~
8. Fuel	: --
9. APCM	: Bag filter with Dedusting system
10. Thimble & Weight (gm)	: 3/6571
11. Temperature on Collection	: 44 & Volume-Absord Media : --
12. Volume-Gas Passed	: 442.0 Lit(N) fro PM
13. Parameters	: 1 & Oper Time(Min) : 30

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	104.95

Laboratory Remarks : Approved By:248-r.o_248 Dt.: 27/05/2020

M B AHIR,SO(M)

Field Observation : sample is collected as per is 11255.

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Sample ID:280860 - Analysis Completion:27/05/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 38613

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

1. Name & : Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit : 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,-HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab , (Insp Type : COM-On Complaint)
4. Sample Collected By : S.S.Valvi,SO
5. Date & Time of Collection & Receipt : 20/05/2020, (1440 to 1510)
6. Date of Start & Completion of Analysis : 26/05/2020 & 27/05/2020
7. Sampling Point : Stack attached to Stock house-Coal line 1 of Corex plant through APCM. ~
8. Fuel : --
9. APCM : Bagfilter with Dedusting system
10. Thimble & Weight (gm) : 2/6571
11. Temperature on Collection : 43 & Volume-Absord Media : --
12. Volume-Gas Passed : 431.0 Lit(N) for PM
13. Parameters : 1 & Oper Time(Min) : 30

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	371.00

Laboratory Remarks : Approved By:248-r.o_248 Dt.: 27/05/2020

M B AHIR,SO(M)

Field Observation : sample is collected as per is 11255

ANALYSIS REPORT FOR AIR

TYPE : Ambient

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:280858 - Analysis Completion:31/05/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 38615

ıne &	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : COM-On Complaint)
4. Sample Collected By	: S.S.Valvi,SO
5. Date & Time of Collection & Receipt	: 20/05/2020, (0600 to 0600)
6. Date of Start & Completion of Analysis	: 26/05/2020 & 31/05/2020
7. Sampling Point	: # Ambient Sampling Point ~ AAQM carried out at control room of corex plant(Conarc Di
8. Fuel	: --
9. APCM	: --
10. Filter No & Weight	: FP No.70/4648,71/4648,72/4648 for PM 10.
11. Temperature on Collection	: & Volume-Absord Media : 25 ml each for SOx,NOx
12. Volume-Gas Passed	: 595.2 m3,576.0 m3,566.4 m3 for PM 10 & 240 lit each for SOx,NOx
13. Parameters	: 3 & Oper Time(Min) : 24 hrs(8+8+8)

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	SOX-Amb	MICROG/M3	IS: 5182 (Part - 2), 2001 (reaffirmed 2006)	5 – 1050 µg/M3	12.82
2	NOX-Amb *	MICROG/M3	-	-	12.70
3	PM10-Amb	MICROG/M3	IS: 5182 (Part - XXIII), 2006	1 – 1000 µg/M3	292.67

Laboratory Remarks : Approved By 248-r.o_248 Dt.: 31/05/2020

M B AHIR,SO(M)

Field Observation : aaqm carried out for 24 hrs from 1300 hrs(20/5/20) to 1300 hrs (21/5/20).

ANALYSIS REPORT FOR AIR
TYPE : Ambient

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:278488 - Analysis Completion:17/03/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 38374

, Name &	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : APP-On Application)
4. Sample Collected By	: S.S.Valvi,SO
5. Date & Time of Collection & Receipt	: 11/03/2020, (1100 to 1910)
6. Date of Start & Completion of Analysis	: 16/03/2020 & 17/03/2020
7. Sampling Point	: # Ambient Sampling Point ~ AAQM carried out at Essar Steel india ltd in Conarc Div. at
8. Fuel	: --`
9. APCM	: --
10. Filter No & Weight	: FP No.38/4648
11. Temperature on Collection	: -- & Volume-Absord Media : 30 ml each for SOX,NOx
12. Volume-Gas Passed	: 484.8 M3 for PM 10 & 120 lit each for SOx,NOx
13. Parameters	: 3 & Oper Time(Min) : 8 hrs

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	SOX-Amb	MICROG/M3	IS: 5182 (Part - 2), 2001 (reaffirmed 2006)	5 – 1050 µg/M3	51.58
2	NOX-Amb *	MICROG/M3	-	-	45.59
3	PM10-Amb	MICROG/M3	IS: 5182 (Part - XXIII), 2006	1 – 1000 µg/M3	121.08

Laboratory Remarks : Approved By:248-r.o_248 Dt.: 17/03/2020

M B AHIR,SO(M)

Field Observation : aaqm carried out near conarc div (premises of corex plant)control room....

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:278487 - Analysis Completion:17/03/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 38360

Name &	:	Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of	:	200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sa	:	REP-Representative/Grab , (Insp Type : APP-On Application)
4. Sample Collec	:	S.S.Valvi,SO
5. Date & Time of Receipt	:	11/03/2020, (1350 to 1410)
6. Date of Start & C Analysis	:	16/03/2020 & 17/03/2020
7. Sampling Point	:	Stack attached to FES stock house-Coal line-2 through APCM. ~
8. Fuel	:	NG
9. APCM	:	Bag Filter
10. Thimble & Weight (gm)	:	10/6078
11. Temperature on Collectio	:	74(Stk) & Volume-Absord Media : --
12. Volume-Gas Passed	:	516.3L(N) FOR PM
13. Parameters	:	1 & Oper Time(Min) : 30

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	42.03

Laboratory Remarks : Approved By:248-r.o_248 Dt.: 17/03/2020

M B AHIR,SO(M)

Field Observation : sample is collected as per is 11255.

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:278486 - Analysis Completion:17/03/2020

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 38359

1. Name & : Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit : 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab , (Insp Type : APP-On Application)
4. Sample Collected By : S.S.Valvi,SO
5. Date & Time of Collection & Receipt : 11/03/2020, (1100 to 1130)
6. Date of Start & Completion of Analysis : 16/03/2020 & 17/03/2020
7. Sampling Point : Stack attached to FES stock house-oxide line-1 through APCM. ~
8. Fuel : NG
9. APCM : Bag Filter
10. Thimble & Weight (gm) : 09/6078
11. Temperature on Collection : 72(Stk) & Volume-Absord Media : -
12. Volume-Gas Passed : For PM=546.2 L(N)
13. Parameters : 1 & Oper Time(Min) : 30

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	80.01

Laboratory Remarks : Approved By:248-r.o_248 Dt.: 17/03/2020

M B AHIR,SO(M)

Field Observation : sample is collected as per is 11255.

ANALYSIS REPORT FOR AIR

TYPE : Ambient

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:267047 - **Analysis Completion:03/10/2019**

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : **37425**

1. Name &	: **Essar Steel India Ltd. (Conarc Division) - 14186**
2. Address of the Unit	: **200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc**
3. Nature of Sample	: **REP-Representative/Grab , (Insp Type : SCN-After SCN Inspection)**
4. Sample Collected By	: **M B AHIR,SO(M)**
5. Date & Time of Collection & Receipt	: **21/09/2019, (1230 to 2030)**
6. Date of Start & Completion of Analysis	: **23/09/2019 & 03/10/2019**
7. Sampling Point	: **# Ambient Sampling Point ~ on the Terrace of Corex Control Room of M/s Essar Steel Inc**
8. Fuel	: **---**
9. APCM	: **---**
10. Filter No & Weight	: **F. P. No. 2/4648**
11. Temperature on Collection	: **31 & Volume-Absord Media : 25 ml NaTCM for SOx & 25 ml 0.1 N NaOH for NOx.**
12. Volume-Gas Passed	: **For PM10 (RSPM) & SPM: 643.2 M3 & For SOx & NOx: 240 Lit. for Bottle 1 & 2**
13. Parameters	: **4 & Oper Time(Min) : 8 Hrs for PM10, SPM, SOx & NOx**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	SPM-Amb	MICROG/M3	IS: 5182 (Part - IV), 1999 (Reaffirmed 2010)	1 – 1000 µg/M3	247
2	SOX-Amb	MICROG/M3	IS: 5182 (Part - 2), 2001 (reaffirmed 2006)	5 – 1050 µg/M3	27.4
3	NOX-Amb *	MICROG/M3	-	-	29.5
4	PM10-Amb	MICROG/M3	IS: 5182 (Part - XXIII), 2006	1 – 1000 µg/M3	53

Laboratory Remarks : Approved By:274-lab_274 Dt.: 03/10/2019

Dr. A H Sharma, Lab Head

Field Observation :

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Sample ID:203932 - Analysis Completion:05/02/2017

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 30211

1. Name &	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : ROU-Routine Visit)
4. Sample Collected By	: S.S.Valvi,SO
5. Date & Time of Collection & Receipt	: 23/01/2017, (1245 to 1315)
6. Date of Start & Completion of Analysis	: 24/01/2017 & 05/02/2017
7. Sampling Point	: Stack attach to ... Any Other ~ From stack attched to FES 1:1 (Fume Extraction system)
8. Fuel	: Electric
9. APCM	: bag filter
10. Thimble & Weight (gm)	: T.NO. 4/4205
11. Temperature on Collection	: 62 & Volume-Absord Media : -
12. Volume-Gas Passed	: PM: 448.25lit
13. Parameters	: 1 & Oper Time(Min) : 30

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	31

Laboratory Remarks : Approved By:274-lab_274 Dt.: 13/02/2017

Dr. A H Sharma, R.O Head

Field Observation :

ANALYSIS REPORT FOR AIR

TYPE : Ambient

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:203931 - **Analysis Completion:05/02/2017**

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : **30208**

1. Name &	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : ROU-Routine Visit)
4. Sample Collected By	: S.S.Valvi,SO
5. Date & Time of Collection & Receipt	: 23/01/2017, (1300 to 1300)
6. Date of Start & Completion of Analysis	: 24/01/2017 & 05/02/2017
7. Sampling Point	: # Ambient Sampling Point ~ AAQM carried out on the terrace of Navjagruti Vidhiya Vil
8. Fuel	: -
9. APCM	: -
10. Filter No & Weight	: F.NO. 12/5727, 13/5727 and 14/5727
11. Temperature on Collection	: 31 & Volume-Absord Media : SOx:25ml and Nox: 25ml
12. Volume-Gas Passed	: each: 240lit and 528 lit, 528 lit and 534 lit
13. Parameters	: 4 & Oper Time(Min) : 1440

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	SPM-Amb	MICROG/M3	IS: 5182 (Part - IV), 1999 (Reaffirmed 2010)	1 – 1000 µg/M3	182
2	SOX-Amb	MICROG/M3	IS: 5182 (Part - 2), 2001 (reaffirmed 2006)	5 – 1050 µg/M3	26
3	NOX-Amb	MICROG/M3	-	-	23
4	RSPM-Amb	MICROG/M3	IS:5182(Part- XXIII)	20-500µg/M3	46

Laboratory Remarks : Approved By:274-lab_274 Dt.: 13/02/2017

Dr. A H Sharma, R.O Head

Field Observation : i.w of cap no:4 (16.0578) , i.w of cap no:5 (15.4053) and i.w of cap no:6 (15.8008)- ambient samle is carried out on the terrace of navjagruti vidhiya vihar school vill: hazira

ANALYSIS REPORT FOR AIR

TYPE : Ambient

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:203925 - **Analysis Completion:05/02/2017**

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 30209

1. Name &	: Essar Steel India Ltd. (Conarc Division) - 14186
2. Address of the Unit	: 200/1 – 7,200/9,200/10,200/12,201,202/1,202/2,203,204/1,204/,-27 Km Surat - Hazira Road,- HAZIRA - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : COM-On Complaint)
4. Sample Collected By	: B.Y. Rathod, Lab Head
5. Date & Time of Collection & Receipt	: 21/01/2017, (1800 to 1800)
6. Date of Start & Completion of Analysis	: 24/01/2017 & 05/02/2017
7. Sampling Point	: # Ambient Sampling Point ~ AAQM carried out on the terrace of Navjagruti Vidhiya Vih
8. Fuel	: -
9. APCM	: -
10. Filter No & Weight	: F.P.NO:6/5727,7/5727 and 8/5727
11. Temperature on Collection	: 31 & Volume-Absord Media : SOx:25ml and Nox:25ml
12. Volume-Gas Passed	: each: 240lit and 534lit, 546lit and 522.0lit
13. Parameters	: 4 & Oper Time(Min) : 1440

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	SPM-Amb	MICROG/M3	IS: 5182 (Part - IV), 1999 (Reaffirmed 2010)	1 – 1000 µg/M3	261
2	SOX-Amb	MICROG/M3	IS: 5182 (Part - 2), 2001 (reaffirmed 2006)	5 – 1050 µg/M3	25
3	NOX-Amb	MICROG/M3	-	-	24
4	RSPM-Amb	MICROG/M3	IS:5182(Part- XXIII)	20-500µg/M3	118

Laboratory Remarks : Approved By:274-lab_274 Dt.: 13/02/2017

Dr. A H Sharma, R.O Head

Field Observation : i.w of cap no:4 (15.8814) , i.w of cap no:5 (15.6501) and i.w of cap no:6 (15.9285)- ambient samle is carried out on the terrace of navjagruti vidhiya vihar school vill: hazira

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Sample ID:139737 - Analysis Completion:08/05/2014

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 18192

1. Name &	: Essar Steel India Limited (HRC Division) - 20680
2. Address of the Unit	: 203-230, 245-264, 312-321,@ 27 KM.SURAT-HAZIRA ROAD,,HAZIRA SURAT - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab , (Insp Type : APP-On Application)
4. Sample Collected By	: A.J. Rathod,DEE
5. Date & Time of Collection & Receipt	: 25/04/2014, (1115 to 1135)
6. Date of Start & Completion of Analysis	: 01/05/2014 & 08/05/2014
7. Sampling Point	: Stack attached to FES for electric arc furnace-III of SMP-I ~
8. Fuel	: Electric
9. APCM	: Bag House[BF]
10. Thimble & Weight (gm)	: 2637/1
11. Temperature on Collection	: 120 & Volume-Absord Media : -
12. Volume-Gas Passed	: 300 liter gas passed
13. Parameters	: 1 & Oper Time(Min) : 20

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	39

Laboratory Remarks : checked By:274-lab_274 Dt.: 08/05/2014

Dr. A H Sharma, Lab Head

Field Observation : only pm sampling is carried out.

ANALYSIS REPORT FOR AIR

TYPE : Stack-Flue Gas

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:139738 - Analysis Completion:08/05/2014

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : **18199**

1. Name &	: **Essar Steel India Limited (HRC Division) - 20680**
2. Address of the Unit	: **203-230, 245-264, 312-321,@ 27 KM.SURAT-HAZIRA ROAD,,HAZIRA SURAT - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc**
3. Nature of Sample	: **REP-Representative/Grab , (Insp Type : APP-On Application)**
4. Sample Collected By	: **A.J. Rathod,DEE**
5. Date & Time of Collection & Receipt	: **25/04/2014, (1210 to 1230)**
6. Date of Start & Completion of Analysis	: **01/05/2014 & 08/05/2014**
7. Sampling Point	: **Stack attached to Kiln-4 of lime plant. ~**
8. Fuel	: **Electric**
9. APCM	: **BF**
10. Thimble & Weight (gm)	: **2637/2**
11. Temperature on Collection	: **100 & Volume-Absord Media : -**
12. Volume-Gas Passed	: **300 liter for PM**
13. Parameters	: **1 & Oper Time(Min) : 20**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	PM-Stack	MG/NM3	IS: 11255 (Part – 1), 1985 (Reaffirmed 1999)	1 – 5000 mg/NM3	208

Laboratory Remarks : checked By:274-lab_274 Dt.: 08/05/2014

Dr. A H Sharma, Lab Head

Field Observation :

ANALYSIS REPORT FOR AIR

TYPE : Ambient

Gujarat Pollution Control Board
Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

Sample ID:139739 - Analysis Completion:08/05/2014

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 18195

1. Name & : Essar Steel India Limited (HRC Division) - 20680
2. Address of the Unit : 203-230, 245-264, 312-321,@ 27 KM.SURAT-HAZIRA ROAD,,HAZIRA SURAT - 394270,Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab , (Insp Type : APP-On Application)
4. Sample Collected By : A.J. Rathod,DEE
5. Date & Time of Collection & Receipt : 25/04/2014, (1200 to 2000)
6. Date of Start & Completion of Analysis : 01/05/2014 & 08/05/2014
7. Sampling Point : # Ambient Sampling Point ~ Material gate near SMP-1 Wind direction.
8. Fuel : -
9. APCM : -
10. Filter No & Weight : 12/3985
11. Temperature on Collection : - & Volume-Absord Media : 20 ml for SOx and 20 ml for NOx
12. Volume-Gas Passed :
13. Parameters : 4 & Oper Time(Min) : 8 hours

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	SPM-Amb	MICROG/M3	IS: 5182 (Part - IV), 1999 (Reaffirmed 2010)	1 – 1000 µg/M3	1573
2	SOX-Amb	MICROG/M3	IS: 5182 (Part - 2), 2001 (reaffirmed 2006)	5 – 1050 µg/M3	28.8
3	NOX-Amb	MICROG/M3	-	-	2.19
4	RSPM-Amb	MICROG/M3	IS:5182(Part- XXIII)	20-500µg/M3	359

Laboratory Remarks : Checked By:274-lab_274 Dt.: 14/05/2014

Dr. A H Sharma, Lab Head

Field Observation : wind direction. black bottle no:1, a-1 is first four hours as 1200 to 1600 and a-2 is 1600 to 2000.

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:139736 - Analysis Completion:19/06/2014

Iron & Steel (involving processing from ore/integrated steel plants) and or Sponge Iron units / LAB Inward : 18184

Gujarat Pollution Control Board, Surat
338, Belgium Square
Typical 1st Floor,Opp. Linear Bus Stand
Ring Road, SURAT
Tele:(0261) 2442696

TEST REPORT

Test Report No. : 18184 Date: 21/06/2014

1. Name of the Customer : Essar Steel India Limited (HRC Division) - 20680
2. Address : 203-230, 245-264, 312-321,@ 27 KM.SURAT-HAZIRA ROAD,,HAZIRA SURAT-394270, Taluka : Chorasi, District : Surat, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab, (Insp Type : APP-On Application)
4. Sample Collected By : A.J. Rathod,DEE
5. Quantity of Sample Received :
6. Code No. of the Sample : 139736
7. Date & Time of Collection & Inwarding : 25/04/2014 , (1200 to 1200) & 01/05/2014
8. Date of Start & Completion of Analysis : 01/05/2014 & 19/06/2014
9. Sampling Point : From outlet-3 ~
10. Flow Details (Remarks) : Yes
11. Mode of Disposal : Estury of river tapi.
12. Ultimate Receiving Body : No generation of industrial wastewater
13. Temperature on Collection : 34 & pH Range on pH Strip :@ 6 on pH strip
14. Carboys Nos for : 4 & Color & Appearance :Light Reddish.
15. Water Consumption & W.W.G (KLPD) : Ind :93595.000 , Dom :2701.000 & Ind :19504.000 , Dom :1217.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	34
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	3.0
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	15
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Methoc	10 – 200000 mg/L	6952
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Methoc	2 – 10000 mg/L	60
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	105
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	2300
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	319
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	318.0
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.4
11	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmec	05–50000 mg/l	70

Laboratory Remarks : Checked By:274-lab_274 Dt.: 21/06/2014

Dr. A H Sharma, Lab Head

Field Observation :

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.