F. No. IA-J-11011/196/2005-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003
E-mail: sharath.kr@gov.in
Tel: 011-24695319

Dated: 2nd August, 2018

To

The Managing Director,
M/s Rashtriya Ispat Nigam Ltd.,
Visakhapatnam Steel Plant,
Visakhapatnam - 530031

Subject: Capacity Expansion of Visakhapatnam Steel Plant from 6.3 MTPA to 7.3 MTPA by revamping and augmentation of existing facilities by M/s Rashtriya Ispat Nigam Ltd located at Gajuwaka, Visakhapatnam, Andhra Pradesh— Terms of Reference Regarding.

Sir,

M/s Rashtriya Ispat Nigam Ltd has reference to your online application vide proposal no. IA/AP/IND/56868/2016 dated 9th January 2018 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of EIA Notification, 2006 and the proposal is appraised at Central level.

2.0 The Capacity Expansion of Visakhapatnam Steel Plant from 6.3 MTPA to 7.3 MTPA by revamping and Augmentation of existing facilities of M/s Rashtriya Ispat Nigam Limited located in Village Gajuwaka Tehsil Visakhapatnam District Visakhapatnam State Andhra Pradesh was initially received in the Ministry on 30th June 2016 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 8th meeting held during 27th to 29th July, 2016 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 19th September 2016 vide Lr. No. J-11011/196/2005-IA.II(I).

3.0 The project of M/s Rashtriya Ispat Nigam Limited located in Village Gajuwaka Tehsil Visakhapatnam District Visakhapatnam, Andhra Pradesh State is for setting up of a new Modification for production of 7.3 MTPA of Steel production enhancement of production of 1MTPA from 6.3 to 7.3
million tonnes per annum (million TPA). The existing project was accorded environmental clearance vide Ir.no. F.No.J-11011/196/2005-IA.II(I) dated 11-8-2005. The Status of compliance of earlier EC was obtained from Regional Office, Chennai vide Lr. No. EP/12.1/354/AP/2052 dated 21-12-2017. There are no non-compliances reported by Regional officer except for the modernization activity undertaken by VSP/RINL which is compulsory in view of aging of the existing plant, ensure the safety during operation and cleaner environment. The proposed capacity for different products for new site area as below:

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Production Unit</th>
<th>Facilities at 6.3 MTPA stage, MT</th>
<th>Production at 6.3 MTPA stage, MT</th>
<th>Facilities at 7.3 MTPA stage, MT</th>
<th>Production at 7.3 MTPA stage, MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coke Ovens and By-products Recovery Plant (COBP) of capacity 0.8 MTPA each</td>
<td>COB-1: 0.695</td>
<td>SP-1: 2.85</td>
<td>COB-1: 0.775</td>
<td>3.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COB-2: 0.695</td>
<td>SP-2: 2.85</td>
<td>COB-2: 0.775</td>
<td>3.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COB-3: 0.695</td>
<td>SP-3: 3.25</td>
<td>COB-3: 0.775</td>
<td>3.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COB-4: 0.695</td>
<td></td>
<td>COB-4: 0.775</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COB-5: 0.8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sinter Plant</td>
<td>SP-1: 2.85</td>
<td>SP-2: 2.85</td>
<td>SP-3: 3.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Blast Furnace</td>
<td>BF-1: 2.0</td>
<td>BF-1: 2.5</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BF-2: 2.0</td>
<td>BF-2: 2.5</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BF-3: 2.5</td>
<td>BF-3: 2.5</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>Lime/dolo Plant</td>
<td>Kiln#1-5: 0.425</td>
<td>Kiln#1-5: 0.425</td>
<td></td>
<td>0.425</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kiln#6&amp;7: 0.365</td>
<td>Kiln#6&amp;7: 0.365</td>
<td></td>
<td>0.365</td>
</tr>
<tr>
<td>5</td>
<td>LD Shop</td>
<td>SMS-1: 3.5</td>
<td>SMS-1: 3.5</td>
<td></td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMS-2: 2.8</td>
<td>SMS-2: 2.8</td>
<td></td>
<td>3.8</td>
</tr>
<tr>
<td>6</td>
<td>Wire Rod Mill</td>
<td>1.65</td>
<td></td>
<td>1.81</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special Bar Mill</td>
<td>1.65</td>
<td></td>
<td>1.78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structural Mill</td>
<td>1.75</td>
<td></td>
<td>1.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rebar</td>
<td>-</td>
<td></td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rounds for FWP</td>
<td></td>
<td></td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semis (Bloom/Rounds/Billets)</td>
<td>0.66</td>
<td></td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coal Based Waste Gas</td>
<td>315 MW</td>
<td>Coal Based Waste Gas</td>
<td>315 MW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gas Based Nedo</td>
<td>69 MW</td>
<td>Gas Based Nedo</td>
<td>69 MW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sinter cooler</td>
<td>120 MW</td>
<td>Sinter cooler</td>
<td>120 MW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.6 MW</td>
<td></td>
<td>20.6 MW</td>
<td></td>
</tr>
<tr>
<td>Captive Power</td>
<td>Coal Based Waste Gas</td>
<td>315 MW</td>
<td>Coal Based Waste Gas</td>
<td>315 MW</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Gas Based Nedo Sinter</td>
<td>69 MW</td>
<td>Gas Based Nedo Sinter</td>
<td>69 MW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cooler</td>
<td>120 MW</td>
<td>cooler</td>
<td>120 MW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20.6 MW</td>
<td></td>
<td>20.6 MW</td>
<td></td>
</tr>
</tbody>
</table>

4.0 The proposed expansion is planned in the existing project site of 3240 ha. No forestland involved. The entire land has been acquired for the project. There is no River passes through the project area. It has been reported that no water body exists around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between 17°34'29" to 17° 38'49" N Latitude and 83° 09'23" to 83° 14'12" E Longitude in Survey of India topo sheet No. 65 O/2, at an elevation of 10 m AMSL. The ground water table reported to ranges between 5-10mgbgl below the land surface during the post-monsoon season and 2-5mgbgl below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 1m. Further, the stage of groundwater development is reported to be 100% and 100% in core and buffer zone respectively and thereby these are designated as critically exploited.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridor for Schedule-I fauna. The authenticated list of flora and fauna in the study area is incorporated in EIA.

7.0 For the proposed capacity augmentation from 6.3 MTPA to 7.3 MTPA liquid steel, it is estimated that nearly 3.533 MTPA additional minerals would be required namely iron ore in the form of fines, Sized Iron Ore& Pellets, limestone & dolomite, Quartzite. 1.2 MTPA Coal/ PCI coal as fuel is required. No additional land is required.

8.0 The targeted production capacity of the Vizag Steel Plant is 7.3 MTPA. The ore for the plant would be procured from (linkages Rail). The ore transportation will be done through Rail.

9.0 The water requirement of the project is estimated as 4,545.m3 /day which will be obtained from the existing Yeleru Reservoir. The permission for drawl of groundwater / surface water is obtained from VIWSCO videagenda item no. 43/7 of 43rd meeting of the BOD held on 24/12/2009.

10.0 The power requirement of the project is estimated as 76 MW, out of which 76 MW will be obtained from the ATRANSCO.
11.0 Baseline Environmental Studies were conducted during post monsoon season 2016 i.e., from October to December 2016. Ambient air quality monitoring has been carried out at 8 locations during 17-10-2016 to 7-1-2017 and the data submitted indicated that PM$_{10}$ (43.8 $\mu$g/m$^3$ to 85.0 $\mu$g/m$^3$), PM$_{2.5}$ (20.2 to 58.1$\mu$g/m$^3$), SO$_2$ (11.6 to 17.5 $\mu$g/m$^3$) and NOx (14.1 to 18.5 $\mu$g/m$^3$). The results of the modelling study indicate that the maximum increase of GLC for the proposed implementation of 7.3 MTPA expansion is 16.6 $\mu$g/m$^3$ with respect to the PM10, 23.2 $\mu$g/m$^3$ with respect to the SO$_2$ 9.3 $\mu$g/m$^3$ with respect to the NOx, which is less than the predicted GLCs due to operation of 6.3 MTPA. This is due to proposed upgradation of pollution control equipment, and also reduction in volumetric flows.

12.0 Ground water quality has been monitored in 7 locations in the study area and analysed. pH: 7.35 to 8.10, Total Hardness: 360 to 520 mg/l, Chlorides: 130 to 250 mg/l, Fluoride: 0.4 to 0.8 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 4 locations. pH: 7.21 to 8.06; DO: 5.6 to 6.2 mg/l and BOD: 1.0 to 1.3 mg/l.

13.0 Noise levels are in the range of 52.0 to 72.9 dB(A) for daytime and 42.2 to 66.2 dB(A) for night time.

14.0 No R&R is involved.

15.0 The solid waste generated at 6.3 MTPA stage will be approx 11,700 TPD which includes granulated BF slag, SMS slag, mill scales, sludges, ESP/Bag filter dust etc. In addition, about 2000 TPD of coal ash will be generated at 6.3 MTPA stage. There would be additional generation of approx 1,700 TPD of solid waste for 7.3 MTPA stage. It is estimated that 100% of the granulated BF slag would be sold to the cement making industries for manufacturing of slag cement. Other waste such as mill scale, sludges, dust etc. would be 100% recycled into the sinter plant. 60% of the SMS slag would also be used within the steel plant and the balance would be stored for further processing for secondary use.

16.0 It has been reported that the Consent for Establishment (CFE) has been obtained from the Andhra Pradesh State Pollution Control Board vide order no APPCB/VSP/108/HO/2005/317 dated 09.05. 2005. Consent for Operation has been obtained from Andhra Pradesh State Pollution Control Board vide order dt.27-04-2015 and the same is valid till February 2019.

17.0 The Public hearing of the project was held on 15th June 2017 at Trishna Grounds, Sector -2, Ukkunagaram under the chairmanship of District Collector and District Magistrate Visakhapatnam for production of 7.3 MTPA of Capacity Expansion Steel Plant / setting up of Capacity Expansion Steel Plant. The issues raised during public hearing inter alia include estimation of project cost, effluent discharge, development of
greenbelt, water requirement, pollution, safety of industry, utilization of CSR funds, R&R package, etc.

18.0 The capital cost of the project is Rs 9439.53 Crores and the capital cost for environmental protection measures is proposed as Rs. 558.99 crore. The annual recurring cost towards the environmental protection measures is proposed as Rs 33700 Lakhs. The employment generation from the proposed project/expansion is Direct Employment during Operation is 1600 and indirect employment is for 3000 people. An amount of Rs. 778.0 Lakhs has been earmarked for 2017-18 towards enterprise social commitment/corporate environment responsibility.

19.0 Out of total acquired land of 8827 ha (21811.99 Acres), greenbelt has been done in 1969 ha (4866 Acres) within the plant area. On the whole about 38% of the land is afforested with the planting of 5.16 million trees.

20.0 There is no litigation pending against the project and/or land in which the project is proposed to be set up.

21.0 The proposal was considered by the Expert Appraisal Committee (Industry-I) during its 28th meeting held on 5th - 7th February 2018. The PP has made detailed presentation on the proposal. The committee observed that the project proponent has already started the proposed modernization and revamping activities since 2013 and the status of implementation of various packages, as reported by Regional Officer, Chennai as follows:

<table>
<thead>
<tr>
<th>Package</th>
<th>Front hand over date/ Contractual Start Date</th>
<th>Actual Completion date / Likely completion date</th>
<th>Status as on November 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>BF-1 Revamping</td>
<td>25/10/2013</td>
<td>21/07/2014</td>
<td>Commissioned and running at 90% capacity</td>
</tr>
<tr>
<td>BF-2 Revamping</td>
<td>5/5/2016</td>
<td>1/08/2017</td>
<td>Commissioned and running at 60% capacity</td>
</tr>
<tr>
<td>Sinter Plant-1 Revamping</td>
<td>31/10/2016</td>
<td>31/07/2017</td>
<td>Commissioned and running at 70% capacity</td>
</tr>
<tr>
<td>Kanthi Balancing Reservoir -2</td>
<td>19/07/2016</td>
<td>Likely to complete by July 2018</td>
<td>15% of construction work completed</td>
</tr>
<tr>
<td>3rd Converted</td>
<td>March 2013</td>
<td>Completed in November 2016</td>
<td>100% completed</td>
</tr>
<tr>
<td>4th Caster</td>
<td>June 2014</td>
<td>Likely to be completed</td>
<td>80% completed</td>
</tr>
<tr>
<td>TB-5</td>
<td>June 2014</td>
<td>November 2017</td>
<td>95% completed</td>
</tr>
<tr>
<td>Sinter Plant-2 Revamping</td>
<td></td>
<td></td>
<td>Not yet started</td>
</tr>
</tbody>
</table>

22.0 After detailed deliberations, the Committee recommended that since the project proponent has already implemented the expansion project / activity without prior Environmental Clearance attracts the violation under EIA Notification 2006.
23.0 In view of above, the proposal was considered by the EAC (Violation) meeting held during 13th -14th June 2018 and further considered in the meeting held during 27th -28th July 2018. The EAC, after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC Notification dated 14th March, 2017, confirmed the case to be of violation of the EIA Notification, 2006 and recommended for issuing the Term of Reference for undertaking EIA and preparation of Environment Management Plan (EMP) as follows:

1) The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate for expansion project to be issued till the project is granted EC for the expansion.

2) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCC prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

3) Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.

4) Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

5) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

6) Since Public Hearing (PH) has been conducted on dated 19.07.2017 covering all the issues, committee felt that one time PH as per the order of Hon'ble High Court of Madras has already taken care and hence repeat PH is not required.

7) EIA/EMP may be prepared by using existing base line data generated.

8) EIA/EMP should cover the validation of current practices also predict cumulative Impact covering total production capacity for each component of environment.

9) Selection of technology and adaption of clean technology for both production & environment be addressed in EIA/EMP report.

10) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-I.A.III dated 1st May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
24.0 In view of above, the Ministry has considered the recommendations of in EAC (violation) and hereby prescribed the specific ToRs as recommended by EAC (violation) above, in addition to the standard ToR, for undertaking detailed EIA-EMP study in addition to the generic ToR enclosed at Annexure I read with additional ToRs at Annexure-2.

25.0 The undersigned is directed to inform that the Ministry of Environment, Forest and Climate Change (MoEF&CC) after accepting the recommendation of the EAC (violation), hereby decided to accord ToRs for the above project.

26.0 It is requested that the draft EIA Report may be prepared in accordance with the above mentioned specific ToRs and enclosed generic ToRs and additional ToRs and thereafter further necessary action may be taken for obtaining Environment Clearance in accordance with the procedure prescribed under the EIA Notification, 2006 as amended.

27.0 The ToRs are valid for a period of three years from today i.e., 02.08.2018 and will expire on 01.08.2021. However, this period could be further extended by a maximum period of one year provided an application is made by the project proponent at least three months before the expiry of the validity period, together with updated Form-I, based on proper justification.

(Sharath Kumar Pallerla)  
Scientist 'F'/Director

Copy to: -

1. The Principal Secretary to Government, Department of Environment, Forest and Science & Technology, Govt. of Andhra Pradesh, Secretariat Office: 4th Block, Ground Floor, Room No:187 Phone: 0863-2444438 Email: splcs_efst@ap.gov.in

2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

3. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai-600034.

4. The Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanath Nagar, Hyderabad - 500 018.

5. The District Collector, Vizianagaram District, State of Andhra Pradesh.


7. MoEF&CC Website

(Sharath Kumar Pallerla)  
Scientist ‘F’/Director
GENER ic TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. Executive Summary

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

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

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

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

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

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

6. Environmental Status

i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
ii. AAQ data (except monsoon) at 8 locations for PM_{10}, PM_{2.5}, SO_{2}, NO_{X}, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and consider the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with min., max., average and 98% values for each of the AAQ parameters from
data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (60 m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall
be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

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

9. Corporate Environment Policy
   i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
   ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
   iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
   iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Enterprise Social Commitment (ESC)
   i. To address the Public Hearing issues, 2.5% of the total project cost of (Rs. .............crores), amounting to Rs. .............crores, shall be earmarked by
the project proponent, towards Enterprise Social Commitment (ESC). Distinct ESC projects shall be carved out based on the local public hearing issues. Project estimate shall be prepared based on PWD schedule of rates for each distinct item and schedule for time bound action plan shall be prepared. These ESC projects as indicated by the project proponent shall be implemented along with the main project. Implementation of such program shall be ensured by constituting a Committee comprising of the project proponent, representatives of village Panchayat & District Administration. Action taken report in this regard shall be submitted to the Ministry’s Regional Office. No free distribution/donations and or free camps shall be included in the above ESC budget.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for point wise compliance of above ToRs.

14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

i. All documents shall be properly indexed, page numbered.

ii. Period/date of data collection shall be clearly indicated.

iii. Authenticated English translation of all material in Regional languages shall be provided.

iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.

v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.

vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J-11013/4/2006-IA.II (l) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.

viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

ix. ToRs’ prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the ‘Generic Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the
Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL TORs

1. Manganese ore/coal linkage documents along with the status of environmental clearance of Manganese ore and coal mines

2. Quantum of production of coal and iron ore from coal & Manganese ore mines and the projects they cater to. Mode of transportation to the plant and its impact

3. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.

4. PM(PM_{10} and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.

5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.

6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.

7. Plan for slag utilization

8. Plan for utilization of energy in off gases (coke oven, blast furnace)


10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.

11. Trace metals in waste material especially slag.

12. Trace metals in water
Executive Summary

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

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)

ii. Products and capacities. If expansion proposal then existing products with capacities and reference to earlier EC.

iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)

iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.

v. Measures for mitigating the impact on the environment and mode of discharge or disposal.

vi. Capital cost of the project, estimated time of completion

vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest, eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)

viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population

ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.

x. Likely impact of the project on air, water, land, flora-fauna and nearby population

xi. Emergency preparedness plan in case of natural or in plant emergencies

xii. Issues raised during public hearing (if applicable) and response given

xiii. CSR plan with proposed expenditure.

xiv. Occupational Health Measures

xv. Post project monitoring plan

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To

The Principal Secretary to Government,
Department of Environment, Forest and Science & Technology,
Govt. of Andhra Pradesh,
Secretariat Office: 4th Block, Ground Floor, Room No:187
Amaravathi, Guntur District
Phone: 0863-2444438, Email: splcs_efst@ap.gov.in

Dated: 2nd August, 2018

Subject: Capacity Expansion of Vishakhapatnam Steel Plant from 6.3 MTPA to 7.3 MTPA by revamping and augmentation of existing facilities by M/s Rashtriya Ispat Nigam Ltd located at Gajuwaka, Vishakhapatnam, Andhra Pradesh– Terms of Reference regarding.

Sir,

M/s Rashtriya Ispat Nigam Ltd has reference to your online application vide proposal no. IA/AP/IND/56868/2016 dated 9th January 2018 along with the copies of EIA/EMP seeking Environmental Clearance under the provisions of the EIA Notification, 2006 for the above mentioned proposed project. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of EIA Notification, 2006. As the project is commenced without prior environmental clearance as required. Therefore, the proponent made an application under the provisions of SO 804(E) dated 14th March 2017 and appraised at the Central level.

2.0 The Capacity Expansion of Visakhapatnam Steel Plant from 6.3 MTPA to 7.3 MTPA by revamping and Augmentation of existing facilities of M/s Rashtriya Ispat Nigam Limited located in Village Gajuwaka Tehsil Visakhapatnam District Visakhapatnam State Andhra Pradesh.

3.0 It is to inform that, Ministry has issued notification vide SO 804 (E) dated 14th March, 2017 on process for appraisal of projects for grant of Terms of Reference and Environmental Clearance, which have started the work on site, expanded the production beyond the limit of environmental clearance or changed the product mix without obtaining prior environmental clearance under the Environment Impact Assessment Notification, 2006.
4.0 As per the above-said notification, in cases of violation, action will be taken against the project proponent by the respective State or State Pollution Control Board under the provisions of section 19 of the Environment (Protection) Act, 1986 and further, no consent to operate or occupancy certificate will be issued till the project is granted the environmental clearance.

5.0 The proposal was considered by the Expert Appraisal Committee (Industry-I) during its 18th meeting held on 12th - 14th March 2018 and deferred for Environmental Clearance as the project involves violation. Later on, the proposal was placed before EAC (violation) meeting held during 13th - 14th June 2018 and further during 27th - 28th June 2018 at Indira Paryavaran Bhawan, New Delhi for prescribing ToRs for undertaking detailed EIA/EMP study. After detailed deliberations, the Committee recommended the project for prescribing ToRs for undertaking detailed EIA and EMP study.

6.0 I am directed to say that the state government is requested to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986 for violation of EIA Notification, 2006.

This issues with the approval of competent authority

(Sharath Kumar Pallerla)
Scientist ‘F’/Director

Copy to: -

1. M/s Rashtriya Ispat Nigam Ltd., Visakhapatnam Steel Plant, Visakhapatnam - 530031
2. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1st and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 600034.
5. The Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanath Nagar, Hyderabad - 500 018.
7. MoEF&CC Website

(Sharath Kumar Pallerla)
Scientist ‘F’/Director