

**Minutes of the 169<sup>th</sup> Meeting of Goa State Expert Appraisal Committee (Goa - SEAC) held on the 18<sup>th</sup> January 2023 at 03.30 p.m. in the conference hall, 4<sup>th</sup> Floor, Dempo Towers, Patto - Panaji, Goa.**

The 169<sup>th</sup> meeting of the Goa-SEAC was held on 18<sup>th</sup> January 2023 in the Conference room 4<sup>th</sup> floor of the Dempo Towers, Patto - Panaji at 03.30 p.m. under the Chairmanship of Shri. Gautam Desai. The list of members who attended the meeting is at "Annexure - 1".

The Chairman welcomed the members and requested to proceed as per the agenda items (refer Annexure - 2).

1. **To decide on application for Amendment in ToR from Deltin Town located at Plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A and 280/1-B, Dhargalim village, Pernem Goa.**

The representative of Deltin Town Mr. Sahil Sachdera appeared before the Committee and explained the details of the project.

**Decision:** The Committee has decided to grant following Terms of Reference for conducting Environment Impact Assessment study for Township and Area Development projects and information to be included in EIA/EMP report.

**Terms of reference for conducting Environment Impact Assessment study**

**I. Project Details**

- i. Need and benefits of the project.
- ii. Submit data for built-up area for each building, the use and occupancy classification in line with NBC 2016 also to be indicated [for differential functional requirements].
- iii. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

**II. Land Environment**

- i. Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.
- ii. Assessment and Impact Study of land use under the agriculture cultivation and socio- ecological implication of the project.

**III. Land acquisition and R&R**

- iv. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.

*[Handwritten signatures and initials]*

*[Handwritten signature]*

*[Handwritten signature]*

#### IV. Environmental Monitoring and Management

- v. Examine baseline environmental quality along with projected incremental load due to the project.
- vi. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- vii. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- viii. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- ix. Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

#### V. Drainage

- x. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.

#### VI. Forest

- xi. Submit the details of the trees to be felled for the project, if any . ix. Submit the present land use and permission required for any conversion such as forest, agriculture etc.

#### VII. Water Environment

- xii. Ground water classification as per the Central Ground Water Authority.

#### VIII. Water Management

- xiii. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- xiv. Rain water harvesting proposals should be made with due safeguards for ground water quality.
- xv. Maximize recycling of water and utilization of rain water, Examine details.
- xvi. Examine soil characteristics and depth of ground water table for rainwater harvesting.
- xvii. Permission from CGWA for abstraction of groundwater, if any, including dewatering during basement excavation.

#### IX. Waste Management

- xviii. Examine details of solid waste generation treatment and its disposal.
- xix. Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.

#### X. Energy Requirements

h  
h  
B  
B  
2000  
A  
A  
A

- xx. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- xxi. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
- xxii. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment.

**XI. Road and Traffic**

- xxiii. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- xxiv. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic. xxiii. Examine the details of transport of materials for construction which should include source and availability.

**XII. Disaster Management Plan**

- xxv. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster. This should cover details of vulnerabilities due to natural and manmade hazards (earthquake, flooding, cyclone, landslides, fire etc.) and details of disaster mitigation efforts for buildings and infrastructure through structural sufficiency and Fire and Life Safety compliance in line with National Building Code NBC, 2016.

**XIII. Court Cases**

- xxvi. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

**1. To decide on application received from M/S Global Ispaat Private Limited for expansion of MS Billet & TMT Bars manufacturing units in Plot No. L-16, L-17, M-18 & M-19 and Survey Nos. 303/1, 303/3, 304/3, 327/4, 327/5, 295/1(P), 303/1(P), 303/2(P) & 303(P), Cuncolim Industrial Estate, Cuncolim, Salcete South Goa.**

The representative of M/S Global Ispaat Private Limited Shri. Vishal Sannakki appeared before the Committee and explained the details of the project.

**Decision:** In view of above the Committee has decided to grant following Terms of Reference for conducting Environment Impact Assessment Study.

**TERMS OF REFERENCE (TOR)**

1) **Executive Summary**

2) **Introduction**

*[Handwritten signatures and initials are present below the TOR items, including a large signature on the right and several smaller ones below the 'Introduction' item.]*

1. Details of the EIA Consultant including NABET accreditation
2. Information about the project proponent
3. Importance and benefits of the project
- 3) **Project Description**
  1. Cost of project and time of completion.
  2. Products with capacities for the proposed project.
  3. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
  4. List of raw materials required and their source along with mode of transportation.
  5. Other chemicals and materials required with quantities and storage capacities
  6. Details of Emission, effluents, hazardous waste generation and their management.
  7. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
  8. Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided
  9. Hazard identification and details of proposed safety systems.
  10. Expansion/modernization proposals:
    - a) Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests 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 shall be attached with the EIA-EMP report.

4) **Site Details**

1. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
2. 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).
3. Details w.r.t. option analysis for selection of site.
4. Co-ordinates (lat-long) of all four corners of the site.
5. Google map-Earth downloaded of the project site.

*hsm*

*§*

*to the*

*2007*

*2007*

*2007*

*[Signature]*

6. 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.
7. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
8. 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)
9. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
10. Geological features and Geo-hydrological status of the study area shall be included.
11. 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)
12. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
13. R&R details in respect of land in line with state Government policy

## 5. Environmental Status

1. 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.
2. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
3. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQPM 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.
4. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
5. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
6. Ground water monitoring at minimum at 8 locations shall be included.
7. Noise levels monitoring at 8 locations within the study area.
8. Soil Characteristic as per CPCB guidelines.

hgt

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
10. 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.
11. Socio-economic status of the study area.

5) **Impact and Environment Management Plan**

1. 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 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.
2. Water Quality modelling - in case of discharge in water body
3. 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.
4. 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.
5. Details of stack emission and action plan for control of emissions to meet standards.
6. Measures for fugitive emission control
7. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
8. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
9. 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.

10. 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.
11. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
12. Action plan for post-project environmental monitoring shall be submitted.
13. 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. Occupational health

1. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
2. 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 above mentioned parameters as per age, sex, duration of exposure and department wise.
3. Details of existing Occupational & Safety Hazards. What are the exposure levels of 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,
4. Annual report of health status of workers with special reference to Occupational Health and Safety.

#### 7. 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 /

*[Handwritten signatures and initials]*

*[Handwritten signature]*

*[Handwritten signature]*

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.

- 6) 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.
- 7) Enterprise Social Commitment (ESC)
  - a. 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) A tabular chart with index for point wise compliance of above ToR.

#### **Specific Terms of Reference for EIA Studies for Metallurgical Industries (Ferrous & Non Ferrous)**

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel
6. Details on ash disposal and management -Non-ferrous metal
7. Complete process flow diagram describing production of lead/zinc/copper/aluminium, etc.
8. Raw materials substitution or elimination
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling

*Sanjiv Kumar*      *BTU*      *For*      *to*      *to*



12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

### **Additional ToR for Integrated Steel Plant**

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. 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.
5. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analysed for source analysis - natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analysed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization of RSPM and incorporating of RSPM data.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace) 10). System of coke quenching adopted with justification.


*The meeting ended with a vote of thanks to the chair.*

*Sanjiv Kumar* *B. S. Pillai* *S. V. S. R. S.* *S. V. S. R. S.* *S. V. S. R. S.*

*S. V. S. R. S.*



**Dr. Benjamin Braganca**

  
-----

**Shri. Sanjay Amonkar**

  
-----

**Dr. Dipak C.S. Gaitonde**

  
-----

**Dr. Chandrashekher U. Rivonker**


  
-----

**Dr. Subhash H. Bhosale**

  
-----

**Shri Sujeetkumar Dongre**

  
-----

  
**Shri. Gautam Vikas Desai**  
(Chairman Goa-SEAC)

  
**Shri. Sanjeev Joglekar**  
(Member Secretary Goa-SEAC)

Place: Patto-Panaji  
Date: 18<sup>th</sup> January 2023

**Annexure – 1**

The list of members who attended the meeting

Shri Gautam Vikas Desai	Chairman (Goa –SEAC)
Shri. Sanjeev Joglekar	Member Secretary (Goa –SEAC)
Shri. Sanjay Amonkar	Expert Member (Goa –SEAC)
Dr. Benjamin Braganca	Expert Member (Goa –SEAC)
Dr. Dipak C.S. Gaitonde	Expert Member (Goa –SEAC)
Dr. Chandrashekher U. Rivonker	Expert Member (Goa –SEAC)
Dr. Subhash H. Bhosale	Expert Member (Goa –SEAC)
Shri Sujeetkumar Dongre	Expert Member (Goa –SEAC)

**Annexure - 2**

1. To decide on application for Amendment in ToR from Deltin Town located at Plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A and 280/1-B, Dhargalim village, Pernem Goa.
2. To decide on application received from M/S Global Ispaat Private Limited for expansion of MS Billet & TMT Bars manufacturing units in Plot No. L-16, L-17, M-18 & M-19 and Survey Nos. 303/1, 303/3, 304/3, 327/4, 327/5, 295/1(P), 303/1(P), 303/2(P) & 303(P), Cuncolim Industrial Estate, Cuncolim, Salcete South Goa.
3. Any other matter with permission of the chair.

