MINUTES OF THE 115TH GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (GOA–SEIAA) MEETING HELD ON 13/10/2023 AT 03:00 P.M. IN THE CONFERENCE ROOM OF THE 4TH FLOOR, DEMPO TOWER, PATTO, PANAJI-GOA.

The 115th meeting of the Goa - SEIAA (*hereinafter referred as 'Authority'*) was held on 13th October 2023 at 03:00 pm in the conference room, 4th floor, Dempo Tower, Patto, Panaji. The list of members present during the meeting is annexed (*refer Annexure - 1*).

At the outset, Chairman welcomed Authority members and briefed about the agenda items (*refer Annexure - 2*) to be taken up for discussion / deliberations and appropriate decision. Accordingly, the same were considered as detailed below.

1. **To decide on application received for ToR from Goa Ispat Pvt. Ltd. for Expansion of production capacity of MS Billets from 59500 TPA to 240000 TPA and TMT Bars from 120000 TPA to 240000 TPA at Plot No.E-6 &E-7 at Madkaim Industrial Estate, Madkaim, Ponda Goa.**

The Director Shri. Sanjeev K. Mathiyan along with his team appeared before the Authority.

Decision: After scrutinizing the application submitted by the Project Proponent the Authority has decided to grant following Terms of Reference for conducting Environment Impact Assessment Study.

A. STANDARD TERMS OF REFERENCE (TOR)

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 landis 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. Process description along with major equipments and machineries, process flow

sheet (quantative) from raw material to products to be provided.

ix. Hazard identification and details of proposed safety systems.

x. 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.

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. Details w.r.t. option analysis for selection of site.

iv. Co-ordinates (lat-long) of all four corners of the site.

v. Google map-Earth downloaded of the project site.

vi. 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.

vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

viii. 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. (notrequired for industrial area).

ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area.

x. Geological features and Geo-hydrological status of the study area shall be included.

xi. 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 fieldprojects).

xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition processand expected time of complete possession of the land.

xiii. R&R details in respect of land in line with state Government policy.

5. 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 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.

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 (100m upstream and downstream of discharge point)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, if yes give details.

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.

6. Impact 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 sourcesof emissions (including transportation) on the AAQ of the area shall be assessed. Details ofthe 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 of discharge in water body.

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 waste water 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 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.

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 waterrequirement 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. On site and Off site 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.

7. Occupational health

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

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 above mentioned parameters as per age, sex, duration of exposure and department wise.

iii. 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 workerscan be preserved.

iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

8. 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.

9. 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.

10. Enterprise Social Commitment (ESC)

i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment Socio-economic development activities need to be elaborated upon.

11. 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.

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

B. 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 androlling 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
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant andtheir utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly ofslag).
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

C. 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 caterto. 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-5mspatial 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 RSPMshall 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
11. Project Proponent need to get feedback from the local Community on the pollution aspect.

2. **To decide on application received for ToR from Sahanu Sponge & Pvt. Ltd. for Expansion of production capacity from 54000 TPA to 100000 TPA at Plot No.122 to 127 of Bicholim Industrial Estate, Bicholim, North Goa.**

The Director Shri Sunil Garg along with his team appeared before the Authority.

Decision: The Authority is of the opinion that as per the Notification No. S.O.3250(E) dated 20/07/2022 by MoEF&CC *"Now, therefore, in exercise of the powers conferred by section 3 of the Environment(Protection) Act, 1986 (29 of 1986), the Central Government hereby directs that all the* ***standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this Notification, with valid Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned State Pollution Control Board or the Union Territory Pollution Control Committee, as the case may be shall apply online for grant of Terms of Reference(ToR) followed by Environment Clearance and the said units shall be granted Standard Terms of Reference as per item 3(a) of the said Notification and shall exempted from the requirement of public consultation:***

Provided that the application for the grant of ToR shall be made within a period of one year from the date of this Notification."

Since the establishment has CTO from the Goa State Pollution Control Board for 54,000 TPA capacity valid as on the date of the Notification the ToR and the EC for the unit should be restricted to 54,000 TPA capacity, as the one year grace period was given for the existing unit and their proposal for expansion of 46,000 TPA capacity is a new proposal which was not existing on the said date of the Notification, hence cannot be covered under the said Notification and therefore the ToR should be restricted to 54,000 TPA capacity with the liberty to the applicant to apply for expansion after the Environmental Clearance for the existing unit is granted.

Hence, the Authority decided to reject the proposal for expansion. The Project Proponent may be informed to apply for Environmental Clearance for existing capacity as per the CTO from the Goa State Pollution Control Board viz. 54,000 TPA.

3. **To decide on application received for ToR from Sunrise Electromelt Pvt. Ltd. for Expansion of production capacity from 54000 TPA to 120000 TPA**

and manufacture of MS Billets of capacity of 120000 TPA at Plot No. M-2 ,M-3 and M-4 of Cuncolim Industrial Estate, Cuncolim, South Goa.

The Director Shri. Vishal Agarwal along with his team appeared before the Authority.

Decision: The Authority is of the opinion that as per the Notification No. S.O.3250(E) dated 20/07/2022 by MoEF&CC *"Now, therefore, in exercise of the powers conferred by section 3 of the Environment(Protection) Act, 1986 (29 of 1986), the Central Government hereby directs that all the* ***standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this Notification, with valid Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned State Pollution Control Board or the Union Territory Pollution Control Committee, as the case may be shall apply online for grant of Terms of Reference(ToR) followed by Environment Clearance and the said units shall be granted Standard Terms of Reference as per item 3(a) of the said Notification and shall exempted from the requirement of public consultation:***

Provided that the application for the grant of ToR shall be made within a period of one year from the date of this Notification."

Since the establishment has CTO from the Goa State Pollution Control Board for 54,000 TPA capacity valid as on the date of the Notification the ToR and the EC for the unit should be restricted to 54,000 TPA capacity, as the one year grace period was given for the existing unit and their proposal for expansion of 66,000 TPA capacity is a new proposal which was not existing on the said date of the Notification, hence cannot be covered under the said Notification and therefore the ToR should be restricted to 54,000 TPA capacity with the liberty to the applicant to apply for expansion after the Environmental Clearance for the existing unit is granted.

Hence, the Authority decided to reject the proposal for expansion. The Project Proponent may be informed to apply for Environmental Clearance for existing capacity as per the CTO from the Goa State Pollution Control Board viz. 54,000 TPA.

4. **To decide on application received for ToR from Mohit Ispat Pvt. Ltd. for Expansion of production capacity from 58000 TPA to 250000 TPA at Plot No.01 in Navelim village, Bicholim Industrial Estate, Bicholim, North Goa.**

The Director Shri. Achintya Mittal along with his team appeared before the Authority.

Decision: After scrutinizing the application submitted by the Project Proponent the Authority has decided to grant following Terms of Reference for conducting Environment Impact Assessment Study.

A. STANDARD TERMS OF REFERENCE (TOR)

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 landis 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. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.

ix. Hazard identification and details of proposed safety systems.

x. 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 operationof the project from SPCB 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. Details w.r.t. option analysis for selection of site.

iv. Co-ordinates (lat-long) of all four corners of the site.

v. Google map-Earth downloaded of the project site.

vi. 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.

vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

viii. 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. (notrequired for industrial area).

ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area.

x. Geological features and Geo-hydrological status of the study area shall be included.

xi. 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 fieldprojects).

xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition processand expected time of complete possession of the land.

xiii. R&R details in respect of land in line with state Government policy.

5. 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 PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be basedCPCB guidelines and take into account 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 (100m upstream and downstream of discharge point)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,

if yes give details.

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.

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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 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 of discharge in water body.

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 waste water 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.

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vii. 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.

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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.

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iii. 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 workerscan be preserved.

iv. Annual report of heath status of workers with special reference to Occupational Health andSafety.

8. 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.

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i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment Socio-economic development activities need to be elaborated upon.

11. 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.
12. A tabular chart with index for point wise compliance of above TOR.

B. 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 androlling 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.
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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
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant andtheir utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly ofslag).
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

C. 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 caterto. 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
11. Project Proponent need to get feedback from the local Community on the pollution aspect.

5. <u>To decide on application received for ToR from Fomento Resources Private Limited bearing Survey No. 22(P), 28(P), 29(P), 109(P), 110(P), 111(P), 112(P), 116(P), 117(P), 118(P), 119(P), 120, 121, 122(P), 123(P), 124(P), 125(9P) & 126(P), Adwalpale village, Bicholim taluka and Survey No. 86, Thivim village, Bardez taluka Goa.</u>

The representative of Fomento Resources Private Limited Shri. Sandeep Morajkar along with the Project Proponents consultant appeared before the Authority.

Decision: After scrutinizing the application submitted by the Project Proponent the Authority has decided to grant following Terms of Reference for conducting Environment Impact Assessment Study.

1. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.

2. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.

3. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.

4. All corner coordinates of the mine lease area, super imposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).

5. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.

6. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.

7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/ deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The 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, may also be detailed in the EIA Report.

8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safe guard measures in each case should also be provided.

9. The study rea will comprise of 10km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine/lease period

10. Land use of the study rea delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In

the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

13. Status of forestry clearance for the broken up area and virgin forest land involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. Incase of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the' Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.

20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

21. R&R Plan /compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/ National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess the irrequirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season); December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

24. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

26. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

28. Based on actual monitored data, it may clearly be shown whether working will intersect ground water. Necessary data and documentation in this regard may be provided. Incase the working will intersect ground water table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working

below ground water and for pumping of ground water should also be obtained and copy furnished.

29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.

30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.

31. A time bound Progressive Green belt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed upfront on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution

32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.

35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

36. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

37. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of

agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

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

41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

42. A Disaster management Plan shall be prepared and included in the EIA/ EMP Report.

43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

44. Besides the above, the below mentioned general points are also to be followed:-

a) Executive Summary of the EIA/EMP Report

b) All documents to be properly referenced with index and continuous page numbering.

c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.

d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/ NABL accredited laboratories. All the original analysis/ testing reports should be available during appraisal of the Project.

e) Where the documents provided are in a language other than English, an English translation should be provided.

f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.

g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I)dated 4th August, 2009, which are available on the website of this Ministry, should be followed.

h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.

i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

6. **To decide on application received from Excel Realty Holdings Pvt. Ltd. for proposed hotel cum shopping center locating at Chalta No.5 P.T. Sheet No. 112 of Panaji, Tiswadi Goa.**

The representative of M/s Excel Realty Holdings Pvt Ltd. Shri. Sajeed Dessai along with his team appeared before the Authority.

Decision: After scrutinizing and perusing the documents submitted by the Project Proponent, the Authority decided to grant the Environmental Clearance under following General and Specific conditions:

a. The Project Proponent should use Ready-Mixed Concrete (RMC) to minimize air/water/land pollution and water usage during the construction phase.

b. Project Proponent should adopt roof-top rainwater harvesting/conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.

c. Project Proponent should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.

d. Project Proponent should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/ zoning.

e. This Environmental Clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which has to be dealt separately by the competent authorities in accordance with law.

f. The construction gross built up area of proposed construction is **29355.98 sq. mts** shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work.

g. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

h. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable, failing which the Environmental Clearance herein shall be deemed to be withdrawn and a copy shall be submitted to the Authority within 30 days of starting construction work at site.

i. Project proponent shall not make any change in the Surface Layout Plan/ Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project proponent needs to inform this Authority.

j. 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 and first aid room etc. The safe

disposal of waste water and solid waste generated during the construction phase should be ensured.

k. Arrangements shall be made that waste water and storm water do not get mixed.

l. All the top soil excavated during construction activities should be stored if or use in horticulture/ landscape development within the project site.

m. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.

n. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest/ Agriculture Department.

o. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.

p. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.

q. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.

r. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.

s. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipment etc. as per National Building Code (NBC) including measures from lighting.

t. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.

u. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

v. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.

w. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.

x. Energy conservation measures like installation of only for LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used of LED's, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

y. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

z. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided by providing separate entry and exit gate. Parking should be fully internalized and no public place should be utilized.

aa. The Project Proponent will lay a direct line for disposal to sewerage network of common STP or else Project Proponent shall make suitable provision for sewage disposal by providing Sewage Treatment Plant on site. The STP should be certified by independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary measures to be made to mitigate the odour problem from STP. Sewage Treatment Plant should be with operation and maintenance after commissioning/ completion of project with minimum period of 5 years.

bb. Opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

cc. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

dd. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.

ee. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started without obtaining EC.

ff. Six monthly compliance reports should be submitted to the MoEF&CC with copy to the Goa-SEIAA and GSPCB in hard as well as soft copy format for the period upto the Project completion.

2. **<u>Project Proponent should implement Dust mitigation measures for construction activities such as</u>:**

a) Roads leading to or at construction sites must be paved and blacktopped (i.e metalic roads).
b) No excavation of soil shall be carried out without adequate mitigation measures in place.
c) No loose soil or sand or construction and demolition waste or any other construction material that causes dust shall be left uncovered.
d) Wind-breakers of appropriate height i.e 1/3rd of the building height and maximum upto 10 meters shall be provided.
e) Water sprinkling system shall be put in place.
f) Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
g) New serial No. '107' has been inserted which relates to mandatory implementation of dust mitigation measures for all construction and demolition activities.

h) Grinding and cutting of building materials in ope area shall be prohibited.

i) Construction material and waste should be stored only within earmarked area and roads side storage of construction material and waste shall be prohibited.

j) No uncovered vehicles carrying construction material and waste shall be permitted.

k) Construction and demolition waste processing and disposal shall be managed as per construction and demolition waste Management rules 2016.

3. **Further**, the Committee decided to direct the Project Proponent to comply with the following **"General Conditions" during post-construction phase:-**

a) Separate funds shall be allocated for implementation of environmental protection measures / EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.

b) The Project Proponent shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO_2 and NO_X (*ambient levels as well as D.G. stack emissions*) shall be monitored.

c) The Project Proponent should provide facilities for storage and segregation of waste generated in three separate streams i.e bio-degradable, Non bio-degradable and domestic hazardous waste in suitable bins and handover segregated wastes to authorized waste pickers or waste collectors as per the directions or notifications by the local Authorities and Goa State Pollution Control Board.

d) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.

e) Project Proponent shall store separately construction and demolition waste, as and when generated, in their own premises and shall be disposed of as per the Construction and Demolition Waste Management Rules 2016.

f) The Project Proponent store horticultural waste and garden waste in their own premises and shall be disposed as per the directions of the local bodies.

g) The Project Proponent in partnership with local bodies shall ensure segregation of waste at source by the generators as prescribe in the rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorized waste pickers or the Authorized recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio- methanation within the premises as far as possible. The residual waste shall be given to the waste collector or agency as directed by the local body.

h) Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.

i) The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.

j) Energy Conservation measures such as solar lighting for common area, solar water heating system, LED's for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.

k) Used LED lights should be properly collected and disposed off/sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.

l) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.

m) Further this EC is issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.

4. Specific Conditions

a. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.

b. Project Proponent should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment/air and water pollution/waste-water management.

c. Project Proponent needs to ensure that no treated water or any waste sewage shall be discharged into any water body. E-waste shall be disposed through Authorized vendor as per E-waste (*Management and Handling*) Rules, 2011.

d. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.

e. The Project Proponent shall utilise fly ash bricks in masonry works.

f. At least 20% of the open spaces as required by the local building bye-laws shall be previous. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as previous surface.

g. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

h. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

i. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate re circulation lines for flushing by giving dual plumbing system be done.

j. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.

k. Areas which are marked as No Development Zone (NDZ) should be clearly marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.

l. No construction shall be done over the portion of land, shown as open space in the site plan.

m. Project Proponent should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.

n. *Solar power generation* - Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage to enable installation of solar panels including battery storage system. In addition south facing walls to be utilized to installed solar panels to harness optimum solar energy. Use of solar panels may be done to the extend possible like installing solar street lights, Project Proponent should installed after checking feasibility solar plus hybrid conventional source as source of energy. PP should ensure storage of solar and release in the grid during peak hours.

o. Solar based electric power shall be provided to each unit for atleast two bulbs / lights and one fan. As proposed central lighting and street lighting shall also be based on solar power.

p. This Environmental Clearance is issued subject to land use verification. Local authority/planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgments / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.

q. Project Proponent should ensure and ascertain that 'civil plans' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments/ agencies concerned while seeking NOC/ Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.

r. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.

s. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEAC.

t. A copy of the environmental clearance letter shall be sent by PP to the concerned

Municipality and planning authority as applicable, from which suggestions/representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from date of issue of environmental clearance.

u. The environmental statement for each financial year ending 31st March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF&CC.

v. The Project Proponent shall use construction debris for land filling wherever applicable and dispose the Construction & Demolition waste in compliance to the Construction and Demolition Waste Management Rules. The Project Proponent shall indicate disposal of Construction & Demolition Debris on the site indicated viz. Porvorim & Pernem showing the Survey No, Village etc as clarified by Project Proponent during SEAC meeting held on 04/10/2023.

w. Bore well water is not to be used for construction phase, only used for drinking purpose and PP should maintain the meter reading on regular basis.

x. Project Proponent should install Bio-gas plant to treat the Bio degradable waste.

y. Building shall be constructed as per Green Building norms of GRIHA/ ASSOCHEM GEM/IGBC with rating standards of 3 stars/ 3 GEM/gold respectively.

z. Building should be constructed as per National Building Code 2016 part-IV.

aa. Project Proponent should do Corporate Social Responsibility and Corporate Environmental Responsibility as recommended/approved by Goa - SEAC/ Goa SEIAA.

bb. As per office memorandum issued by MoEF&CC dated 1st May 2018, some of the activities which can be carried out in CER, are infrastructure creation for Drinking Water Supply, Sanitation, Health, Education, Skill Development, Roads, Cross Drains, Electrification including Solar Power, Solid Waste Management Facilities, Scientific Support and Awareness to Local Farmers to increase yield of crop and fodder, Rain Water Harvesting, Soil Moisture Conservation Works, Avenue Plantation, Plantation in Community areas, etc.

cc. To install additional solar panels on the roof top. In case adequate suitable area is not available within the project site, the Project Proponent may install the same in vicinity to contribute to production of green energy.

dd. The debris expected to be generated in case of demolition of existing old structure and that during new construction work the debris to be disposed off scientifically with due permission of GSPCB.

ee. A proper transport plan for transport of the debris should be prepared and prior permissions should be obtained from the concerned authorities.

The meeting ended with thanks to chair.

(Smt. Reshma Mathew)
Member, Goa-SEIAA

(Shri. Suhas Godse)
Chairman, Goa-SEIAA

(Dr. Sneha S. Gitte, IAS)
Member Secretary, Goa-SEIAA

Place: Patto-Panaji
Date: 13th October 2023

Annexure - 1

Shri. Suhas Godse	Chairman, Goa-SEIAA
Dr. Sneha S. Gitte, IAS	Member Secretary, Goa-SEIAA
Smt. Reshma Mathew	Member, Goa-SEIAA

Annexure - 2

AGENDA OF THE 115TH GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (GOA–SEIAA) MEETING ON 13/10/2023 AT 03.00 P.M. IN THE CONFERENCE ROOM OF THE 4th FLOOR, DEMPO TOWER, PATTO, PANAJI-GOA.

1. To decide on application received for ToR from Goa Ispat Pvt. Ltd. for Expansion of production capacity of MS Billets from 59500 TPA to 240000 TPA and TMT Bars from 120000 TPA to 240000 TPA at Plot No.E-6 &E-7 at Madkaim Industrial Estate, Madkaim, Ponda Goa.
2. To decide on application received for ToR from Sahanu Sponge & Pvt. Ltd. for Expansion of production capacity from 54000 TPA to 100000 TPA at Plot No.122 to 127 of Bicholim Industrial Estate, Bicholim, North Goa.
3. To decide on application received for ToR from Sunrise Electromelt Pvt. Ltd. for Expansion of production capacity from 54000 TPA to 120000 TPA and manufacture of MS Billets of capacity of 120000 TPA at Plot No. M-2 ,M-3 and M-4 of Cuncolim Industrial Estate, Cuncolim, South Goa.
4. To decide on application received for ToR from Mohit Ispat Pvt. Ltd. for Expansion of production capacity from 58000 TPA to 250000 TPA at Plot No.01 in Navelim village, Bicholim Industrial Estate, Bicholim, North Goa.
5. To decide on application received for ToR from Fomento Resources Private Limited bearing Survey No. 22(P), 28(P), 29(P), 109(P), 110(P), 111(P), 112(P), 116(P), 117(P), 118(P), 119(P), 120, 121, 122(P), 123(P), 124(P), 125(9P) & 126(P), Adwalpale village, Bicholim taluka and Survey No. 86, Thivim village, Bardez taluka Goa.
6. To decide on application received from Excel Realty Holdings Pvt. Ltd. for proposed hotel cum shopping center locating at Chalta No.5 P.T. Sheet No. 112 of Panaji, Tiswadi Goa.
7. Any other matter with permission of the chair.