Minutes of the 184th Meeting of Goa State Expert Appraisal Committee (Goa-SEAC) held on the 12th July 2023 at 03.30 p.m. in the conference hall, 4th Floor, Dempo Towers, Patto - Panaji, Goa.

The 184th meeting of the Goa-SEAC was held on 12^{th} July 2023 in the Conference room 4^{th} 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 meeting has been conducted at conference hall. The Chairman welcomed the members and requested to proceed as per the agenda items ($refer\ Annexure\ -2$).

 To decide on TOR application received from Salgaocar Shipping Company Limited for Block II –Sirigao-Mayem Mineral Block bearing Survey No. 1, 2, 3, 4, 5, 6, 7, 46, 47, 48, 84, 90, 91, 92, 93, 94, 95, 96, 97, 98 & 12, 47, 60, 61, 62, 79, 80, 84, road, 48, 56, 57, 58 & 59 at Bicholim Goa.

The representative of Salgaocar Shipping Company Limited for Block II –Sirigao-Mayem Mineral Block Shri Nitin Sood along with his consultant appeared before the Committee and explained the details of the project.

Decision:- After Scrutinizing the documents submitted by the Project Proponent, the Committee decided to recommend the Authority for grant of Following ToR.

- 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.
- A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 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, superimposed 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).

 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,

for her

1 3 Will

hum

existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.

- 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.
- 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 safeguard measures in each case should also be provided.
- The study rea will comprise of 10 km 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.
- 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 asmentioned 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 forestland 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.

the few

18 W

hu

- 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.
- The vegetation in the RF / PF areas in the study area, with necessary details, should begiven.
- 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 andany other protected area and accordingly, detailed mitigative measures required, should beworked out with cost implications and submitted.
- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsarsite 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. In case of any scheduled-I fauna found in the study area, the necessary planalong 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 their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line

Jan John

\$

31<u>U</u>

hum

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.
- 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.
- 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 groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater 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.

to fr

- 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.
- 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 Greenbelt 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 up front 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 perIndian Road Congress Guidelines.
- Details of the on site shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plan sand 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

for Jun

1 Sill how

April 1

- agricultural andgrazing 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.
- 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
- 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.
- 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(1) 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.

 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

for Jane

& Sittle Lun

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.

 To decide on TOR application received from Rajaram Bandekar Mines Private Limited for Block III – Monte De Sirigao Mineral Block bearing Survey No. 47, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 69, 70, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 94, 95, 79 & road at Bicholim Goa.

The representative of Rajaram Bandekar Mines Private Limited for Block III -Monte De Sirigao Mineral Block Shri Vasu Nair and Shri Sujay C Parrikar along with his consultant appeared before the Committee and explained the details of the project.

Decision: After Scrutinizing the documents submitted by the Project Proponent, the Committee decided to recommend the Authority for grant of following ToR.

- 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.
- A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 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, superimposed 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).
- 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.
- 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/

For Your

\$ 500 hus

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 safeguard measures in each case should also be provided.
- 9. The study rea will comprise of 10 km 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 forestland 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 begiven.
- 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 andany other protected area and accordingly, detailed mitigative measures Din required, should beworked out with cost implications and submitted.

- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsarsite 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. In case of any scheduled-1 fauna found in the study area, the necessary planalong 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 their requirements, 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 ambientair 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

for four

& Sittle human

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.
- 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.
- 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 groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater 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 Greenbelt 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 up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under

Jay

50

\$ -

SiW L

hu -

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 perIndian Road Congress Guidelines.
- Details of the on site shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plan sand 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 dimensionsmay 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 andgrazing 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.
- Details of litigation pending against the project, if any, with direction /order passed by anyCourt of Law against the Project should be given.

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

Ja Jan

A Sim

- 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:-
- j) Executive Summary of the EIA/EMP Report
- All documents to be properly referenced with index and continuous page numbering.
- Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
- m) 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.
- where the documents provided are in a language other than English, an English translation should be provided.
- The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
- p) 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.
- q) 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.
- r) As per the circular no. J-11011/618/2010-IA.II(1) 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.
- To decide on application received for Expansion of Environmental Clearance from Ashoka Infraways Limited (Thousand Palms) bearing Survey No. 143/1-A-1A, Sancoale village, Mormugao, South Goa.

The representative of Ashoka Infraways Limited Shri P. Prakash Nair along with his Consultant appeared before the Committee and explained the details of the project.

Decision: After Scrutinizing the documents submitted by the Project Proponent and going through the presentation, the Committee decided to recommend the Authority for grant of

Ja fre

& SVOL han

Expansion of Environmental Clearance under following General and Specific conditions

- The Project Proponent (PP) 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-a-vis its land use categorization/zoning.
- e. The construction gross built up area of proposed construction is 23810.19 sq mtr 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.
- f. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- g. '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.
- h. 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.
- 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.
- Arrangements shall be made that waste water and storm water do not get mixed.
- k. All the top soil excavated during construction activities should be stored if or use in horticulture/ landscape development within the project site.
- Additional soil for leveling 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.
- Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorization of the GSPCB.
- Nehicles used 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

Ja Jun

1 /2) TUL hu

noise emission standard and should be operated during non-peak hrs.

- o. 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.
- p. 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.
- q. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- s. 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.
- Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- u. 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. 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.
- v. 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 shouldbe utilized.
- w. The 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.
- x. 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.
- y. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

z. 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.

71 PIL

五台迎

hu

- aa. 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.
- ab. 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.

1. Project Proponent should implement Dust mitigation measures for construction activities such as:

- a) Roads leading to or at construction sites must be paved and blacktopped (i.e metalic roads). No excavation of soil shall be carried out without adequate mitigation measures in place.
- No loose soil or sand or construction and demolition waste or any otherconstruction material that causes dust shall be left uncovered.
- c) Wind-breakers of appropriate height i.e 1/3rd of the building height andmaximum upto 10 meters shall be provided.
- d) Water sprinkling system shall be put in place.
- e) Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- Mandatory implementation of dust mitigation measures for all construction and demolition activities, to be undertaken.
- g) Grinding and cutting of building materials in open area shall be prohibited.
- Construction material and waste should be stored only within earmarked area and roads side storage of construction material and waste shall be prohibited.
- i) No uncovered vehicles carrying construction material and waste shall be permitted.
- Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures shall be notified at the site.
- Further, the Committee decided to direct the Project Proponent to comply with the following "General Conditions" during post-construction phase:-
- 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.
- 2) 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

Ja You

\$ 501TU huma

respect of SPM, RSPM, SO₂ and NO_X (ambient levels as well as D.G. stack emissions) shall be monitored.

- 3) 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.
- 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.
- 5) 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.
- 6) The Project Proponent shall store horticultural waste and garden waste in their own premises and shall be disposed as per the directions of the localbodies.
- 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 premisesas far as possible. The residual waste shall be given to the waste collectoror agency as directed by the local body.
- 8) Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- The ground water drawl from existing/proposed bore wells if any should bedone 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.
- 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.
- 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.
- 12) 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.
- 13) 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.

for hore

A Sim

3. 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 wastesewage 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.
- 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.
- 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.
- 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.

Ja /200

1 Bill hu

Alm

- n. Solar power generation Every major consumer of conventional powerwill 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 shouldensure storage of solar and release in the grid during peak hours.
- 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. issuedif 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.
- A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
- s. Green Building norms should be followed with a minimum 3 star GRIHA/IGBC/ASSOCHAM GEM rating and Gold rating should be followed up.
- The Project Proponent shall use construction debris for land filling wherever applicable and dispose the C& D waste in compliance to the Construction and Demolition Waste Management Rules.
- Bore well water is not to be used for construction phase, only used for drinking purpose and Project Proponent should maintain the meter reading on regular basis.
- Project Proponent should install Bio-gas plant to treat the Bio degradable waste.
- w. Building should be constructed as per National Building Code 2016 part-IV.
- x. Project Proponent should do Corporate Social Responsibility and Corporate Environmental Responsibility as recommended / approved by Goa SEAC/ Goa SEIAA.

to

- y. 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.
- E-waste generated in the complex should be managed as per CPCB guidelines on Ewaste management.
- 4. Any other matter with permission of the chair.
- a. Corrigendum in 179th Goa SEAC Minutes

The matter was brought to the notice the Committee that 179th minutes consisting typographical errors in the General and specific conditions of item number 2 i.e to decide on application for Amendment of Environmental Clearance received from DLF Ltd. bearing Plot No. 35, EDS Plot Estate, Patto Plaza, Panaji-Goa, which is required to be corrected. In this regards the Committee decided to correct the General & Specific Conditions.

The Corrected conditions are as follows.

- The project is located at 1529'39" N Latitude and 73 50'3" E longitude.
- Earlier EC was obtained vide letter No. 21-626/2007-IA.III and No. 21-89/2017-IA-III dated 08/05/2008 & 04/09/2017 respectively from MOEF&CC.
- iii. The total plot area is 18,120.00 sqm. and total built up area of 74,340 sqm.
- iv. During construction phase, total water requirement is expected to be 30 KLD which will be met by PWD. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labor force.
- v. During operational phase, total water demand of the project is expected to be 540 KLD and the same will be met by PWD and the STP Recycled Water Waste water generated (342 KLD) will be treated in 1 STP of total 400 KLD capacity. 297 KLD of treated waste water will be recycled. About 28 KLD will be disposed in to municipal drain.

92000

1 sittly human

Alm.

- vi. About 1.09 TPD solid wastes will be generated in the project. The biodegradable waste (0.44 TPD) will be processed in OWC and the non-biodegradable waste generated (0.65 TPD) will be handed over to authorized local vendor.
- vii. The total power requirement during construction phase is 500 KVA and will be met from Goa state Electricity Board and total power requirement during operation phase is 4736 KVA or 3,788.8 KW and will be met from Goa state Electricity Board/ Solar energy.
- viii.Rooftop rainwater of buildings will be collected in 1 RWH tank of total 170 CUM capacity for harvesting after filtration.
- Parking facility for 816 ECS is proposed to be provided against the requirement of 835 ECS (according to local norms).
- x. Proposed energy saving measures would save about 18% of power.
- xi. It is not located within 10 km of Eco Sensitive areas
- xii. There is no court case pending against the project.
- xiii.Investment/Cost of the project is Rs. 659.03 (in crores).
- xiv. Employment potential: During construction period, employment opportunities will be generated for about 150 local construction laborers.
- xv. Benefits of the project: The project involves construction of a commercial complex comprising of retails shops, offices, retail food court and multiplex. Shops and retails outlets will provide employment opportunities to local youth. This will be the first of its kind in Goa and would serve as a major attraction. The other amenities would comprise of food courts, sufficient parking spaces and landscaped areas.

PART A-SPECIFIC CONDITIONS:

Construction Phase

 The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building bye laws.

And d

1

SILL

huan

- ii. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- iv. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- v. Provisions 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- viii. 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

John Lanc

& Birth human

as per ECBC specifications.

- ix. 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.
- x. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- xi. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xii. Sewage shall be treated in the STP with tertiary treatment i.e. Ultra Filtration The treated effluent from STP shall be recycled/re-used for flushing, horticulture & DG cooling, Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.
- xiii. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Mode! Building Byelaws. 2016. As proposed, 1 nos. of rain water harvesting tanks of total capacity of 170 m³ shall be provided as per CGWB guidelines.
- xiv. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. 100 m² space shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
- xv. Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
- xvi. A First Aid Room shall be provided in the project both during construction and operations of the project.
- xvii. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

xviii. Disposal of muck during construction phase shall not create any adverse effect on the

Ja frac

& SITUL A

adverse effect on the

- neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- xix. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xx. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xxi. As proposed, no ground water shall be used during construction/ operation phase of the project.
- xxii. Approval of the CGWA require before any dewatering for basements.
- xxiii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.
- xxiv. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- xxv. 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 standards be operated only during non-peak hours
- xxvi. Ambient noise levels shall conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- xxvii, Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACS, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25 January, 2016. Ready mixed concrete must be used in building construction.

xxviii. An assessment of the cumulative impact of all activities being carried out or proposed

Ja don

1 Sill homen

Colin o

to be carried out by the project, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organisation of repute and specialising in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.

- xxix. A comprehensive mobility plan, as per MOUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - · Traffic calming measures
 - Proper design of entry and exit points.
 - · Parking norms as per local regulation

II. Operational phase

- i. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- For indoor air quality the ventilation provisions to be made as per National Building Code of India.
- Fresh water requirement from PWD Water Supply shall not exceed 243 m³/day.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- vi. No sewage or untreated effluent water would be discharged through storm water drains.
- vii. Sludge from the on site sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage

Jon don

& South

Sam

and Sewage Treatment Systems, 2013.

- viii. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.
- ix. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- x. Solar power shall be used for lighting the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar Iwater heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- xi. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLS, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- xii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed adequate area shall be provided for green belt development.
- xiii.An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant. Landscaping. Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.
- xiv. The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.

PART B - GENERAL CONDITIONS

i. A copy of the environmental clearance letter shall also be displayed on the website of

Jail & Sill hu as

the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.

- The funds carmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- iii. Officials from the Regional Office of MoEF&CC, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the APCCF, Regional Office of MoEF&CC, Bangalore.
- iv. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry
- v. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act. 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- vii. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.

viii. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act. 2010

Dr. Benjamin Braganca

la al

1

Of mi

Shri, Sanjay Amonkar

Dr. Chandrashekher U. Rivonker

Dr. Subhash H. Bhosale

SiTU_

· Ahous

Shri. Gautam Vikas Desai (Chairman Goa-SEAC)

Place: Patto-Panaji Date: 12th July 2023 Shri. Sanjeev Joglekar (Member Secretary Goa-SEAC)

Annexure - 1

The list of members who attended the meeting

Shri Gautam Vikas Desai Chairman(Goa – SEAC)

Shri, Sanjeev Joglekar Member Secretary(Goa – SEAC)

Dr. Benjamin Braganca Expert Member (Goa – SEAC)

Shri.Sanjay Amonkar Expert Member (Goa – SEAC)

Dr. Chandrashekher U. Rivonker Expert Member (Goa – SEAC)

Annexure - 2

- To decide on TOR application received from Salgaocar Shipping Company Limited for Block II –Sirigao-Mayern Mineral Block bearing Survey No. 1, 2, 3, 4, 5, 6, 7, 46, 47, 48, 84, 90, 91, 92, 93, 94, 95, 96, 97, 98 & 12, 47, 60, 61, 62, 79, 80, 84, road, 48, 56, 57, 58 & 59 at Bicholim Goa,
- To decide on TOR application received from Rajaram Bandekar Mines Private Limited for Block III – Monte De Sirigao Mineral Block bearing Survey No. 47, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 69, 70, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 94, 95, 79 & road at Bicholim Goa.
- To decide on application received for Expansion of Environmental Clearance from Ashoka Infraways Limited (Thousand Palms) bearing Survey No. 143/1-A-1A, Sancoale village, Mormugao, South Goa.

X July 6

4. Any other matter with permission of the chair.