



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The General Manager

ANDAMAN AND NICOBAR ISLANDS INTEGRATED DEVELOPMENT
CORPORATION

ANIIDCO Ltd Vikash Bahwan, PO 180 Port Blair, Andamans, Andaman and
Nicobar-744101

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the Ministry vide proposal number
IA/AN/NCP/260108/2021 dated 07 Mar 2022. The particulars of the environmental
clearance granted to the project are as below.

- | | |
|---|---|
| 1. EC Identification No. | EC22A033AN125767 |
| 2. File No. | 10/17/2021-IA-III |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including
Schedule No. | 7(e) Ports, Harbours |
| 6. Name of Project | Environmental and CRZ Clearance
Integrated development of International
Container Transshipment Terminal (ICTT)-
14.2 Million TEU along with Greenfield
International Airport (4000 Peak Hour
Passengers-P |
| 7. Name of Company/Organization | ANDAMAN AND NICOBAR ISLANDS
INTEGRATED DEVELOPMENT
CORPORATION |
| 8. Location of Project | Andaman and Nicobar |
| 9. TOR Date | 25 May 2021 |

The project details along with terms and conditions are appended herewith from page
no 2 onwards.

(e-signed)
Amardeep Raju
Scientist E
IA - (INFRA-1 sector)

Date: 11/11/2022

*Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.*

This is a computer generated cover page.



Subject: Integrated development of International Container Transshipment Terminal (ICTT)-14.2 Million TEU, Township & Area development and 450 MVA Gas and Solar based power plant in 16610 ha. Great Nicobar Islands, Nicobar District by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd – Environmental and CRZ Clearance –reg.

2. The abovementioned proposal was considered in the 293rd meeting of EAC held on 24th – 25th March, 2022 and again in the 297th meeting of EAC held on 24th – 25th May, 2022. Based on the reply submitted to the queries raised by the EAC, the proposal is again placed in the 306th meeting of EAC held on 22nd – 23rd August, 2022. ToR was granted vide letter No. 10/17/2021-IA.III dated 25th May 2021.

3. The project proponent along with the EIA Consultant M/s Vimta Labs and M/s AECOM India Pvt Ltd made a presentation and provided the following information:-

4. Andaman and Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) propose Holistic Development of Great Nicobar Island in Andaman and Nicobar Islands. Integrated development of International Container Transshipment Terminal (ICTT)-14.2 Million TEU, Township & Area development and 450 MVA Gas and Solar based power plant in Great Nicobar Islands, Nicobar District by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd.

5. As a part of Holistic Development of Great Nicobar Islands, Deep Berth Port (with ancillary areas for International Trans-shipment terminal) as primary component is planned along with power generation and distribution network; and township are planned which are interlinked projects to ICTT.

6. The proposed project fall under 7(e) Ports, harbours; 1 (d) Power Plant; and 8 (b) Township & Area Development project, Category A, Scheduled to the EIA Notification, 2006.

7. The total area required for the proposed project is 16610 ha. The proposed Project site is in not connected through any road. Currently, the access is through sea and air route only. Approach roads shall be developed within the Islands.

8. No development is proposed on the western side of Galathea Bay in Phase I development apart from Defence area development, power plant and basic infrastructure to sustain defence and power plant site. Suggestion/opinion from MoD will be sought to finalise the buffer zones around Defence parcels. Buffer area of 500 mts from high tide line around Pemayya to be declared as Costal Protection Area with stringent controls on any development within the area. Further, Alexandria Bay and Casuarina Bay are located far away and fall outside the project area on the western coast. All these areas including Pemayya Bay have been made part of the leatherback conservation plan. Adequate measures have been proposed for protection of nesting beaches and turtles.

9. A separate land use category “Special Use” has been included in the land use plan. The subcategories under “Special Use” are:

- a. National Memorial (Western tip of Galathea Bay),
- b. Defence Purpose (Western tip of Galathea Bay),
- c. Pemayya Buffer Area (Buffer area of 500m from HTL for safe nesting of Leatherback turtles),

10. Golf courses are now not proposed as any specific landuse in the master plan.



11. The North South road of 55m ROW is the main arterial road connecting different pockets of development across the master plan area. It also serves as the key connector between the development on the eastern and western side of the master plan area and serves the overall function of distributing traffic and enabling access. The 55m RoW has been envisaged as an urban arterial road and the proposed design for this road is in compliance with guidelines for Urban Roads. The 55 m arterial road serves multiple functions enabling movements through different modes of transport including non-motorised transport i.e. cycles as well as pedestrians. Development within CRZ area will be in compliance with ICRZ Notification 2019.

12. The arterial road will be developed in a phased matter. In the first phase, 30 m ROW will be utilized and developed and the balance 25 m ROW will be reserved for future expansion for Bus Rapid Transit (BRT) or Light Rail Transit (LRT). Need for development of remaining 25 m RoW will be reviewed by the project monitoring committee on biodiversity before its construction and after full capacity utilization of 30m RoW and evaluation by CSIR-Central Road Research Institute (CRRI).

13. Water Bodies & impact on Drainage: Magar Nala is near Govind Nagar and Matai Nala Near Gandhi Nagar. No major drainage channels/ water bodies are being blocked/ impacted by proposed development. All major water channels/ nalas/ drains are being conserved and are part of green land use within the proposed land use plan.

14. Water bodies & impact on drainage: Adjacent to Andaman Sea some water bodies exist such as Matait Anla Near Gandhi Nagar, South Bay (Galathea), Mata Taruwa Bay, Pemayya Bay near Pulobaha, Nanjappa Bay near Pulo Bekka, Galathea River or Dak Kea, Dak Aleh, Dak Ubho, Dak Tolai Near Pulabaha, Dak Air, and Dak Thena.

15. Total Water Demand during Operational Phase shall be 160 MLD. 90 MLD shall be Potable/Fresh Water Demand. Source of Fresh/Potable Water will be River Water/Sea Water. No ground water extraction/usage proposed.

16. In order to have minimal dependency on surface water from Galathea River, it is being proposed to create rainwater harvesting reservoirs within the project area. Approximate 2.5 Sq.km of area is being identified for creation of water reservoirs which will store rainwater from surface runoff. Detail watershed studies and mathematical modelling will be carried out at the detail design stage.

17. Total Power Demand and Supply through various proposed sources is as below. As per discussion with Central Electricity Authority (CEA), it was suggested that majority of demand to be meet through Gas.

Phase	Year	Power Demand	DG Capacity Installed (MVA)	Gas Capacity Installed (MVA)	Solar Capacity Installed (MVA)	Total Installed Capacity (MVA)
Phase - I	1	2	5	0	0	5
	5	35	40	50	0	90
Phase - II	10	106	40	1000	20	160
	15	181	0	150	70	220
Phase - III	20	253	0	250	100	350
	25	293	0	300	100	400
	30	350	0	300	100	400

Phase I: For first 5 year of the project, power demand is proposed to be met through Diesel Generators (DG). It is proposed to have 40 MVA capacity DG power plant installed to meet the power demand which is projected as 35 MVA.

Phase I of project will also include construction and commissioning of 50MVA gas based power plant which will take the total installed capacity to 90 MVA.

Phase II: Total projected demand for the Phase II by the end of 15 year is 181 MVA. The power generation will be augmented to 220 MVA by increasing the installed capacity of Gas based power plant to 150 MVA and increasing the Solar power generation by additional 50 MVA taking total Solar power generation to 70 MVA.

Phase III: Total projected power demand for end of Phase III will be 350 MVA against proposed installed capacity to be augmented to 400 MVA. The Gas based power plant capacity is proposed to be increased to 300 MVA and Solar power plant will be augmented to 100 MVA.

18. Diversion of forest land: In-principle Approval/Stage-I Forest clearance over an area of 130.75 Sq. Km (121.87 Sq. Km of forest land and 8.88 Sq. Km of deemed forest land) in three phases has been accorded in favour of Andaman and Nicobar Islands Integrated Development Corporation(ANIIDCO) by the MoEF&CC vide letter no.8-22/2020-FC dated 27th October, 2022.

19. Waste Management: The Solid Waste Management System and hazardous wastes treatment system in the Centralized Solid Waste Management Facility(CSWMF) Waste management including collection, segregation, transportation and disposal will be done as per the provisions contained in Solid Waste Management Rules, 2016, Hazardous and Other Waste (Management & Transboundary, Movement) Rules, 2016, Construction and Demolition Waste Management Rule, 2016, Biomedical Waste (Management & Handing) Rule, 2016 and Battery Waste Management Rules, 2016 and as per guidelines issued by Govt. of India and the UT Administration from time to time.

20. Rainwater harvesting: A total area of about 2.57 sq km is en-marked for reservoirs for the full development for all phases. As a fall-back option, in the case of contingency against the commissioning of gas based power plant, the water reservoirs can be developed, over which about 90-100 MVA of Solar plant systems can be erected and commissioned to meet power demand.

21. Three (3) new wildlife sanctuaries have been identified at Little Nicobar, Menchal and Meroe Islands for conservation and protection of Leatherback turtles, Megapode and Corals respectively and Ministry of Home Affairs (MHA) accorded approval on 21.03.2022 for new wildlife sanctuaries to be created. The details are: 1. Leatherback turtle sanctuary of 13.75 sq.km at Little Nicobar Island, 2. The entire Menchal Island of 1.29 sq.km as a Megapode Sanctuary, 3. The entire Meroe Island of 2.73 sq.km as a Coral Sanctuary.

22. Great Nicobar has a wider habitat for saltwater crocodiles. The crocodiles have been sighted in Magar nallah, Dillon nallah, Vijay Nagar, Laxminagar, Galathea bay and Navy Dera in the project area in the past and also in Casuarina Bay and Alexandria Bay in the west coast falling outside the project area. The potential habitats include Gandhi Nagar, and Shastri Nagar, etc. WII has prepared a 'Conservation & Management Plan of Salt Water Crocodile (*Crocodylus porosus*) in Great Nicobar Island'. The Conservation & Management Plan is divided into two components as Monitoring and Management.



23. WII has prepared the plan for conservation and long term monitoring of sea turtles of the Nicobar Islands along with the leatherback sea turtles for a period of 10 years primarily. The conservation plan will be implemented in two phases. Phase 1 involves monitoring and nesting the population tracking the movements, identification of high use areas in the breeding sites and non-breeding regions, determining foraging areas using stable isotopes, population genetic structure of leatherback turtles, assessing vulnerability of turtle nesting beaches and adoption of appropriate management strategies and multi stakeholders' involvement in the long-term conservation of sea turtles. Phase 2 of the conservation plan will develop effective site-specific actions for conservation of sea turtles.

24. WII has been identified as a scientific agency to prepare and implement conservation plans for leatherback turtles and saltwater crocodiles. In the case of Nicobar Megapode, coordinated and collaborative research will have better outcome and in the larger interest of the endemic species of Nicobar megapode.

25. For facilitating movement of wildlife between forest and the sea shore and for crossing the arboreal animals as well as for passage of snakes, crabs, crocodiles etc, safe wildlife corridors at 8 locations along the eastern side of the island connecting forest and seashore through via-ducts in the north south arterial road have been proposed and incorporated in the master plan. The locations of the proposed wildlife corridors i.e. via ducts have been selected based on the ground situation and inputs provided by ZSI and Department of Environment & Forest. The width of the corridor ranges from 250 meters to 1100 meters and the eastern side of the corridors via ducts towards the seashore would be maintained as green area and no development is proposed in the said areas.

26. The port may place series of Ecological Marker Buoys for every 200 m along the proposed extended breakwater line. Also, Marker Booms may be connected in between the buoys. Such arrangement will clearly mark the 'AREA TO BE AVOIDED TO AID TURTLES', warn restriction of the navigational route, thereby neither ships nor boats can enter the 'TURTLE NESTING AREA'. It would protect the turtles from the port operation.

27. Shoreline change: The observed trend of the shoreline at the proposed project location reveals that the shoreline remains with not noticeable change over a period of 5 years from 2015 to 2020. The shoreline analysis shows that the project site at port is surrounded with elevated hill promontories and rocky shores.

28. Dredging and Reclamation: The total quantity of capital dredging for the development of port is about 17.7 million cu.m. MIKE 21-PA (Particle Analysis) module was used to identify a suitable location for dumping the dredge spoil and to understand the dispersion pattern of disposed material after dumping. The maximum increase in seabed level over the disposal area is about 0.03 m at the proposed dumping location. Due to availability of deeper water depth of 600m the change in bed level at the proposed disposal location due to dumping is insignificant. The plume of suspended sediment after dumping tends to spread towards northeast to an extent of 1 km with an increase in seabed level of <0.008 m. Therefore, the proposed disposal location is found to be more ideal and it will not cause any adverse impact on the proposed port development facilities and the marine environment.

29. Reclamation: About 298 Ha area to be reclaimed. It is estimated that around 33.35 million m³ material will be required for reclamation. Suitable dredged material shall be used for reclamation, remaining of reclamation shall be achieved by borrowed fill.

30. Cargo handling with dust control measures: Since the proposed port is International Container Transshipment Terminal (ICTT), there will be no dusty cargo, dry bulk cargo such as coal, iron ore or hazardous cargo, etc. will be handled at port. All the vehicles engaged for

construction should have valid pollution check certificate as per the motor vehicle act. Further, any regulations related to vehicle emission issued by local government should also be adhered to. Generators and machineries are to be serviced and maintained regularly to avoid generation of dust and other air pollutants. Oil Spill Contingent Management Plan includes Boom containment, Spray of dispersant and Skimmers. No hazardous industries are envisaged at GNI however the containers may contain hazardous cargo, Hazardous cargo shall be handled in accordance with 'The Manufacture, Storage and Import of Hazardous Chemicals Rules, ACT 1989'. Containers carrying hazardous cargo are labelled as Hazardous Cargos and stored at separate locations in the yard designated for the storage of hazardous cargo and a dedicated Nodal Officer will be appointed who will be responsible to check the compliance of the regulations from time to time. Hazardous waste like used oil, insecticide/herbicides, paints, solvents, lubricants etc. would be generated from the project, the same hazardous substances will be securely stored at site before transportation, Double chamber Incinerator has been proposed to treat the possible hazardous waste generated from Port, Power plant and the Township.

31. No marine disposal is involved in the proposed project.

32. Energy conservation: List of materials to be used for construction will be decided at the details design stage. However, the design will follow Energy Conservation Building Code (ECBC 2017), Indian Green Building Council (IGBC) guidelines and Code of green buildings by Council of Architecture (COA).

33. Land acquisition and R&R issues: Total land acquisition required for project is approximately 421.57 ha. Total families affected is 379 and total affected population is 1761.

34. Revised ICRZ recommendations have been received via letter 'No.PCCF/EPA/1/Vol-XVI/154, Andaman & Nicobar administration, Department of Environment and Forests, PCCF (CRZ&FC) / nodal officer, FCA&MS, A&NCZMA/ Van Sadan, Haddo, Port Blair, Dated 8th July, 2022.

35. Regarding parts of proposed master plan for Ports which are falling within CRZ IA and IB areas, it has been explained that the same shall be excluded from the revised layout of master plan.

36. Mangroves: The Mangrove Conservation and Management Plan for Great Nicobar Island has been prepared by the Department of Environment and Forests, A&N Administration. The mangrove conservation plan is aimed at restoration and restocking of the tsunami impacted mangrove areas besides enhancement/enrichment through plantations. The plan also aims at improving the diversity of mangroves, its richness and stand density through proper assessment of distribution and status of mangrove species found in Great Nicobar Island along with the locations. The conservation plan addresses the strategies to restore and revive the mangrove areas through ecological restoration and enrichment planting.

37. The Coral Conservation Plan prepared by ZSI addresses both, the conservation strategies for coral colonies around GNI as well as translocation strategies for ten (10) hectares of impacted corals. A total of 245 species of scleractinian corals under 53 genera and 15 families are recorded from seven sites including the Great Nicobar Island. No major coral reef exists within the work area of the project. However, scattered coral reefs are available at the peninsular part of the Galathea Bay. As part of the assessment for conservation and management of Coral reefs, the Coral cover required to be translocated from the proposed site is around 10 ha which includes around 20668 Coral colonies out of which approximately 16150 colonies will be translocated. The plan addresses the probable sites for translocation, the methodology, the coral colonies for transplantation, conservation



and management of coral reefs both at the translocated sites, donor sites and other sites in Great Nicobar Islands.

38. Details of Court cases:

(i) Name of the Court (Supreme Court, High Court, NGT) One (1) case at Civil Judge Junior Division, Campbell Bay, Two(2) cases at Addl. District Judge, Port Blair and one (1) case at Hon'ble Court of Calcutta circuit bench at Port Blair.

(ii) Case No. Suit No.1 of 2021(Bose Barla Vs Admn.), Suit No.02 of 2018 (Anburoja vs Admn.), Suit No.11 of 2018 (Kamble vs Admn) and W>P No.313 of 2019 (Shri M. Muthualagu vs A&N Admn.)

(iii)Case Details:

Case 1: Regularization/allotment of plaintiff's encroachment over a portion of Government land bearing Survey No129/P measuring an Area of 0.0200 hectares Campbell bay.

Case 2: Allotment of Tsunami Permanent Shelter at Campbell Bay.

Case 3: Regularization/allotment of plaintiff's encroachment over a portion of government land bearing Survey No 47/P at Laxmi Nagar.

Case 4: Allotment of Tsunami Permanent Shelter at Campbell Bay Tehsil.

39. Employment Potential: The project around 6,939 persons directly and 10,408 persons would be employed by 2025, around 24,734 persons directly, 37,101 persons indirectly would be employed by 2040 and 51,423 persons directly and 77,135 persons indirectly would be employed by 2052. Generally, locals are employed by the contractor.

40. Public Hearing: Public Hearing was conducted on 27.01.2022 at Community Hall, Gram Panchayat, Campbell Bay, Great Nicobar.

41. Benefits of the Project: **Strategic benefits:-** Strong presence in Indian Ocean Region to counter the pressure being built by foreign powers growing presence. Capturing the Strategic location to develop a new Economic hub in India Ocean region. Improving connectivity with Indian mainland and other global cities. **Socio-economic benefits:** Promoting sustainable tourism. The proposed ICTT will allow India to participate in the regional and global maritime economy by becoming a major player in cargo transshipment. A Mixed-use urban development in the vicinity of these major infrastructure works will also be necessary to support quality of life for the residents that will generate and enable growth in the various economic sectors over time. This will require the development of simultaneous primary and secondary urban infrastructure networks such as roads, public transport, energy and electrical power, as well as water, wastewater, and storm water facilities and services, which will form the skeleton of the proposed township master plan. It is estimated that after the project is fully implemented, it has the potential to generate around 1,28,558 jobs opportunity. Socio-economic growth of local population. Development of social infrastructure supporting existing population and proposed population.

42. WII suggested that the project can be undertaken however more intensive assessment/research is required on Leatherback Sea turtle and its movements to craft site-specific mitigation strategy and suggested 10-year road map to systematically implement mitigation measures. SACON and WII has provided 10-year plan to mitigate impacts on Nicobar Megapod.

43. EAC also noted that there are several other endemic flora and fauna and impact of the project on these species is mostly unknown. The EAC noted the scale of impacts the proposed project may have both on flora and fauna of GNI and native populations, however, considering the strategic nature of the integrated project as presented by the PP and taking into account the submission made by the project proponent had a detailed deliberation in its 306th meeting during 22nd – 23rd August, 2022 and **recommended** the proposal for grant of Environmental and CRZ clearance with the specific conditions, as mentioned below, in addition to all standard conditions applicable for such projects:

44. The Ministry of Environment, Forest and Climate Change has considered the proposal based on the recommendations of the Expert Appraisal Committee (Infrastructure, CRZ and other Miscellaneous projects and other co-opted members of Infra-2 EAC, members of Thermal EAC and NDS Committee) and hereby decided to grant Environmental Clearance and CRZ Clearance for the “Integrated development of International Container Transshipment Terminal (ICTT)-14.2 Million TEU, Township & Area development and 450 MVA Gas and Solar based power plant in 16610 ha. Great Nicobar Islands, Nicobar District by M/s Andaman and Nicobar Islands Integrated Development Corporation Ltd” under the EIA Notification, 2006 and ICRZ Notification, 2019 as amended, subject to strict compliance of the following specific conditions, in addition to all standard conditions applicable for such projects.

SPECIFIC CONDITIONS

I. All the recommendations mentioned in the wildlife conservation plans and Tribal welfare plans below shall be implemented in time bound manner. The compliance to the recommendations as per schedule shall be submitted along with 6 monthly compliance reports to the regional office of MoEF&CC.

A. **Leatherback Sea Turtle:** Proposal submitted by Wildlife Institute of India (WII) was considered by the EAC and following recommendations are provided to ensure conservation of Leatherback along with other species of sea turtles such as Hawksbill, Green, Loggerhead and Olive Ridley in Andaman and Nicobar Islands with focus of Nicobar group of Islands. EAC has following specific recommendations-

i. WII will establish its long-term field research unit in Andaman and Nicobar Islands with one base in Great Nicobar, one based in Little Andaman and one in south Andaman to undertake and monitor sea turtle related research in A&N islands.

a. The budget estimated by WII needs to be revised as the project life-cycle is for 30 years till year 2052, however, the proposal of WII is only for 10 years. Therefore, WII need to revise proposal for 30 years along with budgetary provisions and implementation timeline and submitted to PP within 15 days of the grant of EC. Based on the revised proposal sent by WII corresponding amount for first 10 years will be released by PP within 3 months of submission of proposal which would enable WII to undertake uninterrupted research and conservation interventions on Leatherback and other species of sea turtles such as Hawksbill, Green, Loggerhead and Olive Ridley. Accordingly, the Committee informed PP to revise the EMP provisions. The provision for WII would be over and above the cost required by forest department. The costing should include costs of additional resources such as human resource, vehicles, mechanized boats, 200 additional satellite tags and monitoring costs over entire

lifecycle of the proposed project etc as stated below. Project tenure of WII should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 and not limited to 10 years. The financial allocation in the proposal of WII should be such that the satellite tagging studies can be started immediately and have adequate and uninterrupted financial resources to continue the conservation work on Leatherback Sea Turtles. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to WII. Project monitoring committee as stated in 3.10.3(VI) will review the project progress through biannual meetings and additional financial requirements in due course.

- b. 20% of nesting population of Leatherback Sea Turtle or minimum 150 satellite tags (Argos-linked FastGPS Platform Terminal Transmitter with DIVE sensors), whichever is higher, to be deployed to Leatherback Sea Turtle in GNI and Nicobar Islands and Little Andaman in the first 5 years phase by WII. Of these 150 tags, minimum 50 tags to be deployed in the first year so that the sea turtle movement data will be available for the PP to monitor construction activity. For rest of the nesting individuals, flipper tags to be deployed.
- c. 20 satellite tags each for Green Sea Turtle, Hawksbill Sea Turtle and Olive Ridley Sea Turtle to be deployed in the first 5 years phase.
- d. Provision for 10 satellite tags for Loggerhead Sea Turtle should be made in case if nesting females are noticed in A&N
- e. Considering the vast research area, additional manpower especially research associate and field assistants needs to be incorporated in the proposal of WII including dedicated units for Great Nicobar, Little Nicobar and Little Andaman
- f. One additional mechanized engine Dingy for the inter-island movement including boatman, boat running and maintenance cost be included in the WII proposal. All three mechanized dingy (2 for forest dept and one for WII) to be exclusively dedicated to sea turtle research and monitoring
- g. Holistic development will include data and recommendation from WII, ZSI, SACON and BSI studies in the deliberations and directions of the monitoring committee as stated in 3.10.3(VI) and plans maybe modified accordingly if found necessary in the interest of all species of sea turtles with focus of Leatherback Sea Turtle and other flora and fauna of GNI. Additional measures may be considered by the Committee if found essential.
- h. Zero nest predation approach must be ensured by the state forest department to achieve highest possible survival of Leatherback, Hawksbill, Olive Ridley and Green Sea Turtle. Community based nest monitoring and protection programme should be initiated from year 2022 nesting season. The budget for the same will be submitted by state forest department to PP. This will be over and above the budget for WII proposal.
- i. Domestic dog population control through sterilization to be explored with priority.
- j. Accordingly, WII is advised to revise the proposal and implementation plan within 15 days and send the same to EAC and



MoEFCC for record and to PP for release of first 10 years installment within three months.

- k. A&NFD will ensure implementation of conservation measures as recommended by WII.

- B. Nicobar Megapod:** The endemic Nicobar Megapod is a keystone species of Nicobar group of islands. From the enclosure no 17 provided by PP it is clear that about 51 active nests of Nicobar Megapod are present within the proposed project areas of which appx 30 will be permanently destroyed. In this context, the PP has submitted two proposals towards understanding of habitat utilization and microhabitat and conservation of remaining population of this endemic species in the Nicobar region. The approach and methodology for both is similar in nature. However, WII alongside the population monitoring also suggested disease prevalence study. After careful consideration, EAC suggested SACON and WII in close collaboration will undertake comprehensive studies and conservation measures for endemic Nicobar Megapod. Project tenure should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 and not limited to 10 years. Accordingly, SACON and WII shall submit two full proposals to PP with a copy to MoEFCC and EAC within 15 days of grant of EC and CRZ clearance. The SACON will undertake studies for population ecology, meta populations, disease surveillance and translocation of endemic Nicobar Megapod and WII will study population genetics and Satellite tagging studies. SACON and WII is advised to develop full proposals with sufficient budgetary provisions and timeline. Based on the revised proposal sent by SACON and WII corresponding amount for first 5 years will be released by PP within 3 months of submission of proposal which would enable SACON and WII to undertake uninterrupted research and conservation interventions on endemic Nicobar Megapod. A&NFD will ensure implementation of conservation measures as recommended by SACON and WII. This cost is over and above the cost required by A&NFD. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to SACON. Accordingly, the Committee informed PP to revise the EMP provisions.
- C. Saltwater Crocodile:** PP submitted the proposal by WII and A&N State Forest Department towards addressing issue of saltwater water crocodile conservation and conflict mitigation. Project tenure should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052. Accordingly, WII and A&N Forest Department should revise the proposal with budget allocation and timeline and submit it to the PP with a copy to MoEFCC and EAC within 15 days from the grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to WII and A&N Forest Department for the study and conservation measures for Saltwater Crocodiles within 3 months from the grant of EC & CRZ Clearance. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to WII. Accordingly, the Committee informed PP to revise the EMP provisions
- D. Impact of invasive species on native flora:** To understand the impact and to develop prevention of invasives in to the wild, a specific action plan is required. Accordingly, the Committee suggested that a detailed proposal consistent with



the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 along with budgetary provisions shall be developed by Botanical Survey of India (BSI) and submitted to the PP with a copy to MoEFCC and EAC within three months of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to BSI within three months from the grant of EC and CRZ clearance to undertake immediate work on this very important subject, develop robust guidelines in the first year and monitor the impact of invasives on native endemic and endangered flora as the project development progress. If any additional funds are required at a later stage or for post project development monitoring work, those will be made available by PP to BSI. Accordingly, the Committee informed PP to revise the EMP provisions. A&NFD will ensure implementation of conservation measures as recommended by BSI.

- E. Impact on inter-tidal flora and fauna:** The ZSI report emphasize rich biodiversity of the inter-tidal region of GNI. Several parts of this region will be either directly reclaimed or used for other infrastructure such as road on stilts, and other permissible activities within CRZ. Accordingly, the Committee suggested that a detailed proposal consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 along with budgetary provisions shall be developed by Zoological Survey of India (ZSI) and submitted to the PP with a copy to MoEFCC and EAC within 15 days of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to ZSI within three months from the grant of EC and CRZ clearance to undertake immediate work to undertake the detailed baseline documentation and further monitoring of the same during entire implementation phase of the holistic development plan. ZSI should also document shift in the inter-tidal community with each phase of the project is being implemented so as to understand the impact and develop mitigation strategies. Accordingly, the Committee informed PP to revise the EMP provisions. A&NFD will ensure implementation of conservation measures as recommended by ZSI.
- F. Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar:** For conservation of Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar the Committee suggested that a detailed proposal consistent with the holistic development plan for GNI i.e. till the completion of the final phase of the same in the year 2052 along with budgetary provisions shall be developed by SACON and submitted to the PP with a copy to MoEFCC and EAC within 15 days of grant of EC and CRZ clearance. The Committee direct PP for the release the first five years budget payment to SACON within three months from the grant of EC and CRZ clearance to undertake detailed baseline documentation, conservation intervention and further monitoring of the same during entire implementation phase of the holistic development plan. Accordingly, the Committee informed PP to revise the EMP provisions. A&NFD will ensure implementation of conservation measures as recommended by SACON.
- G. Mangrove Restoration:** PP provided the Committee a proposal submitted by A&N forest department for the conservation and restoration of mangroves. EAC agreed to the proposal and directed PP to release the amount mentioned in the proposal to A&N state forest department within 3 months of grant of EC and

CRZ.

- H. Coral translocation:** Zoological Survey of India provided detailed plan for coral translocation with a budget of 55 Crore. EAC noted that the budget is only for 10 years while the project lifecycle is for 30 years. It also does not include several components that will be necessary for this complex work. Accordingly, the Committee advised ZSI to submit revised proposal with budget provisions to PP with copy to Ministry and EAC. Committee also direct ZSI to include translocation of endangered Giant Clams (*Tridacnasp*) in the same proposal with necessary budget provisions. Project tenure should be consistent with the holistic development plan for GNI and thus will be till the completion of the final phase of the same in the year 2052 and not for 10 years. The Committee direct PP for the release the first five years budget payment to ZSI within three months from the grant of EC and CRZ clearance to undertake the uninterrupted work of preparation of new translocation sites and actual translocation of coral heads and giant clams (*Tridacnasp*) from 10 ha project impact areas as stated in the proposal before project work begins on ground. ZSI will maintain systematic data on translocated coral colonies with GPS tags to each colony to monitor its survival. The proposal may be finalized based on the EMP and consultation with PP. A&NFD will ensure implementation of conservation measures as recommended by ZSI.
- I. Welfare of local tribal population of Shompen and Nicobaris:** The project activities shall not disturb Shompen tribe and their habitations. Clear demarcation of the land shall be done for specific purpose of land use in the vicinity of project area such that habitations of the tribal shall not be intervene. Budgetary provisions for the same shall be made in the EMP report and expenditure in this regard shall be maintained on records. For the protection and safety purpose of community, security & surveillance mechanism shall be in place with geo-fencing cum surveillance towers nearby Tribal settlements.

All the considerations will be undertaken by Department of Tribal Welfare (DTW) as per the Andaman and Nicobar Islands (Protection of aboriginal Tribes) Regulation, 1956. (Commonly known as PAT Regulation), Policy on Shompen Tribes. Accordingly, the Committee suggested that a detailed proposal for 50 years along with budgetary provisions shall be developed by Department of Tribal Welfare (DTW) and submitted to the PP. The Committee direct PP for the release the first 10 years budget payment to DTW within three months from the grant of EC and CRZ clearance to undertake immediate work and to undertake the detailed baseline documentation and further monitoring of the same during entire implementation phase of the holistic development plan. Accordingly, the Committee informed PP to revise the EMP provisions.

Other Specific Conditions

- II. PP should construct all weather good quality two research stations within one year from the grant of EC and CRZ clearance (one each in Campbell Bay and Kamorta) with office space and accommodation facilities. Campbell station should have accommodation facility for 40 research team members (ten double occupancy rooms, and four dormitories) while Kamorta accommodation facility will be for 10 research team members (two double occupancy rooms, and two dormitories). PP will maintain at its own cost both the research stations for the entire project duration. The research

station will be exclusively used and shared by WII, BSI, SACON and ZSI teams and other invited scientists. In the meantime, PP will make arrangements of accommodation of researchers at their own cost through the provisions provided in the respective budgets.

- III. WII will be overall in-charge of the station and will appoint a focal person (through the funds allocated to them under various components) to oversee the smooth running of the above centers. WII should make adequate financial provision for the same in their proposals under overall administrative costs.
- IV. After the completion of the project i.e. after 2052, the research station will be handed over to the A&N Forest Department and maintained by them and will be provided exclusively to the researchers involved with the biodiversity studies of the region and forest department staff for on ground conservation work.
- V. PP will also separately provide funds to A&N forest department for complete oversee of the conservation and mitigation work, infrastructure and operation costs towards implementation of Leatherback Sea Turtle, Nicobar Megapod, Saltwater Crocodile management and other endemic flora and fauna conservation. Proposal for the same will be developed by A&N Forest Department. This amount will be over and above the cost recommended for WII (Leatherback Sea Turtle, Salt-water Crocodile related work and Nicobar Megapod); SACON (Nicobar Megapod, Nicobar Macaque, Robber Crab and other endemic bird species of Great Nicobar); Zoological Survey of India (for coral and Giant Clam translocation and restoration work, inter-tidal flora and fauna work); Botanical Survey of India (for invasive species related work); A&N Forest department (for mangrove restoration and supervision of work of WII, SACON, BSI and ZSI); and A&N Tribal Welfare Department (for welfare, protection and other measure for Shompen and Nicobarese). All these funds will be provided by the PP as stated in the specific conditions and within stated time stipulated from sr. no A to I upon receiving the EC and CRZ so that respective agencies can initiate uninterrupted conservation action, research and monitoring while the project is being implemented.

Monitoring Committee

- VI. PP will establish three independent Monitoring Committees to oversee the implementation of Environmental Management Plan. Each committee must meet twice a year and undertake one site visit each year. The committees will take review of progress of work of respective areas and implementation of mitigation measures and advise further on its implementation. Minutes of the meetings, site visit reports by these committees and recommendation of the same will be included in the implementation plans of each institute and PP. Proceedings of each Committee will be uploaded on the A&N state forest department website under a specific link provide to the project at GNI. One committee will be to oversee the pollution related matters and measures and its implementation. Second committee is to oversee the implementation of biodiversity related conditions. Third committee will oversee welfare and issues related to Shompen and Nicobarese. Following specific composition of the committees are stipulated. The tenure of the committee will be till the completion of final phase of Holistic Development Plan. However, tenure of every individual expert in each of the Committee shall not exceed three years, and accordingly committees should be reconstituted every three years. The budget allocation of 10 Crore is provided to meet the expanses of the committee meetings. For the first three years following constitution is recommended

- i. **Committee to oversee pollution related matters** – The Committee will be chaired by Member Secretary of State Pollution Control Board. The other



members of the committee should include representative from CPCB, one national reputed expert each in the field of air, noise, water, solid waste and soil pollution. The committee will also include representative of Chief Wildlife Warden not below the rank of CF, representative of PP, representative of Niti Aayog, representative of collector, representative of disaster management unit, representative from Central/State-UT Ground Water Authority and one member of EAC-CRZ and Infra 1 Committee.

- ii. **Committee to oversee biodiversity related matters** – The Committee will be chaired by PCCF (WL) A & N Forest Department. The other members of the committee must include directors of WII, SACON, ZSI, and Botanical Survey of India, representative of PP, representative of Niti Aayog, representative of collector, Director, CSIR-National Botanical Research Institute, two independent and nationally recognized scientists in the field of terrestrial and marine biodiversity, Director-Deep Sea Mission of GoI and one member of EAC-CRZ and Infra 1 Committee with biodiversity expertise
- iii. **Committee to oversee welfare and issues related to Shompen and Nicobarese**- The Committee will be chaired by the Collector. The other members of the committee should include Director - A & N Tribal Welfare Department, PCCF and HoFF-A&N, Director of department of health, two independent and nationally reputed individual experts on Shompen and Nicobarese, representative of PP, representative of Niti Aayog, representative of A&N Administration and one member of EAC-CRZ and Infra 1 Committee.

- VII. **Western Flank of the Galathea Bay:** Along the western flank of Galathea Bay no development will be allowed in Phase 1 and 2 of the projects except defence related infrastructure (pocket 10 in the master plan) or any activity that is strategic and national defence point of view important in nature. A buffer of 500 meters from HTL on both the sides of the flank shall be maintained in any case. Infrastructure related to Gas-based power plant as shown in the development plan (pocket 9) will be allowed. Institutional areas marked in pocket 9 and 10 will not be allowed at this location. It needs to be shifted within pocket 1 to 7. Tourism will not be permitted along the western flank of Galathea Bay in any phases. Pemayya Bay and all other Leatherback nesting sites on the western parts of GNI must remain no development zones as these sites are likely to be used by Leatherback Sea Turtles as alternate sites due to impact of ICTT at Galathea Bay. All major nesting beaches in Great Nicobar Islands including Alexandria Bay, Casuarina Bay, Pemayya Bay, Dogmar will be protected by establishing protection camp, sea turtle hatcheries and kept under 24X7 surveillance and monitoring from nesting till hatching season each year. No development and tourism will be allowed on these shores. Besides, in GNI nesting of Leatherback turtles also have been reported in East of Indira point, West of Indira Point, Koshindon, Laxmi Nagar, North of Alexandria, South of Alexandria, North of Dogmar, South of Dogmar, Pulo Bed, PuloKunji, re Pinsuot, Renhong, Safed Balu, Patatiyo and South of Galathea. These sites will be kept disturbance free with no tourism activity or infrastructure development. WII studies will provide further insight in to it and can be further incorporated in the management plan of Leatherback and other sea turtles at GNI.
- VIII. No withdrawal of water from Galathea River is permitted. Galathea River must remain free of any recreational activity. No ground withdrawal of freshwater will be permitted. Drinking water will be exclusively augmented through two reservoirs proposed along with capacity augmentation of existing freshwater storage facilities at GNI.
- IX. Construction activity shall be carried out strictly according to the provisions of the



ICRZ Notification, 2019. No construction works other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.

- X. All the recommendations and conditions specified by the Andaman Nicobar Coastal Zone Management Authority (ANCZMA) vide letter dated 8th July, 2022 shall be complied with.
- XI. Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974. The project proponent shall comply with the air pollution mitigation measures as submitted.
- XII. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- XIII. Necessary approvals to be taken during implementation and commissioning from statutory bodies concerned.
- XIV. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes and coastal geomorphology shall be conducted and mitigation measures like living shoreline carried out in line with conservation plan. The details shall be submitted along with the six monthly monitoring report to the regional office of MoEFCC.
- XV. No trees will be cut at one go. These will be done in phased manner and depending on the progress of the work on an annual basis. Plan for cutting of trees should be developed by PP and got approved from state forest department. All trees which are exceptionally tall and old in age shall be safeguarded, as far as possible. A&NFD will mark all such trees and submit the species wise list to the Ministry and EAC and the regional office of MoEFCC before the infrastructure activities take place.
- XVI. Trees with nesting holes of endemic owls to be identified and geo-tagged with the help from SACON. Such trees shall be safeguarded, as far as possible.
- XVII. Some of the township clusters seems to have several defence installations abutted by commercial and tourism infrastructure thus PP shall obtain the recommendations from the Ministry of Defence and as suggested by them buffer zone will be maintained in between the defence installation and township cluster, commercial and tourism infrastructure.
- XVIII. The arterial road shall be developed in a phased matter. In the first phase, 30 m ROW shall be utilized and developed and the balance 25 m ROW shall be reserved for future expansion for Bus Rapid Transit (BRT) or Light Rail Transit (LRT). Need for development of remaining 25 m RoW will be reviewed by the project monitoring committee on biodiversity before its construction and after full capacity utilization of 30m RoW and evaluation by CSIR-Central Road Research Institute (CRRI). During that period the 25 m RoW shall be maintained in "as it is" condition.
- XIX. In the western coast of Galathea Bay excluding the defence installation and power plant, a buffer area of 500 mts from high tide line around Pemayya may be declared as Coastal Protection Area with no development within the area.
- XX. Safe wildlife corridors at eight (8) locations along the eastern side of the island connecting forest and seashore through via-ducts (elevated crossings) on the north south arterial road shall be provided. In addition to wildlife corridors, culverts and canopy crossings will be provided at appropriate locations for movement of wildlife. The chainage wise locations of the wildlife corridors has been identified by ZSI and Department of Environment & Forest. The width of the corridor ranges from 250 m to 1100 m and the eastern side of the corridors towards the seashore would be maintained

as green area. SACON and WII may further suggest additional corridors and canopy crossings based on the data available with them and proposed studies. Representative of A&FFD will physically monitor that the same are implemented as stipulated in the EIA-EMP.

- XXI. The Mangrove Conservation and Management Plan for Great Nicobar Island has been prepared by the Department of Environment and Forests, A&N Administration with the budget of Rs.7.5 crores for mangrove conservation and management as part of EMP. PP shall strictly implement the same. The conservation plan shall adhere the strategies to restore and revive the mangrove areas through ecological restoration and redensification.
- XXII. No dredging activity should be taken in Rocky areas to avoid any type of Disaster. Dredge management plan with automatic monitoring sensors in port area, reclamation area to contain the impact of dredge spoil on marine ecosystem to be developed and to be overseen by nationally reputed institution such as NIOT or NIO.
- XXIII. All illumination for ICTT, Gas-based power plant and other infrastructure adjacent to sea turtle nesting areas must be in conformity with international standards and sea turtle friendly. No other type of illumination would be permitted. WII will develop illumination policy for the entire infrastructure and PP will ensure its implementation.
- XXIV. Dredging, sea reclamation activity for ICTT should take into account nesting and hatching time of sea turtles. Also it should be strictly following Dredging protocol and operational protocol as prepared by IUCN experts and Species Survival Commission's Marine Turtle Specialist Group and revision, scrutiny, and follow-up of the processing time to time as per the expert opinion.
- XXV. Movement of the ships within Galathea Bay once the ICTT is operational should take into account the movement of Leatherback Turtles. WII satellite data will aid ICTT operators to monitor movement and accordingly plan operations to avoid sea turtle collision risks. One scientist from WII and representative of A&NFD will be on boarded by ICTT operators for the environment monitoring cell as a part of their standard operating procedures. Adequate financial provisions be made by ICTT to meet the costs of both environmental cell and requirements of WII scientists including long-term satellite tagging of Leatherback Sea Turtles.
- XXVI. Installation of deflectors to be done to clear turtles from the path of the suctioning equipment. Underwater silt/sediment dispersal preventing curtains to be deployed to avoid deposition of silt on sandy shores.
- XXVII. PP must explore and use non-conventional sources of energy in the form of solar, wind or tidal energy to bridge the deficit, if needed.
- XXVIII. A & N administration should establish within six month a Special Medical Unit along with state of art infrastructure, medicines and qualified medical staff at GNI to monitor human induced diseases due to expected influx of large population both domestic and international. All mechanism must be in place to ensure that Shompen and Nicobarese are not exposed to the risks related to introduced diseases. SOP and Guidelines will be developed by the Special Medical Unit for the same within 6 months from the grant of EC&CRZ. A provision of 100 Crore is recommended and PP is advised to accordingly revise EMP and submit the same to the Ministry and EAC within 30 days from the grant of EC and CRZ. PP is also directed to make these funds available for A&N Administration within 3 months from grant of EC and CRZ. Any additional funds required will be provided through special provisions by A&N Administration.
- XXIX. Forest department will establish hatcheries to ensure minimum 90% survival of



hatchlings with onset of coming nesting season for Leatherback and other sea turtles, as presented during the EAC. Systematic data will be maintained for the same and reported to the regional office of the Ministry on annual basis.

- XXX. The existing island human population should be protected and if needed, ensure to provide the compensation instead of their agricultural/ residential Lands. The census of local as well as population from mainland should be documented.
- XXXI. Optimum number (minimum 2) of road side monitors (CAAQMS) at appropriate distance from the kerb of the road shall be fixed following the CPCB criteria to monitor biogenic VOCs, NO_x and PM_{2.5}.
- XXXII. Disposal of hazardous waste material would not be allowed in GNI including batteries, pesticides, organochlorines etc.
- XXXIII. The waste generated during construction and operation period of the project shall be managed as per the prevailing regulations on management of solid waste, plastic waste, e-waste, bio-medical waste, C&D waste and hazardous wastes issued in 2016 by the Ministry. The waste shall be segregated and should be recycled/reused as per the regulatory provisions. No Municipal Landfills will be allowed in GNI. All rejects after the recycle/reuse of waste must be transported to mainland for its safe disposal. A separate application for TSDF shall be made to the Ministry in case of establishment of TSDF at GNI.
- XXXIV. For the first 5 years (Phase-I) of the project, power demand shall be met through Diesel Generators (DG). Phase I of project shall include construction and commissioning of 50MVA gas based power plant and floating solar power plant in water reservoirs. The combined installed capacity to 90 MVA through diesel and gas based power will further augmented by 20 MVA through first phase of solar power from 6th year. During 10-15 years (Phase-II), the power generation shall be augmented to 220 MVA by increasing the installed capacity of Gas based power plant to 150 MVA and increasing the Solar power generation by additional 50 MVA taking total Solar power generation to 70 MVA. During 15 – 30 years (Phase III) the Gas based power plant capacity shall be increased to 300 MVA and Solar power plant shall be augmented to 100 MVA.
- XXXV. Additional storage facility for 7000 kl fuel, 4 ha of additional land at GNI has been provided considering the existing fuel storage capacity is inadequate to cater to increased fuel demand during construction. The area for the storage and hazard mitigation measures as stated in the revised EIA-EMP be followed strictly.
- XXXVI. All the facilities such as port, powerplant and township etc., to be designed to withstand seismic and Tsunami hazard and detailed plan should be submitted to monitoring committee.
- XXXVII. As stated by PP, a total number of 102 active mounds of Nicobar Megapode and their locations in GNI have been mapped by ZSI. Out of the 102 mounds, only 19 mounds are falling in the project area. Further, it is seen that several mounds are falling in the green area of the development and the same will be protected. SACON will thoroughly map exact locations of all such mounds falling in the green areas of development and A&N forest department will ensure that these are not disturbed during project development and accordingly advised to define safe buffer areas as advised by SACON for each mound and to be designated as NDZs.
- XXXVIII. A&N Administration should develop tourism policy for GNI considering ecological sensitivities of the island. The tourism development will be guided by the GNI



Tourism Policy. PP has to ensure that tourism development is consistent to this policy.

- XXXIX. PP will establish a modern nature and science information center at GNI in consultation with National Council of Science Museum, Kolkatta (NCSM) an autonomous society under the Ministry of Culture, Government of India. PP is advised to write to NCSM seeking further assistance and develop a full proposal within 3 months from grant of EC&CRZ. All costs necessary for developing the center will be made available by PP. The center can also act as capacity building for operators of various infrastructure components of GNI holistic development. Accordingly, the Committee informed PP to revise the EMP provisions.
- XL. Use of vehicles or any recreational means on Sea Turtle nesting beaches will be strictly prohibited. Such beaches will be clearly marked as no-use zones by A&NFD. These will also be included in the Tourism Policy of GNI.
- XLI. Three new sanctuaries are notified by A&N administration as follows towards mitigation measures. It will be ensured that these remains as sanctuaries with no further scope of denotification for any purposes.
- a. Leatherback turtle sanctuary of 13.75 sq.km at Little Nicobar Island*
 - b. The entire Menchal Island of 1.29 sq.km as a Megapode Sanctuary.*
 - c. The entire Meroe Island of 2.73 sq.km as a Coral Sanctuary.*
- XLII. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.

STANDARD CONDITIONS:

A. International Container Transshipment Terminal (ICTT)

I. Statutory compliance:

- (i) Construction activity shall be carried out strictly according to the provisions of ICRZ Notification, 2019 and the Coastal Zone Management Plan as drawn up by the State/UT Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- (ii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation:

- (i) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the project area at least at four locations, covering upwind and downwind directions.
- (ii) Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
- (iii) Shrouding shall be carried out in the work site enclosing the dock/proposed facility



area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.

- (iv) Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
- (v) The Vessels shall comply the emission norms prescribed from time to time.
- (vi) Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

III. Water quality monitoring and preservation:

- (i) The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
- (ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
- (iii) No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
- (iv) Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- (v) Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- (vi) A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- (vii) No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
- (viii) All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

IV. Noise monitoring and prevention:

- (i) Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- (ii) Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.



- (iii) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- (iv) The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures:

- (i) Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- (ii) Provide LED lights in offices and project areas.

VI. Waste management:

- (i) Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring reports.
- (ii) Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- (iii) The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- (iv) Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- (v) A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- (vi) Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- (vii) Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminals oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered.

VII. Green Belt:

- (i) Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines.
- (ii) Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology:

- (i) Dredging shall not be carried out during the fish breeding and spawning seasons.
- (ii) Dredging, etc shall be carried out in the confined manner to reduce the impacts on



marine environment.

- (iii) The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- (iv) A detailed marine biodiversity management plan shall be prepared through the NIO or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.
- (v) Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.
- (vi) The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

B. Township & Area development

I. Statutory compliance:

- i. 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 byelaws.
- ii. 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.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- vii. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
- viii. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.



II. Air quality monitoring and preservation:

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5}) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. 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 Management Rules 2016.
- x. 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.
- xi. 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.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation:

- i. 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.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.



- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- 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. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- 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. 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.
- viii. 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.
- ix. 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.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. 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 Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- xvi. 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.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. 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. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite 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 and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention:

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone 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.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures:

- i. 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.
- ii. Outdoor and common area lighting shall be LED.
- iii. 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.
- iv. 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.
- v. 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.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water 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.



VI. Waste Management:

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall 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 sites with the approval of competent authority.
- iii. 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.
- iv. Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. 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.
- vii. 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.
- viii. 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 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

- i. 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. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- ii. 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.

VIII. Transport

- i. 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.



- a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
- ii. 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.
 - iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

C. 450 MVA Gas and Solar based power plant.

I. Statutory Compliance

- i. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
- ii. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
- iii. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
- iv. Groundwater shall not be drawn during construction of the project. In case, groundwater is drawn during construction, necessary permission be obtained from CGWA.

II. Air quality monitoring and Management:

- i. Stacks of prescribed height shall be provided with continuous online monitoring instruments for SO_x, NO_x and Particulate Matter as per extant rules.
- ii. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
- iii. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM₁₀, PM_{2.5}, SO₂, NO_x within the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
- iv. Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.



III. Noise pollution and its control measures:

- i. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
- ii. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
- iii. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

IV Human Health Environment:

- i. Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
- ii. Baseline health status within study area shall be assessed and report be prepared. Mitigation measures should be taken to address the endemic diseases.
- iii. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
- iv. Sewage Treatment Plant shall be provided for domestic wastewater.

V. Risk Mitigation and Disaster Management:

- i. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
- ii. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- iii. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
- iv. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

D Public hearing and human health issues:

- (i) The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.
- (ii) Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
- (iii) In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.
- (iv) Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the



occurrence of untoward incidents/ accidents.

- (v) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- (vi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (vii) Occupational health surveillance of the workers shall be done on a regular basis.

E. Environment Responsibility:

- (i) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- (ii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (iii) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

F. Miscellaneous:

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the



Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- (vi) The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (vii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No further expansion or modifications in the project shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory 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.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- (xvi) Any appeal against this EC 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.

This issue with the approval of the Competent Authority



(Amardeep Raju)
Scientist-E

Copy to:

1. The Principal Secretary (Environment), Department of Environment and Forests Van Sadan, Haddo, Port Blair Andaman & Nicobar Islands.
2. Addl. Principal Chief Conservator of Forests (C), Andaman and Nicobar Coastal Zone Management Authority, Van Sadan, Haddo, Port Blair, Andaman & Nicobar Islands.
3. Member secretary, Andaman & Nicobar Islands Pollution Control Committee (ANIPCC), Department of Science and Technology, Dollygunj, Port Blair - 744103, South Andaman, A & N Islands.
4. Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change, Regional Office (SEZ), Ist and IInd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Member Secretary, Andaman and Nicobar Coastal Zone Management Authority, Van Sadan, Haddo, Port Blair, Andaman & Nicobar Islands.
6. Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
7. Guard File/Record File
8. Notice Board.



(Amardeep Raju)
Scientist-E