

15.4.1 Development of Greenfield International Airport at Tehsil Bhogapuram, District Vizianagaram, Andhra Pradesh by M/s Bhogapuram International Airport Corporation Ltd - Environmental Clearance [10-21/2016-IA.III; IA/AP/MIS/50659/2016]

The project proponent and their consultant (M/s Reencindia Consulting Private Limited) gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken as per Draft Terms of Reference (ToR) granted by the Ministry vide letter No. 10-21/2016-IA-III dated 04.05.2016 for preparation of EIA-EMP report. All the projects related to Airports are listed at 7(a) of schedule of the EIA Notification, 2006 covered under category 'A' and appraised at central level.

The project proponent informed the following:

- (i) The project is for development of Greenfield International Airport at Tehsil Bhogapuram, District Vizianagaram, Andhra Pradesh promoted by M/s Bhogapuram International Airport Corporation Ltd.
- (ii) The current proposal is for Phase-I of the Airport where the airstrip will be developed to cater for operation of Airbus-A380 type of aircraft. It will also involve construction of new runway with all allied facilities like terminal building, apron, apron shoulder, taxi track, runway shoulder, boundary wall, perimeter roads and parking facilities.
- (iii) Land for the proposed airport has already been allotted by the State Govt. of Andhra Pradesh vide Memo No. 512/Airports/A2/2015, dated 31.08.2015.
- (iv) The project site involves no forest land, and involves some private land and government land.
- (v) The proposed airport site selected by the state government lies on the border of Visakhapatnam and Vizianagaram districts. The site is in East-West Direction, East of NH-5 and West of sea coast, in Bhogapuram Mandal, Vizianagaram District of Andhra Pradesh. The site is approximately 45 kms from Visakhapatnam (in North East direction) through NH-5 and 25 kms from Vizianagaram (in south East direction) via NH-43. The approach to the site is through four-lane NH-5. The site has Bay of Bengal on the east side which is about 1.5km from the eastern boundary of the site and NH-5 is about 1.5 km from the western boundary of the site.
- (vi) An area of 2004.52 acres (811.21 Ha.) has been earmarked for the Bhogapuram International Airport. The project site falls within the jurisdiction of the six villages, namely, Amatam Ravivalasa, Savaravilli, Gudepuvalasa, Kancheru, Kavulavada, and Ravada. The Bhogapuram airport (Aerodrome Reference Code 4E) is proposed to be developed as a PPP project under a Design, Build, Finance, Operate and Transfer (DBFOT) concession framework, with a concession period of 99 years with premium as the bidding parameter. Parts of three villages (four habitations) will be displaced namely, Kancheru, Kavulavada, and Gudepuvalasa villages.
- (vii) The tentative cost estimate is around Rs. 2260.73 Crores.
- (viii) The project will utilize water supply from the Vizianagaram Municipal Corporation, other options of the source of water will be considered after a feasibility study. The daily consumption of water during operation phase will be about 1,576.8 KLD of which 872.5 KLD will be fresh water and 674.7 KLD will be recycled water. The construction water requirement is 70 KLD for domestic use which could be met through private water tankers. For civil works 1663 KLD of water will be used which will be met through private water tankers.
- (ix) The total anticipated load demand will be approx. 25 MVA. The power backup would be catered by DG Sets of 2MVA rating(6 Nos.) +1 standby of 2MVA with AMF Panel.
- (x) The daily sewerage generation for operation phase of the development is estimated to be around 1,152.3 KLD. A sewerage treatment plant of MBBR technology, and 1,383 KLD capacity, shall be located near the eastern boundary of the airport. An area of 10,000 m² has been earmarked in the master plan.
- (xi) During the construction phase ~ 300 kg / of solid waste will be collected and disposed as per established laws and procedures. During the Operation phase, Commercial waste of 5.4 MT will be generated from airport. The total solid waste generation will be 20.9 MT per day, but the horticulture and street sweeping waste (17 MT/day) will be converted to manure for the landscaping area, and only the Municipal waste will be collected, segregated and transported to the nearby municipality landfill site after segregation. Organic Waste Converters will be provided for biodegradable waste.
- (xii) The CSR budget is 2% of the project cost, which amounts to INR 45.2 crores for the project.

- (xiii) **ToR Details:** The ToR for the project was granted on 4th May, 2016.
- (xiv) **Public Hearing:** The Public Hearing for the project was held on 11th January, 2017 at the project site in, Bhogapuram Mandal, Vizianagaram District.
- (xv) **Employment potential:** During Construction Phase 1100 man-power, 500 daily labourers, 500 residential labourers and 100 officials; During Operation Phase 1000 airport staff (500 regular and 500 on contract).
- (xvi) **Benefits of the project:** The Bhogapuram airport will decrease the air traffic load at the existing Vishakhapatnam airport as its capacity will be exhausted in next few years. Improvement in all weather air connectivity of the region with rest of the state and country from strategic and commercial point of view. Employment opportunity to people. Development of tourism in the state of Andhra Pradesh.

The Committee deliberated upon the issues raised during the Public Hearing/Public Consultation meeting conducted by the Maharashtra State Pollution Control Board on 11.01.2017. The issues were raised regarding compensation for land, rehabilitation and resettlement, employment to local, maintenance of green belt, promotion of agro products in the area, welfare activities such as Health, education etc, change in name of the proposed air port, plan for rain water harvesting and recharging, skill development programme for locals, etc. The Committee noted that issues raised during public hearing have not been responded satisfactorily. The project authority vide letter dated 14.4.2017 has submitted the revised point wise response of PH to the Committee. The Committee noted that issues have satisfactorily been responded by the project authority and suggested to incorporate in the final EIA-EMP report.

After detailed deliberations, the Committee recommended the project for environmental clearance and stipulated the following specific conditions along with other environmental conditions while considering for accord of environmental clearance:

- i. As proposed, environmental clearance is for Phase - I development of Airport project.
- ii. PP shall obtain clearance from DGCA and AAI for safety and project facilities.
- iii. The Land acquisition /purchase shall be in conformity to the LARR Act, 2013 and any other laws and regulations governing land acquisition.
- iv. Construction site should be adequately barricaded before the construction begins.
- v. Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet.
- vi. The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.
- vii. The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- viii. Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimised. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical). Top soil shall be separately stored and used in the development of green belt.
- ix. A detailed drainage plan for rain water shall be drawn up and implemented.
- x. Ground water shall not be abstracted during the construction and operation phases. Drinking water shall be obtained from Municipal sources. Water conservation measures such as rain water harvesting and using treated water from the STP will be applied to minimize the use of fresh water.
- xi. Ground water abstraction and rain water recharge shall be as may be prescribed by the CGWA. A clearance of the CGWA shall be obtained in this regards.
- xii. Noise from vehicles and 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.
- xiii. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

- xiv. Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rule, 2016 and Construction and Demolition Waste Rules, 2016.
- xv. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase 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.
- xvi. Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- xvii. Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc shall be provided.
- xviii. The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.
- xix. Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area during monsoon season / cloud bursts.
- xx. Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- xxi. Total fresh water requirement from Vizianagaram Municipal Corporation shall not exceed 872.5 KLD.
- xxii. Wastewater generation shall not exceed 1,152.3 KLD and treated in the STP. Treated sewage shall be recycled/reused for cooling tower make up, flushing and horticulture.
- xxiii. 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.
- xxiv. During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- xxv. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out.
- xxvi. Traffic congestion near the entry and exit points from the roads adjoining the Airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- xxvii. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used 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.
- xxviii. Full ECBC compliance.
- xxviii. Compliance with conditions stipulated at Annexure XIV of the amended EIA notification of 09.12.2016 and seek the approval of the CGWA before any dewatering for basements.
- xxix. An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.
- xxx. The concerns of the Public hearing panel shall be suitably addressed to and the recommendations adopted as part of the Environmental Management Plan and in the plan for C.S.R. as applicable.

	<p>xxxii. A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities</p>
<p>15.4.2</p>	<p>Development of LNG storage and regasification terminal at village Chhara Taluka Kodinar, District Gir Somnath, Gujarat by M/s HPCL Shapoorji Energy Ltd - Environmental and CRZ Clearance [11-1/2014-IA.III; IA/GJ/MIS/61501/2014]</p> <p>The project proponent has presented the project and informed the following:</p> <ul style="list-style-type: none"> (i) The project is for development of LNG storage and regasification terminal at village Chhara Taluka Kodinar, District Gir Somnath, Gujarat by M/s HPCL Shapoorji Energy Ltd. (ii) On-shore LNG storage and re-gasification facilities for 5 MMTPA capacity (expandable to 10 MMTPA) are planned. (iii) Land requirement for the LNG Terminal will be 47 ha. No land procurement is required for LNG terminal as it will be located within boundary of the port at Chhara by M/s Simar Port Private Limited. (iv) Facilities planned in CRZ area include 1 no. LNG Jetty with 3 Nos unloading arms, approach trestle of length 1225 m with pipelines, 6 mooring and 4 berthing dolphins, LNG transfer lines from jetty to storage tanks, vapor return line from tankages to jetty, utilities for firewater, 2 nos Storage Tanks of 200,000 cum each (gross capacity), re-gasification facilities comprising of BOG Compressor, HP Pumps, Shell and Tube Vaporizers, Submerged Combustion Vaporizer and air heaters, Glycol water tanks and circulation system, Re-condenser, U/G LNG Drain drum, LNG Send out facilities comprising truck loading, LNG Metering station, Weigh bridge, TLG Control room, Truck parking, Security Watch Tower and Security Gate (v) Facilities planned in on-shore area are BOG Compressors, HP Pumps, Submerged Tube Vapourizers, Submerged Combustion Vapourizer, Air Heaters, LP Flare, Truck Loading Facility, Captive Power Plant (18 MW), Fire Water Pump House, Nitrogen Generation Facility, Fire Water Reservoir, Re-condenser Unit, Diesel Tank, and Overhead DW Tank & DW Pump (vi) TOR details: Terms of Reference was granted by MoEFCC vide letter No.11-1/2014-IA.III dated 13th Jun 2014. (vii) Cost of the project is Rs. Rs.5408.82 crores (viii) Public Hearing for the project was conducted on 18th December, 2015 at Chhara, Kodinar (Project site). (ix) SCZMA Recommendations: The Gujarat Coastal Zone Management Authority (GCZMA) has recommended the Project vide letter no. ENV-I0-2016-S0-E (T cell) dated February 2, 2017. (x) There are no protected areas like National Parks, Wildlife Sanctuary and Biosphere Reserves within 10 km radius of the proposed site. Reserve forests are present in Sarakhadi, and Chhara villages on west and east side of the port site. Gir Wildlife Sanctuary and National Park is located at a distance of approximately 22 km from the proposed LNG Terminal site (xi) There are two fresh water bodies within 10 km radius of the proposed site. These are Panchpipalva Bandhara (9.0 km towards North-East direction) and Sodam Bandhara (3.0 km towards east). Proposed project will not be withdrawing water or discharging any effluents to these water bodies. (xii) Coastal beach on coast of Kodinar taluka is known for nesting of Sea turtles reported to regularly nest on flat sandy beaches at about 2 km from the project site towards east. Shoreline near the project site is rocky and not suitable for turtle nesting. Commercial fishing operations prevail in the nearshore waters off Chhara-Madhwad using gill net operations. In deeper waters off Sarakhadi/Veraval fishing by trawlers is common. Due to presence of shoal bank no fishing activity is carried out at the site of proposed project. (xiii) LNG terminal will be designed considering IS 1893 (Part 1): 2002 Indian Standard "Criteria for Earthquake Resistant Design of Structures" for buildings and non-process related structures. LNG terminal will be monitored and controlled from a continuously manned Central Control Room (CCR) located in the control Room building. Emergency Shut Down (ESD) system is part of the main Plant Control & Monitoring system (xiv) Employment potential: For the operation of LNG terminal around 100 people will be employed. (xv) Benefits of the project: LNG Terminal will improve socioeconomic condition of the region as well as bring economic benefit to the people. It will also increase business and employment opportunity.