

F.No.21-8/2016-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 11th October, 2017

To,

The General Manager
M/s Leading Hotels Ltd
573 Road 4 La Campala,
Miramar Goa,
Email: mail@leadinghotels.in

Subject: Development of 18 hole Golf Course and an Eco Tourism Resort at Village Tiracol, Taluka Pernem, North Goa by M/s Leading Hotels Ltd - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No. IA/GA/MIS/60977/2016 dated 9th December, 2016, submitted to this Ministry for grant of Amendment in Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of amendment in environmental clearance to the project 'Development of 18 hole Golf Course and an Eco Tourism Resort at Village Tiracol, Taluka Pernem, North Goa promoted by M/s Leading Hotels Ltd was considered by the Expert Appraisal Committee (Infra-2) in its meetings held on 12-14 April, 2017 and 27-29 June, 2017. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above meeting, are under:-

- (i) The proposal is for Development of 18 hole golf course and an Eco Tourism Resort at village Tiracol, Tal. Pernem, North Goa, on Survey No. 2-13 (part). The proposed development is located at village Tiracol, Tal. Pernem, North Goa, on Survey No. 2-13 (part) at 15° 43' 33.88" N Latitude and 73° 41' 02. 05"E longitude
- (ii) Total plot area is 9,90,00.00 sqm. Land has been converted to non-agriculture by the Collector- North Goa. Resort will be built on the non-agricultural land. Proposed Resort consists of 128 Standard Villas keys, 60 Premium Villas and an US PGA standard championship Golf Course spread over a built-up area of around 95,000 sqm.
- (iii) Details of facilities to be constructed and area statement are given below:

S. N.	Description	Area (sqm)
1	Main Resort & Associated facilities	
	Resort villas-125 nos.	9,300
	Lobby and Public spaces	727
	Food and beverages areas	1,520
	Banquet and meeting facilities	2,751

	Administrative offices and ancillary area	466
	Spa and fitness center	1,590
	Sports and children activities	1,760
	Food & beverages related services	1,226
	Truck dock area	371
	Housekeeping and laundry	870
	Human resource and security	182
	Employee facilities	1,266
	Repairs & maintenance	904
2.	Premium resort villas (60 nos)	24,190
3.	Back of house (BOH)	
	General circulation	1,000
	Common BOH (Back of house)	1,993
4.	Community facilities	8,300
	Total Gross Floor Area	58,416

- (iv) All the projects related to townships and area development projects covering an area equal to and greater than 50 ha and or built up area equal to and greater than 1,50,000 m² are listed under item 8 (b) i.e. Townships and Area Development Projects of the schedule of EIA Notification, 2006 and covered under category 'B'. However, due to absence of SEIAA/SEAC, Goa the project proposal was appraised at Ministry level by Expert Appraisal Committee (Infrastructure -2). ToR was recommended in the 12th EAC (Infra-2) meeting held on 26-28 December, 2016 and issued vide letter dated 19th January, 2017.
- (v) Tiracol village falls under CRZ-III. The proposal is to develop the villas and associated facilities forming part of the main hotel like entrance lobby, spa, restaurants etc within 200-500m of the HTL line, while the premium villas will be located beyond 500m.
- (vi) Recommendation of Coastal Zone Management Authority: As per extract of Minutes of the 81st meeting of GCZMA held on 21/03/2014, GCZMA forwarded the proposal to SEIAA for its Recommendations. Environment Clearance issued by the Goa State Environment Impact Assessment Authority EC granted vide letter No: 3-181-2010/STE-DIR/13, dated 12.04.2013. Layout on CRZ map of 1: 4000 scale prepared by an authorised agency. CRZ delineation was undertaken by IRS, Chennai.
- (vii) Total Water requirement will be 2550 m³. It will be source from Water Resource Department (WRD), Goa and Maharashtra Jeevan Pradhikaran Department, Maharashtra / recycled water from STP on site. WRD has sanctioned 1500 m³ raw water from Tilari Irrigation canal (Dam).
- (viii) Waste water generation will be 500 m³. Treatment capacity will be Two Ultrafiltration Grey Water Plants: 350 m³ each and STP for black water 550 m³ will be provided.
- (ix) Solid Waste generated will be 520 kg/day (Dry waste: 260 kg/day, Wet waste: 260 kg/day)

- (x) About 1966 Trees come in the path of the development and of these 1101 trees are endogenous to Konkan and shall be transplanted at a new location as per the master plan for the development. Balance trees will be cleared.
- (xi) Parking requirement with provision made for 660 vehicles.
- (xii) Investment/Cost of the project is Rs. 505 Crore.
- (xiii) Employment potential: Estimated direct employment from the Project is 704.
- (xiv) Benefits of the project: High-end coastal protection measures to the otherwise eroding shoreline. Golf resort will offer exclusive lifestyle in natural environment. Propagate eco-friendly concepts in architecture & design utilities. Tiracol will be catapulted into a global destination.

3. The EAC, During deliberation, noted that SEIAA, Goa vide letter no 3-181-2010/STE-DIR/13 dated 12.04.2013 had granted environmental clearance to M/s Leading Hotels Ltd for development of 18 hole Golf Course. Further, Hon'ble NGT in Application No. 135/2015 (WZ) and M.A. No. 259/2015 vide order dated 29th November, 2016 has directed that:

- i. "The EC dated 12.04.2013 is kept in abeyance for next 4 months.
- ii. The Goa-SEAC shall appraise the project by considering all the materials on record within next 4 weeks and send the recommendation to SEIAA who shall further appraise the project for decision on grant of EC within 4 weeks from the date of the receipt of recommendations of SEAC. Both SEAC and SEIAA shall appraise project without any prejudice, without getting influenced by any of the observations in the judgment."

Further, in compliance of Hon'ble NGT order dated 29th November, 2016, PP submitted online application to the Ministry for appraisal of the project as term of SEIAA/SEAC, Goa was expired on 8.12.2016. Due to absence of SEIAA/SEAC, Goa, project was treated as category 'A' and appraised by the Expert Appraisal Committee (Infrastructure-II). The Committee noted that M/s Leading Hotels Ltd. has proposed for development of 18 hole Golf Course and an Eco Tourism Resort at Village Tiracol, Taluka Pernem, North Goa in a total plot area of 244.6 acres i.e. 99 ha. Since plot area is more than 50 ha, project falls under item no. 8 (b) i.e. Township and area development projects of the schedule of the EIA Notification, 2006. The Committee also noted that earlier SEIAA/SEAC, Goa has considered this project under item no. 8 (a) instead of 8 (b) of the schedule of EIA Notification, 2006. Proposal also attracts provision of CRZ Notification, 2011. MoEF&CC vide letter no F. 11-32/2014 IA III dated 9th December, 2014 has granted CRZ clearance to M/s Leading Hotels Ltd.

Proposal was considered by the EAC in its meeting held on 26-28 December, 2016, after detailed deliberations on the proposal, the Committee granted ToR for preparation of EIA-EMP report.

After submission of EIA/EMP Report, proposal was considered by the EAC in its meeting held on 12-14 April, 2017. The Committee decided that before further deliberation in the matter as directed by the Hon'ble NGT to 'Appraise the project by considering all the materials on record', MoEF&CC may write letter to Government of Goa to provide all files/materials relating to the project to the Ministry for further consideration of the EAC. Project proponent also requested to submit Certified

Compliance Report issued by the Regional Office, MoEF&CC on the environmental conditions stipulated in earlier EC issued vide letter no. 3-181-2010/STE-DIR/13 dated 12.04.2013.

The Project Proponent submitted additional Information i.e. relevant project documents and records from the SEIAA/SEAC, Goa vide letter dated 03.5.2017 (uploaded on the website on 16.05.2017). Project proponent also submitted Certified Compliance report issued by the Regional Office (SZ), Bangalore vide letter No. EP/12.1/2014-15/Goa dated 15.6.2017.

Accordingly proposal was considered by the EAC in its meeting held on 27-29 June, 2017. During presentation, the project proponents clarified that there is no difference on the proposals for which the earlier E.C. was issued and that the micro and macro project configuration remains the same. The project proponents also clarified that the only issue under consideration of the NGT was the propriety of grant of E.C. by the SEIAA/SEAC, Goa and that no environmental issues were raised or discussed before the Hon'ble NGT.

The issue related to CRZ clearance was also discussed and it was clarified that CRZ clearance has already been obtained. Under the circumstances the present appraisal is being made only from the point of view of an Environmental clearance and the revalidation of the earlier E.C. is being examined.

The EAC, after detailed deliberation on the proposal, has recommended for grant of Environmental Clearance to the project. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project Development of 18 hole Golf Course and an Eco Tourism Resort at Village Tiracol, Taluka Pernem, North Goa promoted by M/s Leading Hotels Ltd, under the provisions of the EIA Notification, 2006 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:-

PART A – SPECIFIC CONDITIONS:

I. Construction Phase

- (i) This clearance is subject to the decision by the Hon'ble NGT, Pune in the Appeal No 2/2015 & Application No. 120/2015.
- (ii) 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.
- (iii) The conditions stipulated in the CRZ clearance issued by the Ministry vide letter F. No. 11-32/2014-IA-III dated 9th December, 2014 shall be strictly followed.
- (iv) Prior permission from forest department shall be obtained for felling trees.
- (v) The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales,

landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

- (vi) Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- (vii) All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- (viii) 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.
- (ix) Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Sewage shall be treated in the STP based on MBR Technology (with tertiary treatment i.e. Ultra Filtration). The treated effluent from STP shall be



recycled/re-used for flushing, horticulture & DG cooling. Excess treated effluent shall be discharged in to Municipal sewer line as per CPCB norms.

- (xiv) 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. As proposed, rain water from terraces and paved areas will be harvested by way of Ground Water Recharge (Soak Aways), Lakes (40,000 Cum) and underground tank (10,000 cum) as per CGWB guidelines.
- (xv) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. As proposed, adequate space shall be provided for Organic Waste Converter for solid waste management within the premises. The inert waste from group housing project will be sent to dumping site.
- (xvi) Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
- (xvii) A First Aid Room shall be provided in the project both during construction and operations of the project.
- (xviii) 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.
- (xix) Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (xx) 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.
- (xxi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxii) As proposed, no ground water shall be used during construction/ operation phase of the project.
- (xxiii) Approval of the CGWA require before any dewatering for basements.
- (xxiv) 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.
- (xxv) 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.

- (xxvi) 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.
- (xxvii) Ambient noise levels shall conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- (xxviii) Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- (xxix) A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - Traffic calming measures
 - Proper design of entry and exit points.
 - Parking norms as per local regulation

II. Operational Phase

- (i) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- (ii) For indoor air quality the ventilation provisions as per National Building Code of India.
- (iii) Fresh water requirement from Water Resource Department (WRD), Goa, Maharashtra Jeevan Pradhikaran, Maharashtra water supply and bore well shall not exceed 1750 m³/day.
- (iv) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- (v) The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the

Ministry before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.


- (vi) No sewage or untreated effluent water would be discharged through storm water drains.
- (vii) Sludge from the 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.
- (viii) The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.
- (ix) Solar 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 heaters shall be used to meet hot water demand, as far as possible.
- (x) Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- (xi) A minimum of 1 tree for every 80 sq.mt. of land should be planted and maintained. The existing trees will be counted for this purpose. Preference should be given to planting native species. Where the trees need to be cut, compensatory plantation in the ratio of 1:3 (i.e. planting of 3 trees for every 1 tree that is cut) shall be done and maintained. As proposed 186 acres or 76% of the project area shall be provided for green belt.
- (xii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Department shall also include the consent of all the concerned implementing agencies.
- (xiii) An environmental management plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

- (xiv) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.

PART B - GENERAL CONDITIONS

- (i) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
- (ii) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
- (iii) Officials from the Regional Office of MoEF&CC, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the APCCF, Regional Office of MoEF&CC, Bangalore.
- (iv) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
- (v) The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (vi) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- (vii) These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.
- (viii) The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.nic.in>. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of this Ministry at Bangalore.
- (ix) Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

- (x) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- (xi) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) 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.
- (xii) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
4. This issues with the approval of the Competent Authority.


(Kushal Vashist)
Director

Copy to:

- 1) The Secretary, Department of Science, Technology & Environment, Government of Goa Betim-Verem-Saligao Rd, Opp. Saligao Seminary, Saligaon, Pilerne Industrial Estates, Goa 403114.
- 2) Addl. Principal Chief Conservator of Forests (Central), Ministry of Environment, Forests and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bengaluru-560034 (E-mail: rosz.bng-mef@nic.in)
- 3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- 4) Member Secretary, Goa State Pollution Control Board, 1st Floor, Dempo Tower, Patto Plaza, Patto Centre, Panjim, Goa 403001
- 5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6) Guard File/ Record File/ Notice Board.


(Kushal Vashist)
Director