



सत्यमेव जयते

**Proceedings of the State Environment Impact Assessment
Authority Kerala**

Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member and Sri. V.S. Senthil, I.A.S., Member Secretary

Sub: Environmental Clearance -Application for prior Environmental Clearance for the proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project in Survey Nos. 1888/2-6, 1888/4-2, 1888/1-3, 1890/1, 1888/12-1-1, 1888/12-2, 1888/1-2-1, 1888/1-2, 1888/1-1-1, 1888/12-3, 1888/1-1, 1888/1-2-4-1, 1888/1-1-2, 1882, 1888/1-2-2, 1888/1-2-6, 1888/2-2, 1888/2-3 and 1888/2-4 at Kadakampally Village, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk and District, application of Sri. Nishad, M. A., Director, M/s LULU International Shopping Mall Pvt. Ltd. - E.C. Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 1047/SEIAA/EC1/899/2016

dated, Thiruvananthapuram 04-10-2016

- Read:-*
1. Application dated 23-05-2016 by Sri. Nishad, M. A., Director, M/s LULU International Shopping Mall Pvt. Ltd., 34/1000, NH-47, Edappally Kochi-688007
 2. Minutes of the 56th meeting of SEAC held on 06/07-06-2016.
 3. Minutes of the 58th meeting of SEAC held on 28/29-06-2016
 4. Minutes of the 55th meeting of SEIAA held on 16-07-2016.
 5. Minutes of the 56th meeting of SEIAA held on 23-07-2016.
 6. Minutes of the 58th meeting of SEIAA held on 08-09-2016.
 7. Letters dated 01-08-2016 and 24-08-2016 from Sri. Nishad, M. A., Director, M/s LULU International Shopping Mall Pvt. Ltd., 34/1000, NH-47, Edappally Kochi-688007

ENVIRONMENTAL CLEARANCE NO.156/2016

Sri.Nishad M.A., Director, M/s LULU International Shopping Mall Pvt. Ltd., 34/1000, NH-47, Edappally Kochi-688007, vide his application received on 24.05.2016, has sought prior environmental clearance under the EIA Notification, 2006 for the Commercial Complex (Hotel, Convention Centre & Shopping Mall) in Sy. Nos. 1888/2-6, 1888/4-2, 1888/1-3, 1890/1, 1888/12-

1-1, 1888/12-2, 1888/1-2-1, 1888/1-2, 1888/1-1-1, 1888/12-3, 1888/1-1, 1888/1-2-4-1, 1888/1-1-2, 1882, 1888/1-2-2, 1888/1-2-6, 1888/2-2, 1888/2-3 and 1888/2-4 at Kadakampally Village, Thiruvananthapuram Corporation, Taluk & District. The project comes under the Category B, 8(b) of the Schedule of the EIA Notification 2006. No forest land is involved in the present project. Other details of the project are as follows:

Basic Details		
	Item	Details
I	Primary Details	
1	Name of the project	Proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project by M/s Lulu International Shopping Mall Pvt. Ltd.
2	Name of the applicant	M/s Lulu International Shopping Mall Pvt. Ltd.
3	Name, Designation & full Address	Mr. NISHAD M.A. Director M/s LULU International Shopping Mall Pvt. Ltd. 34/1000, NH-47, Edappally Kochi, Kerala-688007. director@luluindia.com & nishadma@in.lulumea.com 0484 2727777 / 2727700 Mobile No. 09895770786
4	Sl. No. in the schedule	8 (b) of EIA Notification, 2006. Proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project with built-up area of 2,32,400sq.m.
5	Proposed capacity / area / length / tonnage to be handled/command area/lease area/ number of wells to be drilled	Total Plot Area = 7.636 ha. (76,366 sq.m.) Total Built-up Area = 2, 32,400sq.m. Height = 44.9 m.
6	New/Expansion/Modernization	New
7	Category of Project i.e. 'A' or 'B'	Category 'B' as per EIA Notification, 2006
8	Location & Survey No.	Survey Nos. 1888/2-6, 1888/4-2, 1888/1-3, 1890/1, 1888/12-1-1, 1888/12-2, 1888/1-2-1, 1888/1-2, 1888/1-1-1, 1888/12-3, 1888/1-1, 1888/1-2-4-1, 1888/1-1-2, 1882, 1888/1-2-2, 1888/1-2-6, 1888/2-2, 1888/2-3 and 1888/2-4, at Kadakampally Village, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk & District, Kerala.
9	Village/ Municipal Corporation, Local body	Kadakampally Village, Venpalavattom, Thiruvananthapuram, Kerala-688029.

		<u>Municipal Corporation Office Address :-</u> Zonal Office of Municipal Corporation of Thiruvananthapuram, Kachani-Aruvikkara Rd, Vattiyoorkavu, Nettayam, Thiruvananthapuram, Kerala- 695013. Ph. 0471 - 2320821.
10	Whether the proposal involves approval/clearance under: If yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972? (c) The C.R.Z Notification, 2011?	NO NO The project site is near coastal zone which is influenced by sea water during high tide. Hence CRZ status study was carried out to demarcate the HTL and setback lines which is outside the CRZ regulation zone for the project site. The CRZ Status report, confirming above aspects of the CRZ Classification of the project site as prepared by Institute of Remote Sensing, Anna University, Chennai.
11	Whether there is any Government Order/Policy relevant/relating to the site?	No
12	Forest land involved (hectares)	NO
13	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up?	Nil as declared
14	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	There will be permanent change in current land use of the project area. During construction phase, about 150 persons per day will be at site. During operation phase, on full occupancy of proposed project, the maximum population is expected to be about 22,400 persons (fixed & floating). Therefore, there will be increase in the intensity of land use both during construction phase & operation phase.
15	Clearance of existing land, vegetation and buildings?	There are different types of trees and different varieties of shrubs, herbs, grass, climbers existing at site. For the development of the proposed project, there will be clearance of the existing trees & different varieties of shrubs, herbs, grass, climbers.
16	Creation of new land uses?	The new land use will be of Hotel, Convention Centre, Shopping Mall, MLCP block & related facilities & other services.
17	Temporary sites used	A labour colony / camp will be constructed for

	for construction works or housing of construction workers?	<p>housing of construction workers within the project site.</p> <p>Open land shall be provided temporarily to the contractors as per their requirement for establishing temporary sheds and facilities for accommodating the workmen deployed.</p> <p>Excavation for pile foundation of structures & for basement will be carried out. The excavated top soil will be used for landscaping, internal road construction and for backfilling purposes.</p>
18	Facilities for treatment or disposal of solid waste or liquid effluents?	<p>Construction phase :-</p> <p>Municipal solid waste generation from the project site including the labour colony during construction phase will be about 60 Kg/day and domestic sewage would be about 9 KLD. The non-biodegradable waste and packaging material would be sold to vendors. The bio-degradable solid waste would be disposed in a bio-gas generation plant and the bio-gas generation would be utilized in the labour colony. A mobile sewage treatment plant (STP) for the treatment of domestic sewage from the labour colony.</p> <p>Operation phase :-</p> <p>Solid waste generation will be about 2.5 Tons/day on full occupancy of the township. The municipal solid waste segregation would be achieved at source by providing colour coded bins. The segregated municipal solid waste will be collected separately as Bio-degradable and Non-biodegradable wastes as per the MSW Rules, 2000. The non-biodegradable and recyclable waste would be collected through waste collection centre and which would be sold to the vendors.</p> <p>The biodegradable waste along with sludge from STP would be sent to the bio-gas generation plant to be developed within the project site.</p> <p>Further, the spent oil from the D.G. sets will be sold to C.P.C.B. approved recyclers.</p> <p>e-Waste :-</p> <p>E-wastes will be stored in an earmarked area. e-waste will be disposed as per e Waste (Management & Handling) Rules, 2012. The e-waste will be disposed through a KSPCB approved agency.</p> <p>Sewage :- The daily domestic sewage generation would be about 357 KL which will be treated at the proposed Sewage Treatment Plant within the project premises.</p>
19	New road, rail or sea traffic during construction or operation?	Internal roads for movement inside the project will be constructed.

20	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No impoundment, damming, culverting, realignment or other changes to the hydrology of surface water courses is proposed.
21	Stream crossings?	Not applicable
22	Changes in water bodies or the land surface affecting drainage or run-off?	The project development does not envisage any change in the existing water body. As far as possible, the natural drainage or run-off would be maintained. CRZ conditions apply.
23	Loss of native species or genetic diversity?	There are different types of trees and different varieties of shrubs, herbs, grass & climbers existing at site. For the development of the proposed project, there will be clearance of some of the existing trees & different varieties of shrubs, herbs, grass, climbers. On completion of construction work, eco-restoration plan would be made.
24	Water (expected source & competing users) unit: KLD	<p>Construction phase :- The water consumption during construction phase is for meeting the domestic requirement (about 11 KLD) for the construction labourers. The water requirement for construction purposes (30 KLD). The source of water will be tanks, wells and Kerala Water Authority supply for meeting the non-flushing water requirement & treated water from sewage treatment plant for the flushing requirement.</p> <p>Operation phase :- The total daily domestic water consumption for the proposed project would be about 446 KLD (which includes fresh water requirement of about 210 KLD). The sources of water during operation phase for the proposed project are :-</p> <ol style="list-style-type: none"> 1. Stored Rain water in tanks (Non-flushing req.) (Non-rainy days). 2. Kerala Water Authority supply / Open Wells (Non-flushing req.) (Non-rainy days) 3. Treated waste water from STP (Flushing Req.) (Entire yea
25	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	<p>Power Requirement = 12 MW Power Source : Kerala State Electricity Board & Total capacity of D.G. Sets = 12,000 kVA (Standby arrangement) Fuel - Low Sulphur HSD (about 3,000 ltr/hr.)</p>

II		Environmental Sensitivity
	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	None within the study area
1	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Water bodies :- ParvathiPuthan River - abutting the site. Akkulam Lake within 0.5 km., N Lakshadweep Sea – about 1.50 km, W
2	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	None within the study area
3	Defense installations	Military Area, Pangode, Trivandrum - About 12 km.
4	Densely populated or built-up area	The project site is within the suburb of Thiruvananthapuram Municipal Corporation & hence densely populated.
5	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)	Hospitals, schools, places of worship, community facilities located within 15 km. around the site.
6	Areas susceptible to natural hazard which could cause the project to present environmental problems (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>)	Not reported incidence of earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic condition at site. The project area falls in Zone – III, accordingly to the Indian Standards Seismic Zoning Map. Suitable NBC measures will be adopted while designing the structures.

3. The project site is near coastal zone which is influenced by sea water during high tide and hence CRZ study was carried out. The CRZ status report of the project site is prepared by the Institute of Remote Sensing, Anna University, Chennai and submitted to the Kerala Coastal Zone Management Authority for CRZ clearance. The KCZMA in its 75th meeting held on 23-03-2016 discussed the proposal in detail. The proposed site is outside CRZ III area, since it lies at a distance of 100m from the HTL of lake. Construction of building can be permitted outside CRZ area subjected to the conditions like

- a. Effluents from the proposed establishments should not be discharged into the lake
- b. Proper waste management facility should be provided
- c. No construction should be allowed in the No Development Zone of CRZ III

d. No reclamation and land modification should be allowed in the No Development Zone of CRZ III

4. The KCZMA recommended the proposal on CRZ angle and reported to SEIAA vide Letter. No. 2966/A3/16/KCZMA/S & DD dated 30-04-2016.

5. The total built-up area being 232,400 m². It requires environmental assessment report to be appraised as category B1. The proponent submitted application for approval or ToR online. They also submitted the Certificate of Indian Green Building Council (IGBC) rating System. As per O.M No. 19-58/2011-1A. III dated 27-06-2011 of MoEF, proposal for E.C in respect of building and construction projects, which have green building rating (pre-certification or provisional certification) shall get priority for consideration out of turn.

6. The proposals were considered by the SEAC in its 56th meeting held on 06th and 07th June, 2016 on out of turn priority considering the IGBC certification. The proponent and the Consultant attended the meeting. The consultant presented the ToR and informed that the proponent had already submitted the application online. Since nothing was heard from SEAC within the prescribed time limit they presumed that the ToR was approved and hence went ahead with EIA study. They have also submitted the EIA report. Since SEIAA is yet to operationalize OSMEC in Kerala, online submission is not being accepted yet. However, considering the fact that ToR submitted is acceptable without any change, the Committee decided to go ahead with the processing of EIA study report. The Committee deferred the item for site inspection by a team consisting of Sri. S. Ajaya Kumar, Sri. P. Sreekumaran Nair, Sri. John Mathai, Dr. Oommen V. Oommen and Sri. Sanjayan Kumar.

7. The site visit was conducted by the subcommittee consisting of Sri. V. Gopinathan, Chairman, Sri. John Mathai, Sri. Keshav Mohan and Sri. Ajayakumar on 15.6.2016, and the report is as follows:

"The Committee made some queries based on the EIA report submitted by the proponent regarding;

1. *Proposed rain harvesting capacity, location of tanks and excess storm water drainage to T S Canal*
2. *Finished floor level of lowest floor with respect to the high Flood level of the T S Canal*
3. *Emergency evacuation plan*
4. *Solid waste treatment*
5. *Preferred traffic regulation methods for the exit and entry to the NH by-pass.*

The proponent made a presentation to the committee on 17.6.2016 on the queries made during the site visit. They produced additional plans to the committee during the presentation. The subcommittee recommends the proposal based on the

site visit and subsequent presentation by the proponents to the subcommittee, with following conditions in addition to the general conditions.

- 1. Rain water collection pond of 4000 KL capacity should be provided at the site.*
- 2. The proponents committed that there will not be any treated water discharge. The subcommittee accepts the proposal as such.*
- 3. The proponents submitted disaster management plan with emergency evacuation plan and locations of assembly points. The subcommittee accepts the proposal as such.*
- 4. The proponents submitted water supply service plan. The subcommittee accepts the proposal as such.*
- 5. The proponents submitted the storm water management plan with points of disposal to T S canal. The proponent shall provide more exit points to reduce overflow of storm water.*
- 6. The proponents shall implement the traffic regulation plan with signalised intersection in the NH bye pass as recommended by M/s NATPAC in their EIA report which was annexed to the submitted main EIA report. Since NHAI is the authority to implement the plan along the bye pass, the proponents shall get necessary permissions and get it implemented before the project starts commercial operation.*

The subcommittee filed the Disaster Management Plan, NATPAC report, schematic diagrams for storm water drainage, water supply, rain water harvesting and sewage treatment system and soil test report submitted by the proponents during the presentation for future reference”.

8. The proposal was again considered by SEAC in its 58th held on 28/29-06-2016. The Committee appraised the proposal based on Form 1, Form I A, EIA report, site inspection report and other details provided by the proponent. The Committee recommended for issuance of EC for the construction project subject to the general conditions and to the following specific conditions.

1. Proper regulation of incoming and outgoing traffic will be one of the critical aspects of this project. If it is not done scientifically the whole traffic along the NH from Venpalavattam Junction to KSRTC Terminal Bypass could be thrown into disarray. Hence the implementation of the traffic regulation plan with signalised intersection in the NH bypass as recommended by M/s NATPAC in their study report which is annexed to the EIA report is of paramount importance. The recommendation is to have synchronized signals at the Venpalavattam Junction, proposed KSRTC intersection and in front of the exit gate of the Lulu Mall. Since NHAI is the authority to implement the plan along the bypass the proponents shall obtain necessary permissions and get it implemented before the project starts commercial operation.
2. As agreed by the proponent during the discussions the rain water collection facilities for 4000 KL capacity shall be provided at the site.

3. The proponents submitted the storm water management plan with two points of discharge to T S canal. But it is advisable to provide more outlets to reduce overflow of storm water.

4. Disaster management plan filed shall be scrupulously implemented

9. The Committee filed the Disaster Management Plan, NATPAC report, schematic diagrams for storm water drainage, water supply, rain water harvesting and sewage treatment system and soil test report submitted by the proponent during the presentation for future reference.

10. In due consideration of the green rating for the building, CRZ clearance stipulations and the specific conditions recommended by SEAC, integrated E.C may be granted to the proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project in Survey Nos. 1888/2-6, 1888/4-2, 1888/1-3, 1890/1, 1888/12-1-1, 1888/12-2, 1888/1-2-1, 1888/1-2, 1888/1-1-1, 1888/12-3, 1888/1-1, 1888/1-2-4-1, 1888/1-1-2, 1882, 1888/1-2-2, 1888/1-2-6, 1888/2-2, 1888/2-3 and 1888/2-4, of Kadakampally Village, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk & District with the above conditions and the general conditions for buildings.

11. In due consideration of the green rating for buildings, CRZ clearance stipulations and specific conditions recommended by SEAC, the case was placed in the 55th meeting of SEIAA held on 16-07-2016. The Authority decided to defer the case for the next meeting for studying the proposal in detail.

12. The proposal was again considered by SEIAA in its 56th meeting held on 23-07-2016. The Authority examined the CRZ recommendations vide Letter. No. 2966/A3/16/KCZMA/S & DD dated 30-04-2016, and findings of SEAC in its 56th meeting held on 06th and 07th June, 2016 on out of turn priority considering the IGBC Certification.

13. The total built-up area being 232,400 m² it requires environmental assessment report to be appraised as category B1. Procedural requirements for appraisal as category B1 have been observed. The proposal has the Certificate of Indian Green Building Council (IGBC) rating System. The Authority assessed that the project being executed under CRZ clearance conditions and in an environmentally degraded area beside the polluted T.S canal, shall conform to procedure integrity and facilitate environmental improvement of the locality. Towards this end the Authority decided to impose the following additional conditions for environmental management and mitigation of adverse impacts:

1. The No Development Zone of CRZ III shall be preserved as a green area with proper landscaping in line with the condition in the CRZ clearance.
2. Upkeep and maintenance of the T. S canal stretch traversed by the project site shall be taken up and executed by the proponent as their CSR activity

pertaining to the project. The amount allotted for CSR should be enhanced to minimum 1% of total cost.

3. The proponent shall submit a feasible scheme on the above conservation programmes to SEIAA before the issue of EC.
4. Survey boundaries of the canal based on geographic co-ordinates shall be fixed and exhibited on visible boards as boundary of the T.S Canal portion, to prevent encroachment. Wiremesh fencing shall be erected all along the approved survey boundary of the canal within the area possessed by the proponent, also as a safety measure, the canal being very deep throughout the length and breadth traversed by the boundary.
5. At least 10% of the total energy requirement of the project shall be from non-conventional sources. Renewable energy source should be, as per the Renewable Purchase Obligation, notified by the Kerala State Electricity Regulatory Commission. As per the provisions of the Ministry of New and Renewable Energy, solar water heater of minimum capacity 100 litre/4 persons (25 litre per capita) total installed.
6. The proponent shall obtain explosive licence for storage of diesel and the diesel for the generator system shall be stored only in underground storage tanks conforming to safety specifications.
7. Use of glass for the construction should be limited to the minimum as per the Green building norms. All common area lighting must be of LED/solar lights.
8. The project shall have energy saving certificate from Government of India.
9. The STP shall have 25% additional capacity than that estimated for the present use, to cope with the future needs. No effluent not conforming to the standards fixed by the state Pollution Control Board.
10. Ground water having found to be polluted and does not conform to standards, shall not be used for any purpose requiring higher purity and standard specifications.
11. Adequate measures should be taken to prevent odour problem from solid waste processing and STP.
12. Parking should be fully internalised and no public space should be used. Traffic congestion near the entry and exit point should be avoided.

13. E-waste should be stored separately and disposed off through KSPCB approved agency.
14. Mitigation measures to reduce Carbon dioxide production as part of climate change action shall be adopted.
16. Structural safety earth quake, fire fighting etc shall be as per national building code.
17. In the construction phase noise attenuation will be ensured by restricting loud noise activities to daytime, provision for PPE and acoustic enclosure for DG sets. In the operation phase noise pollution will be checked through acoustic enclosure for DG sets and green belt plantation.
18. The biological environment shall be improved by landscaping the banks of the canal and no development zone with native flowering creepers and other suitable native fruit trees and aesthetic species.
19. Construction wastes shall on no account be dumped in the canal or any water body.
20. Permanent Environment Management Cell as undertaken in the EMP shall be put in place for implementation of the EMP and ensuring the mitigation measures undertaken by the proponent and stipulated in the E.C.

14. The Authority in due consideration of the green rating for the building, CRZ clearance stipulations and the specific conditions recommended by SEAC, decided to grant integrated E.C to the proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project of M/s Lulu International Shopping Mall Pvt Ltd, 34/1000, NH-47, Edappally Kochi, 688007 in Survey Nos. 1888/2-6, 1888/4-2, 1888/1-3, 1890/1, 1888/12-1-1, 1888/12-2, 1888/1-2-1, 1888/1-2, 1888/1-1-1, 1888/12-3, 1888/1-1, 1888/1-2-4-1, 1888/1-1-2, 1882, 1888/1-2-2, 1888/1-2-6, 1888/2-2, 1888/2-3 and 1888/2-4, of Kadakampally Village, Thiruvananthapuram Municipal Corporation, Thiruvananthapuram Taluk and District with the above additional conditions and the general conditions for buildings and the specific condition during construction and operational phase and on production of the conservation scheme mentioned at para 13.3 to the satisfaction of the Authority.

15. On receipt of the scheme and related documents as sought by the 56th meeting of SEIAA, the proposal was again considered in the 58th meeting of SEIAA held on 08-09-2016. The pre E.C condition was submission of a feasible scheme to preserve the No Development Zone of CRZ areas with landscaping and upkeep of T.S canal portion on CSR. A scheme for greening the No Development Zone with green hedge, medicinal plants and butterfly garden has been submitted. As for T.S canal conservation under CSR, it is informed that they have no control over the water body, but upkeep of portion of the canal abutting the project site can be

taken up if permitted by the Authority concerned. Authority approved these undertakings. In case the component on conservation of T.S. Canal could not be taken up due to any reason, the proponent shall in consultation with the Corporation of Thiruvananthapuram implement appropriate environment care programmes including the greening of no development zone, at the same expenditure as has been stipulated vide para 13.2 (minimum 1% of total cost).

16. As regards generation of 10% of the total energy required through non-conventional source, it is informed that mandatory requirement of Ministry of New and Renewable Energy on generation of solar power shall be complied with. Energy Saving Certificate, of the Bureau of Energy Efficiency, SEWA Bhavan, R.K. Puram, New Delhi-66 shall be obtained.

17. The Authority decided to issue integrated E.C to the proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project of M/s Lulu International Shopping Mall Pvt Ltd, at Kadakampally Village, Thiruvananthapuram Taluk and District with the additional conditions and the general conditions for buildings and the specific condition during construction and operational phase as decided in the 56th meeting held on 23-7-2016.

18. Environmental clearance as per the EIA notification- 2006 is therefore granted to the proposed Commercial Complex (Hotel, Convention Centre & Shopping Mall) project of M/s Lulu International Shopping Mall Pvt Ltd., at Survey Nos. 1888/2-6, 1888/4-2, 1888/1-3, 1890/1, 1888/12-1-1, 1888/12-2, 1888/1-2-1, 1888/1-2, 1888/1-1-1, 1888/12-3, 1888/1-1, 1888/1-2-4-1, 1888/1-1-2, 1882, 1888/1-2-2, 1888/1-2-6, 1888/2-2, 1888/2-3, 1888/2-4 of Kadakampally Village, Thiruvananthapuram Taluk and District, subject to the CRZ conditions in para 3, specific conditions in para 8, the additional conditions in para 13, the usual general conditions for non-mining projects other than mining appended hereto and the following green conditions to be adhered to, strictly.

Green conditions

1. Adequate rain water harvesting facilities shall be arranged for.
2. Technology and capacity of STP to be indicated with discharge point (if any) of the treated effluent.
3. Effluent water not conforming to specifications shall not be let out to water bodies.
4. Maximum reuse of grey water for toilet flushing and gardening and construction work shall be ensured.
5. Dual plumbing for flushing shall be done.
6. Provisions for disposal of e-wastes. Solid wastes, non-biodegradables and separate parking facilities for the building shall be provided.
7. Generation of solar energy to be mandatory for own use and /or to be provided to the grid.
8. There shall be no compromise on safety conditions and facilities to be provided by the project proponent, which shall be ensured for occupation, regularisation or consent to operate

19. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, all the environmental impact mitigation and management measures undertaken by the project proponent in the documents submitted to SEIAA, and the mitigation measures and waste management proposal as assured in the Form-1 and Form-1 A, Environment Impact Assessment report, Environment Management Plan and the further undertakings on CSR obligations as submitted. The assurances, clarifications and undertakings given by the proponent in the application, related documents and letters read as 7th paper above, will be deemed to be part of these proceedings as conditions as undertaken by the proponent, as if incorporated herein.

20. Validity shall be seven years from the date of issuance of E.C., subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of any of the conditions stipulated herein or genuine complaints from residents within the security area of the project.

21. Compliance of the conditions herein will be monitored by the Authority or its agencies and also by the regional office of the Ministry of Environment & Forests, Government of India, Bangalore.

- i. Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring
- ii. Instances of violation if any shall be reported to the District Collector, Thiruvananthapuram to take legal action under the Environment (Protection) Act, 1986.

22. The given address for correspondence with the authorised signatory of the project is Sri.Nishad M.A., Director, M/s LULU International Shopping Mall Pvt. Ltd., 34/1000, NH-47, Edappally Kochi-688007.

Sd/
V.S. SENTHIL, I.A.S.,
Member Secretary (SEIAA)

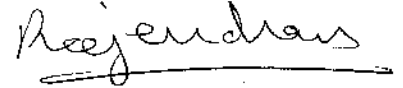
To,

Sri.Nishad M.A.,
Director,
M/s LULU International Shopping Mall Pvt. Ltd.,
34/1000, NH-47,
Edappally,
Kochi-688007

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
2. Additional Chief Secretary to Government, Environment Department.
3. The District Collector, Thiruvannathapuram.
4. The District Town Planner, Thiruvannathapuram
5. Secretary Kerala, State Pollution Control Board, Pattom, Thiruvannathapuram-4
6. The Secretary, Corporation of Thiruvannathapuram Zonal Office, Kachani- Aruvikkara Road, Vattiyoorkavu, Nettayam, Thiruvannathapuram-695013
7. Member Secretary, Kerala Coastal Zone Management Authority, Sasthra Bhavan, Pattom P.O., Thiruvannathapuram-4
8. General Manager (IP), K. S. I. D. C., Keston Road, Kawdiar, Thiruvannathapuram-03
9. Principal Secretary, Local Self Government Department
10. Chairman, SEIAA
11. Website
12. E.C file
13. Stock File
14. O/C

Forwarded / By Order



Rajendran Chettiar, C
Administrator, SEIAA

GENERAL CONDITIONS *(for projects other than mining)*

- (i) Rain Water Harvesting capacity should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified elsewhere.
- (ii) Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- (iii) Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, inclusive of approach road and internal roads.
- (iv) The project shall incorporate devices for solar energy generation and utilization to the maximum possible extent with the possibility of contributing the same to the national grid in future.
- (v) Safety measures should be implemented as per the Fire and Safety Regulations.
- (vi) STP should be installed and made functional as per KSPCB guidelines including that for solid waste management.
- (vii) The conditions specified in the Companies Act, 2013 should be observed for Corporate Social Responsibility.
- (viii) The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- (ix) Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.
- (x) All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
- (xi) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- (xii) The Authority 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 Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (xiii) The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of 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 EIA Notification, 2006.
- (xiv) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.
- (xv) Provision should be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.
- (xvi) Officials from the Regional of MOEF, Bangalore who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional Office of MOEF, Bangalore.
- (xvii) These stipulations would be enforces among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control Pollution) at 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

- (xviii) Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
- (xix) Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.
- (xx) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- (xxi) A copy of the clearance letter shall be sent by the proponent to concerned GramaPanchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
- (xxii) The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data **(both in hard copies as well as by e-mail)** and 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 respective Regional Office of MoEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala.
- (xxiii) The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40.
- (xxiv) The proponent should provide notarized affidavit (*indicating the number and date of Environmental Clearance proceedings*) that all the conditions stipulated in the EC shall be scrupulously followed.

SPECIFIC CONDITIONS

I. Construction Phase

- i. "Consent for Establishment" shall be obtained from Kerala State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.
- ii. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- iii. A First Aid Room will be provided in the project both during construction and operation of the project.
- iv. Adequate drinking water and sanitary facilities should be provided for construction workers at the site, Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- v. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

- vi. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- vii. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- viii. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- ix. Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Kerala State Pollution Control Board.
- x. The diesel generator sets to be during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- xi. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- xii. 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 the applicable air and noise emission standards and should be operated only during non-peak hours.
- xiii. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/KSPCB.
- xiv. Fly ash should be used as building material in construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August 2003. (The above condition is applicable Power Stations).
- xv. Ready mixed concrete must be used in building construction.
- xvi. Storm water control and its re-use per CGWB and BIS standards for various applications.
- xvii. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xviii. Permission to draw ground shall be obtained from the Computer Authority prior to construction/operation of the project.
- xix. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xx. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xxi. Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.
- xxii. Roof should meet prespective requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.
- xxiii. Opaque wall should meet perspective requirement as per energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfil requirement.

- xxiv. The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National, Building Code including protection measures from lightening etc.
- xxv. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- xxvi. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the protect proponent if it was found that construction of the project has been started without obtaining environmental clearance.

II. Operation Phase

- i. The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Kerala State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- ii. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- iii. Diesel power generating sets proposed as source of back up 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 low sulphur diesel. The location of the DG sets may be decided with in consultation with Kerala State pollution Control Board.
- iv. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- v. The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- vi. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- vii. 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. The borewell for rainwater recharging should be kept at least 5 mts. Above the highest ground water table.
- viii. The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- ix. Traffic congestion near the entry and exit points from the roads adjoining the purposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- x. A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.

- xi. Energy conservation measures like installation of 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. Use 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. Use of solar panels may be done to the extent possible.
- xii. Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.
- xiii. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

III Post Operational Phase

Environmental Monitoring Committee with defined functions and responsibility should foresee post operational environmental problems e.g. development of slums near the site, increase in traffic congestion, power failure, increase in noise level, natural calamities, and increase in suspended particulate matter etc. solve the problem immediately with mitigation measures

For Member Secretary, SEIAA

Rajendran

Rajendran Chettiar, C.
Administrator. SEIAA



