

F. No. 10-51/2010-IA.III
Government of India
Ministry of Environment & Forests
(IA-III Division)

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003

Dated: 18th November 2013

To
The Managing Director,
M/s KGS Aranmula Airport Ltd.
No.43, Besant Avenue Road,
Adyar, Chennai – 600 020.

Subject: Environmental Clearance for proposed Airport at Mallappuzhasserry, Aranmula and Kidangannur villages, Kozhencherry Taluk, Patthanamthitta District, Kerala by M/s KGS Aranmula Airport Ltd. -Reg.

This has reference to your letter No. NIL dated 24.06.2011 and your subsequent letters dated 01.03.2012, 01.08.2012, 21.12.2012 and 23.08.2012 seeking Environmental Clearance under the Environment Impact Assessment Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the Environment Impact Assessment Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Form-I, EIA, EMP, Public Hearing proceedings and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 21st-23rd September, 2011, 15th – 16th December, 2011 and 16th – 17th August, 2012.

2. The proposal involves development of Airport at Mallappuzhasserry, Aranmula and Kidangannur villages, Kozhencherry Taluk, Patthanamthitta District, Kerala on a plot area of 500 Acres to cater to air bus A – 300 aircraft. The length of the run-way in the first phase will be 2800 mtr. x 45 mtr. Construction will have G+1 floor of terminal building of 1250 sq.m. in phase I and 15000 sq.m. in phase II. The total water requirement is 7.55 KLD in the first phase and 31 KLD in the second phase. The capacity of STP proposed is 3.6 KLD in the first phase and 21.6 KLD in the second phase. The total power requirement will be 2 MVA. Isolation parking bay of size 80 x 80 mtr of flexible pavement is proposed for 40 cars, 50 taxis and 10 buses in phase I and 205 cars, 250 taxis, and 30 buses in phase II. The cost of the project is Rs.81.1836 Crores for phase I and 125.4383 Crores for phase II.

3. The project was considered by the EAC in its meeting held on 21st – 23rd September, 2010 and ToR was finalized including the Public Hearing. ToR for the project was accorded on 13.10.2010. Public Hearing was conducted on 10.05.2011 at Pathanamthitta District Collectorate. Major issues raised during the Public hearing are filling up of paddy fields, restoration of kozhythodu a tributary of Pamba etc. It is noted that the proponent committed the minimum area required for runway, apron, taxiway etc and the remaining area will be preserved in its natural form while kozhythodu will be maintained in consultation with Minor Irrigation Department, Government of Kerala.

4. There have been representations, news items, joint petitions from MLAs and a report from the Salim Ali Foundation against the project. Major allegations are inclusion of wetlands and conversion of paddy fields, filling up of wetlands and paddy fields that will disturb the ecosystem and environmental balance of the area, proponent facing criminal & vigilance cases, violation of the Central and State Acts like the Kerala Land Reforms Act of 1963 (in regard to the Land ceiling provision); Kerala Conservation of Paddy Land and Wetland Act 2008, findings of Legislative Committee, commencement of the land filling work at the site prior to EC, non-obtaining of Defence NOC, competition to existing Airports, inadequate EIA, non-inclusion of source of earth for filling the land, 212 species of plant, including 27 that are endemic and 110 that are economically important being recorded in the area, causing impact on the Aranmula, heritage site etc.

5. The comments on the above representations/ issues were sought from the Project Proponent and the State Government of Kerala. Proponent replied vide letter dated 20.6.2011, 01.03.2012 and 23.08.2012. The comments were received from the Principal Secretary, Environment Department, Government of Kerala provided vide letters dated 26.6.2012, 01.06.2013 and 21.08.2013 and from the Additional Chief Secretary, Environment Department, Govt. of Kerala vide letter dated 13.09.2013.

6. The following issues are noted from the letters of the Project Proponent :

- i. There are no developmental works at this site by them, however, the original owner of the site had carried out minor developmental works. The semi-developed site was purchased from Mount Zion Educational Trust
- ii. Ministry of Defence has granted NOC vide letter No. 19 (79)/11(DN-11/Ops) (669) dated 24.08.2011
- iii. There is a small riverlet Kozhithodu passing through the project site. This riverlet collects water from uphill areas and joins the Pampa River. Due to poor maintenance over the years, it is blocked at various points causing small water bodies in different parts of the project site. The Minor Irrigation Department of Kerala was entrusted to study and streamline the flow of riverlet and the Department has studied and has suggested measures to maintain the riverlet. It is noted from the report of Minor Irrigation Department of Kerala that after the due alterations that are suggested are carried out in the Kozhithodu, the water logging in the upstream paddy fields will not occur.
- iv. Only minimum area required for runway, apron, taxiway etc would be filled and the remaining area will be preserved in its natural form. The previous owner had filled the runway of 1000 x 150 mts for airstrip. Therefore, only the area required for runway 1000 x 150 mts will be filled to a height of one meter and the soil required for land filling will be met from the elevated area of about 14.5 acres available within the site itself. To confirm his statement, the EAC sought the contour map. As per the contour map submitted, the level of elevated area varies from 3.0 to 11.5 meters with average height of 3.5 meter. The soil available is 14.5 acres = 58678.6 sqm x 3.5 mt = 205375 cum. The soil required is 1000 x 150 x 1 = 150000 cum.
- v. Aranmula was declared by the UNDP as a 'Heritage Village' due to Uthirattathi Boat Race and Aranmula Mirror which are unique of this Village and not based on

environmental or physical features. This airport project once commissioned will showcase these unique cultural aspects globally and will ensure international visibility, ensuring tourist flow.

7. The following are noted from letters of the Government of Kerala:

- (i) State Government vide notification SRO.No. 185/2011 dated 24.02.2011 had declared approximately 500 acres of land as an industrial area, the reclamation was during pre 2008 period when the Kerala Paddy Land and Wetland Conservation Act was not there. Hence the 2008 Act on Kerala Conservation of Paddy and Wetland Act 2008 are not applicable. The ecological damages which have already set-in, especially the unmindful river sand mining during the last three decades that lowered the bed of Pampa river to almost below sea level, among other environment factors causing degradation, resulted in lowering of ground water table in the riparian areas. Putting the blame for lowering of ground water table on the reclaimed portion of the paddy field would be illogical. The paddy field is left fallow and the natural irrigation facilities have been encroached upon or blocked at several places.
- (ii) No instance or details of the criminal/vigilance cases referred to have been furnished. Further, in the order dated 29.03.2012 of the Hon'ble High Court of Kerala in WP (C) No. 3407/ 2012 filed by the proponent it has been directed that the Police Department shall maintain law and order at the worksite, if disturbance of any nature is caused for any of the works done by the petitioner. Moreover, Application No. 38/2013 (SZ) filed in the National Green Tribunal by Aranmula Heritage Village Action Council represented by its Patron Sri Kummanam Rajasekharan, who also is a signatory in the instant petition was withdrawn, on application of the applicant himself, the tribunal awarding a cost of Rs. 25,000/- payable by the applicant to the respondents' side.
- (iii) The Legislative Committee on Environment has not categorically expressed any reservation against the project as such but also on the other hand, it has recommended that the excess land notified as Industrial Area, except the land under the possession of the KGS Group, may be de-notified urgently and orders issued.
- (iv) Some factual mistakes in the report of the Salim Ali Foundation are worth noting. The report says that there are extensive wetlands in the village. But there is no identified wet land in Aranmula Village as per the Report of the Centre for Earth Science Studies (CESS) which prepared the list of wetlands in Kerala. As for the definition of the Kerala Conservation of Paddy and Wetland Act 2008, paddy land is not wetland. The provisions of the Central Wetland Act are also similar. Therefore, it seems the authors of the RSAF have confused paddy land with wetland.
- (v) The State Government would like to have modern infrastructure facilities in the state with least disturbance to environment and as such the State Government is in favour of the project. The objections against the vital infrastructure and employment generating development projects, which would

be a boon to the educated unemployed in the state, are baseless. Such employment generating projects in a state like Kerala with its teeming educated unemployed cannot but be welcomed in the larger public interest and the economic interest of the country, subject of course to all environmental protection measures as per law. The State Government have decided to take 10% equity in this project vide GO (Ms) 4/2013/Trans dated 16.1.2013.

8. Regarding the allegation by the Salim Ali Foundation that the EIA report is inadequate, did not recognize the fertile, wetlands on the flood plains of river Pampa and presence of endemic and economically important species in the area, non inclusion of source of earth for filling the land, it is stated that EAC has suggested ToRs and the EIA has been prepared as per the ToRs. EAC has sought additional information on Noise level modeling, analysis of impact, Traffic management, NOC from Civil Aviation etc, before recommending the project. Ministry has also called for additional information on the details of the area required to be filled, source of material, likely impacts and referred back to EAC. EAC again in August, 2012 examined and recommended. It is noted that the EIA study covered the flora and fauna under Chapter- III of the EIA Report.

9. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project. Accordingly, the Ministry hereby accords necessary Environment Clearance for the above project as per the provisions of Environment Impact Assessment Notification, 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

10. SPECIFIC CONDITIONS:

- (i) The “Consent to Establish” shall be obtained from Kerala Pollution Control Board under Air and Water Act a copy shall be submitted to the Ministry before start of any construction work at the site.
- (ii) Proponent informed that there is no wet land however, due to blockage of riverlet water logging occurs and forms few shallow water bodies. The Minor Irrigation Department of Kerala was entrusted to study and stream line the flow of riverlet and the Department has studied and has suggested measures to maintain the riverlet. The following measures as recommended by the Minor Irrigation Department to maintain the riverlet shall be carried out with letter and spirit as committed.
 - (a) The highly silted up Kozhithodu is to be improved so as to contain easy flood flows.
 - (b) The design bed slope shall be maintained during any alteration or maintenance works carried in the thodu.
 - (c) All the small structures like culverts, foot bridges which does not have enough vent way shall be constructed with adequate vent way as designed.
 - (d) The thodu portion coming under runway shall be constructed with three spans of 15 m x 3.2 m vent.

- (e) Adequate structural design shall be adopted with out compromising the hydraulic design.
 - (f) Apart from the necessary minimum filling for infrastructure for the proposed airport, all the balance portion of barren land shall be kept as such for harnessing rainwater.
 - (g) Kozhithodu shall be maintained and periodical de-silting be carried out.
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- (iii) Though the site is not a wetland, in view of the presence of various plants species, Proponent shall fill only minimum area required for runway, apron, taxiway etc and the remaining area will be preserved in its natural form as committed. Only the area required for runway 1000 x 150 mts shall be filled with 1 mt height. The soil required for land filling shall be met from elevated area of about 14.5 acres available within the site itself. Necessary permission for levelling should be taken.
 - (iv) There shall be no disposal of solid or liquid waste in to the Kozhithodu, a tributary to Pampa.
 - (v) State Government shall consider the observation of ‘Legislative Committee on Environment’ about de notification of the excess land except the land under the possession of the KGS Group and apprise the Ministry.
 - (vi) Project proponent shall have a Master Plan for the project and other related facilities if any. Such other felicities shall be considered by the Competent Authority only after a Cumulative Environment Impact Assessment is carried out.
 - (vii) All the commitment like maintenance of Kozhithodu, minimum filling of the site etc made during the Public Hearing shall be strictly complied with.
 - (viii) Sewage and other liquid effluent generated from the airport should be treated as per the norms laid down by the State Pollution Control Board and recycled wherever possible. Water conservation fixtures shall be provided.
 - (ix) The solid waste generated shall be properly collected, segregated and disposed as per the provision of Solid Waste (Management and Handling) Rules, 2000.
 - (x) All the recommendations of EIA, EMP, and disaster management plan shall be strictly complied with.
 - (xi) Installation and operation of DG sets if any shall comply with the guidelines of CPCB.
 - (xii) Energy conservation measures shall be taken up as per ECBC 2009.
 - (xiii) Parking provisions shall be provided as per National Building Code of India, 2005.

- (xiv) The switches used for outdoor lighting generally do not take seasonal variation and hence a timer should be used that is sensitive to seasonal variations and adjusts on the basis of actual length of day/night.
- (xv) All cooling equipment should meet the minimum efficiency requirements, as specified in the ECBC (Energy Conservation Building Code), 2007.
- (xvi) The terminal building shall incorporate the features of local architecture in and around the area as well as special measures to highlight the Indian antiquity through a museum like corner depicting the same.
- (xvii) The land use around the Airport complex shall be regulated through a plan to control unauthorized development which may create problems in the operation of Airport.
- (xviii) Necessary permission shall be obtained for drawing of ground water from competent Authority prior to construction / operation of the project.
- (xix) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
- (xx) The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.

11. GENERAL CONDITIONS:-

- (i) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (ii) A First Aid Room will be provided in the project both during construction and operation of the project.
- (iii) All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- (iv) 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.
- (v) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

- (vi) 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.
- (vii) 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 and should be operated only during non-peak hours.
- (viii) 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/ Kerala Pollution Control Board.
- (ix) Fly ash usage shall be explored as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003.
- (x) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xii) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- (xiii) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- (xiv) Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- (xv) 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.
- (xvi) Treated effluent 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 effluent shall conform to the norms and standards of the Uttar Pradesh State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- (xvii) 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.

- (xviii) 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.
- (xix) 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.
- (xx) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- (xxi) 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.
- (xxii) The construction of the structures shall be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and central rules and regulations.
- (xxiii) The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.
- (xxiv) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.
- (xxv) Full support shall be extended to the officers of this Ministry/ Regional Office at Bengaluru by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
- (xxvi) Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (xxvii) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.

- (xxviii) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.
- (xxix) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (xxx) A copy of the clearance letter shall be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.
- (xxxi) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/ Tehsildar's office for 30 days.

12. These stipulations would be enforced among others under 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, including the amendments and rules made thereafter.

13. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

14. 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 and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bengaluru.

15. 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.

16. Any appeal against this environmental 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

17. The project proponent shall also submit six monthly 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) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

18. 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 by e-mail.

(Lalit Kapur)
Director (IA-III)

Copy to:

- (1) The Secretary, Department of Environment, Government of Kerala, Thiruvananthapuram.
- (2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 110 032.
- (3) The Member Secretary, Kerala State Pollution Control Board, Plamoodu Junction, Pattom Palace, P.O. Thiruvananthapuram - 695 004.
- (4) The CCF, Regional Office, Ministry of Environment & Forests(SZ), Kendriya Sadan, IVth floor, E&F wings, 17th Main Road, Koramangala II Block, Bengaluru – 560 034.
- (5) IA - Division, Monitoring Cell, MOEF, New Delhi - 110003.
- (6) Guard file.

(Lalit Kapur)
Director (IA-III)