## F. No. 10-72/2016-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: 30<sup>th</sup> May, 2018

To,

## The Chief Executive Officer M/s Delhi International Airport Pvt Limited New Udaan Bhawan, Opp Terminal 3, IGI Airport, New Delhi -110037

## Email: indanaprabhakara.rao@gmrgroup.in

# Subject: Expansion of Indira Gandhi International Airport by M/s Delhi International Airport Pvt Limited - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No.IA/DL/MIS/59697/2016 dated 14.07.2017, submitted to this Ministry for grant of 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 environmental clearance to the project 'Expansion of Indira Gandhi International Airport by M/s Delhi International Airport Pvt Limited' was considered by the Expert Appraisal Committee (Infra-2) in its 21<sup>st</sup> meeting held on 21-24 August, 2017 and 30<sup>th</sup> meeting held on 18-20 April, 2018. 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) Indira Gandhi International Airport (IGIA) is the primary civil aviation hub for India and the National Capital Region of Delhi. IGIA is located at 28°34'07" North, 77°06'44" East, at an elevation of about 227 m above sea level. The overall airport infrastructure has the capacity to handle about 62 MPPA and cargo handling capacity of about 1.5 MMTPA. In FY 2015-16, it handled 48.6 million passengers at a growth of 18%, 344 thousand aircraft movements and 787 thousand tonnes of cargo and has recorded a growth of 13% from previous year.
- (ii) M/s Delhi International Airport Limited (DIAL) has earlier obtained the environmental clearance for the expansion, restructuring and modernization of IGIA vide letter No. 10-10/2006-IA.III dated 17<sup>th</sup> January, 2007.
- (iii) IGIA has witnessed a substantial passenger traffic growth over the past few decades. Total passengers at IGIA, a sum of domestic and international passengers, are forecasted to grow at an average of 5.6% annually reaching about 109.3 MPPA in 2033-34 from about 36.9 MPPA in 2013-14. In view of continued rapid growth, it is essential that the existing airport require major capacity enhancement programs. The existing facilities are inadequate to cater services of handling increased volume of aircrafts, passengers and

Page 1 of 8

cargo. Hence, it is evidently important that the airport capacity needs expansion.

- (iv) The proposed development of IGIA includes enhancement of airport operation infrastructural capacity to handle forecasted passengers, aircrafts and cargo growth by expanding the terminal, airside, landside, cargo and associated support/ancillary facilities. The expansion will be done within the existing airport land and is interlinked with the existing airport infrastructure. There will be no additional land acquisition as part of this expansion project. The land under existing airport is 5106 acres.
- (v) The present expansion project includes up-gradation, expansion, development and construction of the following facilities to achieve airport capacity to handle about 109 MPPA and about 2.2 MMTPA of cargo by 2034.
  - Expansion of existing terminals (T1, T2 & T3);
  - Construction of new terminal (T4);
  - Cargo terminals and cargo city/village;
  - Development of new runway and taxiway;
  - Aprons and general aviation;
  - Maintenance, Repair and Overhaul (MROs) & Hangars;
  - Landside facilities, airport access road and inter-terminal connections by Automatic People Movers (APM);
  - Supporting utilities and facilities such as fuel farm, ground handling, multi level car parking, catering and power stations etc.; and
  - Administrative infrastructures.
  - Hotels & Commercial property developments.
- (vi) Expansion activities will be implemented in three phases; phase-3A during 2016-2020, Phase-3B during 2021-2025 and Phase-4 during 2026-2034. The project activities will be started after obtaining all statutory clearances. According to the growth demand the tentative time line given for development phases may be taken early or together with other phases.
- (vii) Term of Reference (ToR) for the present expansion proposal was granted by MoEF&CC vide letter No. 10-72/2016-IA-III dated 28<sup>th</sup> November, 2016.
- (viii) **Public hearing**:-The public hearing was conducted by Delhi Pollution Control Committee (DPCC), on 19<sup>th</sup> June 2017 at 11:00 AM under the chairmanship of District Magistrate and Additional District Magistrate at Terminal-2, Indira Gandhi International Airport, New Delhi.
- (ix) IGI airport is spread over 5106 acres (2066 ha). The proposed expansion project will be developed within the existing airport site area. Hence, no additional land is required.
- (x) The total water demand for the airport at its ultimate phase is estimated to be 24.47 MLD, of which the major water demand will be met through Delhi Jal Board (~70-80%) and remaining from ground water source. The fresh and ground water use will be reduced using water efficient infrastructures, water reuse for flushing, landscaping & HVAC system. Rainwater harvesting system will be adopted to enhance the water recharge & sustainability at the airport through water positive initiatives.



- (xi) It is estimated that the total power requirement for all the three phases (3A, 3B & 4) is 282.62 MVA which will be sourced from grid through M/s BSES Rajdhani Power Limited. At present, to meet power grid failures, emergency power backups are provided with the capacity of 42 MVA (Captive power plant of 14 x 3 MVA DG sets). The current operating load is 45 KVA, connected load is 100 MVA. Additional DG sets will be used for emergency backup purpose at airport.
- (xii) Total estimated project cost for the expansion is Rs. 16,000 crore and M/s Delhi International Airport Limited (DIAL) is spending on an average about Rs. 1 crore per annum towards pollution control and treatment.
- (xiii) **Employment opportunities:** The proposed expansion of the airport will enhance the employment opportunities in the region both technical and non-technical areas will further improve the job creation and social wellbeing.
- (xiv) Benefits of the Project: Proposed expansion project of the airport would be beneficial not only to meet the air traffic demand in New Delhi, but also will enhance the operational efficiency, safety, environmental performance and passenger amenities/facilities. Post expansion, all aviation stakeholders, passengers and local communities will be immensely benefitted with world class infrastructure and high class service levels resulting in improved tourism and large economic & social benefit to the region and to the nation.

3. The EAC, in its meeting held on 21-24 August, 2017 and 18-20 April, 2018, after detailed deliberations 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 'Expansion of Indira Gandhi International Airport by M/s Delhi International Airport Pvt Limited', 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) As proposed, environmental clearance is for Expansion of Indira Gandhi International Airport by Delhi International Airport Pvt Limited.
- (ii) Project Proponent shall be obtained clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities.
- (iii) Construction site should be adequately barricaded before the construction begins.
- (iv) Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet.
- (v) The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.
- (vi) The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.



- (vii) Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical). Top soil shall be separately stored and used in the development of green belt.
- (viii) A detailed drainage plan for rain water shall be drawn up and implemented.
- (ix) Ground water abstraction and rain water recharge shall be as may be prescribed by the CGWA. A clearance of the CGWA shall be obtained in this regards.
- (x) Noise from vehicles and power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- (xi) Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- (xii) Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rule, 2016 and Construction and Demolition Waste Rules, 2016.
- (xiii) Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (xiv) Aircraft maintenance, sensitivity of the location where activities are undertaken, and control of runoff of potential contaminants, chemicals etc shall be properly implemented and reported.
- (xv) Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc shall be provided.
- (xvi) The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.
- (xvii) Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area during monsoon season / cloud bursts.
- (xviii) 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.
- (xix) Total fresh water requirement from existing bore wells Water Supply shall not exceed 24.47 MLD.
- (xx) Sewage Treatment Plant (STP) of 16.6 MLD capacity is operating to treat the wastewater generated from IGI airport. Wastewater from the proposed expansion activities will be treated in the existing STP. Wastewater from the



proposed expansion project will be treated in the existing STP and the treated wastewater will be reused for flushing, horticulture and HVAC purposes

- (xxi) Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- (xxii) During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations. A monitoring station for ambient air and noise levels shall be provided in the village nearest to the airport.
- (xxiii) The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out.
- (xxiv) Traffic congestion near the entry and exit points from the roads adjoining the Airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- (xxv) Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be locate conveniently near arrival and departure gates.
- (xxvi) An assessment of the cumulative impact of all activities being carried out or proposed to be carried out by the project, 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 organisation of repute and specializing in Transport Planning shall be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (xxvii) Apart from the requirements of Traffic Management Plan as given in para (xxvi), the project proponent, in consultation with the Ministry of Urban Development and Ministry of Civil Aviation, would study the impacts of the proposed development on the wider circulation of traffic that uses the approach roads but is not headed to and from the Airport and execute a Traffic Plan, including augmenting infrastructure to the satisfaction of the aforesaid Ministry's. The Ministry of Civil Aviation will be the Nodal Ministry for execution of the plan.
- (xxviii) Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

(xxix) An onsite disaster management plan shall be drawn up to account for risks and

accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.

- (xxx) The company shall draw up and implement a corporate social Responsibility plan as per the Company's Act of 2013.
- (xxxi) The concerns of the Public hearing panel shall be suitably addressed to and the recommendations adopted as part of the Environmental Management Plan and in the plan for C.S.R. as applicable.
- (xxxii) A water security plan to the satisfaction of the CGWA shall be drawn up to include augmenting water supply and sanitation facilities and recharge of ground water in at least two villages and schools, as part of the C.S.R. activities.
- (xxxiii) As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) plan. As per the said OM, funds @0.125% of the total project cost shall be earmarked for the activities proposed under CER. The activities proposed under CER shall be restricted to the affected area around the project.

# PART B - GENERAL CONDITIONS

- (i) The project authorities must strictly adhere to the stipulations made by the SPCB, State Government and any other statutory authority.
- (ii) No further modification or expansion in the project shall be carried out without prior approval of the Ministry of Environment Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to this Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) The overall noise levels in and around the airport area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. On all the sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the EPA Rules, 1989 viz. 78 dBA (daytime) and 70 dBA (night-time).
- (iv) A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- (v) Adequate funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures and shall be used to implement to conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.

4. The Regional Office of this Ministry/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly

compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.

5. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat / Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom any suggestion/ representation, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

6. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective of Zonal Office of CPCB and the SPCB.

7. The environmental statement for each financial year ending 31<sup>st</sup> 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 Clearance conditions and shall also be sent to the respective Regional Office of MoEF&CC by e-mail.

8. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with SPCB and may also be seen at website of the Ministry of Environment, Forest and Climate Change at <u>http://www.envfor.nic.in</u>. This shall be advertised within Seven days from the date of receipt of the Clearance letter at least two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office of this Ministry.

9. The project authorities 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 commencing of land development work

10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

11. The Ministry reserves the right to stipulate additional conditions, if necessary. The company in a time bound manner shall implement these conditions.

12. This 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.

13. 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.

14. The above stipulations will be enforced inter-alia 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, Hazardous



and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability (Insurance) Act, 1991 along with their amendments and rules.

15. This issues with the approval of Competent Authority.

(Kushal Vashist) Director

#### Copy to:

- The Principal Secretary, Environment Department, Government of Delhi, Level-6, C-Wing, Delhi Secretariat, IP Estate, New Delhi - 110002.
- The APCCF (C), MoEF&CC, Regional Office (CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector "H", Aliganj, Lucknow - 226020.
- The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
- The Chairman, Delhi Pollution Control Committee, 4<sup>th</sup> floor, ISBT Building, Kashmere Gate, Delhi- 110006.
- 5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
- 6) Guard File/ Record File/ Notice Board.
- 7) MoEF&CC Website.

(Kushal Vashist) Director