## F.No.10-52/2013-IA-III Government of India Ministry of Environment, Forest & Climate Change (I.A. Division)

Indira ParyavaranBhawan Aliganj, Jorbagh Road, New Delhi -110003

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Dated: 29th December, 2016

To.

The Director M/s Airport Authority of India Shimla Airport, Shimla, Himachal Pradesh – 171 013.

Subject: Restoration of Basic Strip & Prevention of Soil Erosion including feasibility studies for runway extension at Shimla Airport, Himachal Pradesh by M/s Airport Authority of India – Environmental Clearance reg.

Ref.: Your online proposal no. IA/HP/MIS/27268/2013 dated 22<sup>nd</sup> June, 2016.

Sir,

This has reference to your online proposal no. IA/HP/MIS/27268/2013 dated 22<sup>nd</sup> June, 2016 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report and public hearing report regarding above mentioned project.

- 2.0 The Ministry of Environment, Forest and Climate Change has examined the application. It is noted that the proposal is for restoration of basic strip & prevention of soil erosion including feasibility studies for runway extension at Shimla Airport, Himachal Pradesh. Shimla Airport has a table top runway on a mountain close to Jubbarhatti Village in Shimla. The airport is situated about 23 km from Shimla city in western direction. The table top is approximately 1600 meters long and 80-120 meters wide along the length of runway. However, at the terminal building, the table top has a width of 338 meters. Steep side slopes of 35 to 50 degree are observed all along the periphery of the table top. The present Airport at Shimla has the following facilities:
  - i. Runway 14-32 : 1189m X 23m
  - ii. Apron: 50m X 30m
  - iii. Terminal Building, ATC, Fire Station, MET Office and Electric Sub Station
- 3.0 The basic strip has eroded and the rain cuts have progressed towards the runway over the years due to rains. The following erosion control measures and restoration activities to be carried out:
  - (i) Restoration and grading of runway strip of dimension of 1309m X 80m. (This includes 60m runway strip length + 1189m of runway + 60 length of runway strip and 80m width of runway strip i.e. 40m on either side of centerline). Presently runway strip of length of 60m is available on either side of runway having a runway length of 1189m.
  - (ii) Provision of Runway marking and signage as per ICAO standard.
  - (iii) Provision of Runway End Safety Area (RESA) of dimension of 30m X 60m on either side of the runway strip.

- (iv) Extension of apron by 30.5mX30m to accommodate for VIP aircraft (B-200/C-90) alongwith the schedule of aircraft operation of ATR-42.
- (v) Taxi link to be constructed of dimension 42.5m X 10.5m and 18.6m X 10.5
- (vi) Remedial measures to check soil erosion of airstrip including side slopes:
  - a). Reconstruction of slide areas with strengthened material
  - b). Prevention methods to ensure avoidance of soil erosion, subsidence, slides etc, including construction of retaining walls
  - c). Prevention of infiltration/percolation of water into the dumped/filled material in the basic strip/shoulder area and inside slopes of the embankment, by providing top impervious layer.
- (vii) Improvement of drainage including repairs of existing cross and longitudinal drains of airstrip.
- (viii) 6m wide road to connect Fire station to operational gate approximately 40 meter length for movement of fire-tender.
- 4.0 The cost of proposed project is Rs. 105.02 Crore. It is reported that the proposed project area for the airport and in its neighborhood within 10 km radius has no wild life sanctuary or national park. However, Chail Wild life sanctuary is located at an aerial distance of 12.74 km towards South-East direction from the Shimla Airport.
- About 1.37 lakh m³ of earth will be required from outside for filling. Proper mitigation measures like dust suppression measures and erosion control measures need to be followed during the earthwork excavation. For erosion control measures three different schemes have been proposed as per the steepness of the slope as under:
  - (i) Slope up to 30 degree Coir Mat Erosion Control Blanket
  - (ii) Slope between 30 and 45 degree Coir Mat Erosion Control Blanket + Double Twist Steel Wire Mesh.
  - (iii) Slope more than 45 degree 3 D Turf Mat + Double Twist Steel Wire Mesh.

A rectangular concrete drain has been proposed along the runway on either side to facilitate the drainage of storm water.

- 6.0 Dust generated by construction activities will be controlled by implementing the following mitigation measures:
  - Water trucks (for sprinkling of water) are to be used when necessary during clearing, grading, earth moving, excavation, or transportation of cut or fill materials, to prevent dust from leaving the site and to create a crust after each day's activities cease;
  - ii. During construction, water trucks shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site;
  - iii. Stockpiled earth material shall be sprayed with water to minimize dust generation. During construction, the amount of disturbed area shall be minimized;
  - iv. Onsite vehicle speeds should be reduced to 10 kmph or less;
  - v. Exposed ground areas (that are left exposed after project completion) should be sown with a fastgerminating native grass seed and watered until vegetation is established.
  - vi. After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or re-vegetation or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized;
  - vii. Grading and scraping operations shall be suspended when necessary to minimize dust generation;
- viii. All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible.
- ix. Crusher plant shall be located at least 500m away from the habitation and on the barren land so as to avoid / cause minimum damage to the population during construction.
- x. Contractor operating the crusher plant would fulfill the requirements laid down by Himachal Pradesh State Pollution Control Board in terms of pollution control in operating the crusher plant.

- xi. Every day the haul road at the construction site be inspected and the debris left by the trucks to be removed as early as possible
- Out of which, total fresh water requirement from Public Health Department water supply will be 14.7 m³/day and remaining water requirement 7.75 m³/day will be met from recycled/treated water. Sewage generation will be 19.45 m³/day, which will be treated in packaged Sewage Treatment Plant (STP). Some part of the storm water from terminal building, and fire station will be collected separately for rain water harvesting. The remaining storm water discharges into the nallas through storm water drains. Generation of solid waste will be 63 kg/day. The collected solid waste shall be disposed regularly at designated solid waste treatment site of the town, which is at an aerial distance of 6.0 km from the airport. Waste /used oil, from the DG set will be sent to the authorized recyclers/re-processor.
- 8.0 Public consultation/public hearing was exempted as per para 7 (ii) of EIA Notification, 2006.
- 9.0 All the projects related to Airports are listed at 7(a) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level.
- 10.0 The proposal was considered by the Expert Appraisal Committee (Infrastructure) in its meetings held during  $22^{nd}$   $24^{th}$  December, 2014 and  $24^{th}$   $25^{th}$  October, 2016 respectively. Project Proponent and the EIA Consultant namely M/s RITES Ltd., have presented EIA / EMP report as per the TOR. EAC has found the EIA / EMP Report and additional information to be adequate and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.
- 11.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006, subject to the compliance of the following Specific and General Conditions:

## A. SPECIFIC CONDITIONS:

- 'Consent for Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- ii. PP shall obtain clearance from DGCA and 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 minimised. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical). Top soil shall be separately stored and used in the development of green belt.
- viii. Construction activities schedule shall be planned in such a way that the area of exposed soil is minimised during time of the year potential for erosion is high for example during summer when intense rainstorms are common.
- ix. Stabilize the site and install and maintain erosion control so that they remain effective during any pause in construction. This is particular important if the project stops during wetter month.

- x. A detailed drainage plan for rain water shall be drawn up and implemented.
- xi. 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.
- xii. Where an activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.
- xiii. 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.
- xiv. 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 of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- xv. 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.
- xvi. Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc shall be provided.
- xvii. The run off 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.
- xviii. 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.
- 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.
- xx. 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.
- xxi. 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.
- xxii. The solid wastes shall be segregated as per the norms of the solid waste management and handling rules. 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.
- xxiii. 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.
- xxiv. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.
- xxv. 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. Use of solar panels may be done to the extent possible.

## B. GENERAL CONDITIONS:

- (i) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.
- (ii) No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. 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 the 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 plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- (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 the conditions stipulated by the Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.
- (vi) 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.
- (vii) A copy of 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 suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- (viii) The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions.
- (ix) 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- 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 the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local

- newspapers 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.
- (xi) 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 the land development work.
- 8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 9.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 10.0 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.
- 11.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water 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.

(A N Singh) Scientist 'D'

## Copy to:-

- The Principal Secretary, Department of Environment, Science and Technology Narayan Villa, Near Wood Villa Palace, Chhota Shimla, Shimla, Himachal Pradesh-171002
- The Addl. Principal Chief Conservator of Forests (Central), Regional Office (Northern Zone), Bay No.24-25, Sector 31-A, Dakshim Marg, Chandigarh-160030.
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi 110 032.
- 4. The Chairman, Himachal Pradesh State Pollution Control Board, Him Parivesh, Phase-III, New Shimla-171009, Himachal Pradesh (INDIA)
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi.

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(A N Singh) Scientist 'D'