## F. No. 10-29/2017-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: 17<sup>th</sup> August, 2017

To.

M/s Delhi Mumbai Industrial Corridor Development Corporation,

Room No. 341-B, 3rd Floor, Hotel Ashok, Diplomatic Enclave, 50-B Chanakyapuri, New Delhi-110 021

Email: ceo@dmicdc.com

Development of Bhiwadi International Airport near Bhiwadi, Distt. Rajasthan by Delhi Mumbai Industrial Corridor M/s Development Corporation (DMICDC) - Terms of Reference - reg.

Sir.

This has reference to your proposal No. IA/RJ/MIS/64611/2017 dated 10th May, 2017, submitted to this Ministry for seeking Terms of Reference (ToR) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

- The proposal for grant of Terms of Reference (ToR) to the project 'Development of Bhiwadi International Airport near Bhiwadi, Distt. Alwar, Rajasthan promoted by M/s Delhi Mumbai Industrial Corridor Development Corporation (DMICDC) was considered by the Expert Appraisal Committee (Infra-2) in its meeting held on 27-29 June, 2017.
- The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said meeting, are under:-
- (i) The proposal is for Development of Bhiwadi International Airport near Bhiwadi, Distt. Alwar, Rajasthan by M/s Delhi Mumbai Industrial Corridor Development Corporation (DMICDC). The coordinates are 28° 0'23.50"N and 76°47'2.88"E. Total land required for the project is 2074 ha, out of which 1037 ha land will be used for the first phase. The land has been identified for the airport based on the pre-feasibility study conducted by Airports Authority of India in consideration of the operational requirements. Ministry of Civil Aviation has granted approval of 'Site Clearance' and the Ministry of Defence has accorded 'No Objection Certificate' for the proposed airport.
- (ii) The Project components are:
  - Runway: 18 Ha
  - Taxiway: 13.6 ha
  - 3. Apron: 36.3 ha
  - 4. Terminal Building: 1.5 ha
  - ATC and Admin Building: 0.3 ha
  - 6. Hanger: 3.0 ha
  - 7. Offices: 2.0 ha
  - 8. ESS and Power Station: 4.0 ha
  - 9. Fuel Farm; 6.0 ha

- 10. Crash Fire Rescue: 0.065 ha
- 11. STP: 1.0 ha
- 12. Cargo Building: 0.3 ha
- 13. Cargo Aircraft Apron: 5.2 ha
- 14. Space for Defence: 4.0 ha
- 15. Isolation Bay: 1.0 ha
- 16. Space for Commercial Development: 31.4 ha
- 17. Parking: 8.5 ha
- (iii) The project area falls within 15 km from Critically Polluted Area-Bhiwadi Industrial Cluster. The Critically Polluted Area is 9.5 km from the proposed Airport boundary.
- (iv) Water requirement during Operation will be 5000 KLD (Drinking Water: 961 KLD & Gardening: 3500 KLD and others 539 KLD) Fire Fighting Requirement: 5000 KL. It will be sourced from Ground water
- (v) Sewage will be treated through Septic Tank and Soak Pit during construction and STP during operation.
- (vi) Solid waste generated during construction and operation of the project will be disposed at nearby SWM Facility.
- (vii) Electricity Power Supply will be provided by Electricity Board.
- (viii) Rehabilitation is involved in which about 6 villages need to be displaced.
- (ix) No forest land required for the project.
- (x) Court cases if any Nil
- (xi) Investment/Cost of the project is Rs. 2500 Crore (250,000 Lakhs)
- (xii) **Employment** potential: About 10000 technical staff required during operation phase @ 1000 staff per one million annual passengers (MAP).
- (xiii) Benefits of the project: Airport development will generate multiple commercial benefits. Air transport facilitates the growth of many industries and delivers real benefits that can be measured in economic output and jobs. At the local level benefits accrue in terms of airport and air traffic related commercial activities providing jobs, profits and welfare.
- 4. The EAC, in its meeting held on 27<sup>th</sup>-29<sup>th</sup> June, 2017, after detailed deliberations, recommended the project for grant of ToR as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following ToR in addition to Standard ToR for preparation of EIA-EMP report. As per the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords ToR to the project 'Development of Bhiwadi International Airport near Bhiwadi, District Alwar, Rajasthan promoted by M/s Delhi Mumbai Industrial Corridor Development Corporation (DMICDC) for preparation of the Environmental Impact Assessment (EIA) Report and Environmental Management Plan (EMP) with the following specific and general conditions in addition to Standard ToR provided at Annexure -1:
- (i) Importance and benefits of the project.
- (ii) A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet (including all eco-sensitive areas and environmentally sensitive places).

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- (iii) Layout maps of proposed project indicating runway, airport building, parking, greenbelt area, utilities etc.
- (iv) Cost of project and time of completion.
- (v) The EIA report will give a justification of the land requirements for the project. It will also provide the guidelines, if any, developed by the Airport Authority of India regarding land requirements for airports in India and the conformity status with regards to the land provisions proposed.
- (vi) A management plan for the conservation of top soil in the cut and fill operations proposed. Area has a contour difference of about 20 m hence management of leveling and surplus/deficit of earth be given including Top soil preservation.
- (vii) Details on environmental problems, compliance status and improvement plans, if any for the existing airport which is planned to be retained.
- (viii) A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices.
- (ix) Electro-mechanical doors to be explored for the toilets meant for disabled persons.
- (x) Details of emission, effluents, solid waste and hazardous waste generation and their management. Air quality modelling and noise modelling shall be carried out for the emissions from various types of aircraft.
- (xi) Classify all Cargo handled as perishable, explosive, solid, petroleum products, Hazardous Waste, Hazardous Chemical, Potential Air Pollutant, Potential Water Pollutant etc. and put up a handling and disposal management plan.
- (xii) Noise monitoring shall be carried out in the funnel area of flight path.
- (xiii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- (xiv) Water bodies should not be disturbed.
- (xv) The E.I.A. should specifically address to vehicular traffic management as well as estimation of vehicular parking area.
- (xvi) Details of fuel tank farm and its risk assessment.
- (xvii) R&R plant for displaced families be given as per Gol rules.
- (xviii) An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 05 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organisation of repute and specialising in Transport Planning shall be

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- submitted with the EIA. The Plan to be implemented to the satisfaction of the State Urban Development and Transport Departments shall also include the consent of all the concerned implementing agencies.
- (xix) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- (xx) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- (xxi) A tabular chart with index for point wise compliance of above TOR.

## General Guidelines

- (i) The EIA document shall be printed on both sides, as for as possible.
- (ii) All documents should be properly indexed, page numbered.
- (iii) Period/date of data collection should be clearly indicated.
- (iv) Authenticated English translation of all material provided in Regional languages.
- (v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the ToR.
- (vi) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- (vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues in ToR and that raised in Public Hearing. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific TOR prescribed by Ministry and the issue raised in the P.H. have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- (viii) Grant of ToR does not mean grant of EC.
- (ix) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (x) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed ToRs (ToR proposed by the project proponent and additional ToR given by the MoEF&CC) have been complied with and the data submitted is factually correct (Refer MoEF&CC Office memorandum dated 4<sup>th</sup> August, 2009).
- (xi) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through

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which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF&CC Office Memorandum dated 4<sup>th</sup> August, 2009). The project leader of the EIA study shall also be mentioned.

- (xii) All the ToR points as presented before the Expert Appraisal Committee (EAC) shall be covered.
- 5. The above ToR should be considered for the project 'Development of Bhiwadi International Airport near Bhiwadi, Distt. Alwar, Rajasthan promoted by M/s Delhi Mumbai Industrial Corridor Development Corporation (DMICDC), in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.
- 6. A detailed draft EIA/EMP report should be prepared in terms of the above additional ToR and should be submitted to the State Pollution Control Board for conducting Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- 7. The project proponent shall submit the detailed final EIA/EMP prepared as per ToRs to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.
- 8. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/ Laboratories including their status of approvals etc. vide Notification of the MoEF&CC dated 19.07.2013.
- 9. The prescribed ToR would be valid for a period of three years for submission of the EIA/EMP Reports.

(Kushal Vashist)
Director

## Copy to:

The Member Secretary, Rajasthan Pollution Control Board, Paryavaran Bhavan, 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur (Rajasthan), Pin- 302 004, E-mail:- member-secretary@rpcb.nic.in

and

## 7(a): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR AIRPORTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

- (i) Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental angle, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.
- (ii) Details of the land use break-up for the proposed project. Details of land use around 10 km radius of the project site. Examine and submit detail of land use around 10 km radius of the project site and map of the project area and 10 km area from boundary of the proposed/existing project area, delineating project areas notified under the wild life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/inter state boundaries and international boundaries.. Analysis should be made based on latest satellite imagery for land use with raw images.
- (iii) Submit the present land use and permission required for any conversion such as forest, agriculture etc. land acquisition status, rehabilitation of communities/ villages and present status of such activities. Check on flood plain of any river.
- (iv) Examine and submit the water bodies including the seasonal ones within the corridor of impacts along with their status, volumetric capacity, quality likely impacts on them due to the project.
- (v) Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area, any obstruction of the same by the airport.
- (vi) Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/ villages and present status of such activities.
- (vii) Examine the impact of proposed project on the nearest settlements.
- (viii) Examine baseline environmental quality along with projected incremental load due to the proposed project/activities
- (ix) Examine and submit details of levels, quantity required for filling, source of filling material and transportation details etc. Submit details of a comprehensive Risk Assessment and Disaster Management Plan including emergency evacuation during natural and man-made disaster integrating with existing airport
- (x) Examine road/rail connectivity to the project site and impact on the existing traffic network due to the proposed project/activities. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- (xi) Submit details regarding R&R involved in the project
- (xii) Examine the details of water requirement, use of treated waste water and prepare a water balance chart. Source of water vis-à-vis waste water to be generated along with treatment facilities to be proposed.
- (xiii) Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.



- (xiv) Examine details of Solid waste generation treatment and its disposal.
- (xv) Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- (xvi) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xvii) Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- (xviii) Examine baseline environmental quality along with projected incremental load due to the proposed project/activities.
- (xix) The air quality monitoring should be carried out as per the notification issued on 16<sup>th</sup> November, 2009.
- (xx) Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- (xxi) Submit details of corporate social responsibilities (CSR)
- (xxii) Submit details of the trees to be cut including their species and whether it also involves any protected or endangered species. Measures taken to reduce the number of the trees to be removed should be explained in detail. Submit the details of compensatory plantation. Explore the possibilities of relocating the existing trees.
- (xxiii) Examine the details of afforestation measures indicating land and financial outlay. Landscape plan, green belts and open spaces may be described. A thick green belt should be planned all around the nearest settlement to mitigate noise and vibrations. The identification of species / plants should be made based on the botanical studies.
- (xxiv) Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- (xxv) A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
- (xxvi) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- (xxvii) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- (xxviii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Airport".

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