

EXECUTIVE SUMMARY

1. INTRODUCTION

The EIA report has been prepared as per TOR (Terms of Reference) grant in addition to “Generic Structure of EIA/EMP/RA Report” required by the Ministry of Environment & Forest, Government of India as per the general condition stipulated in the EIA notification dated 14.09.2006.

2. PROJECT DESCRIPTION

Airports Authority of India has proposed to develop a new Greenfield Airport at Doloo, Silchar. The current airport at Silchar belongs to IAF and AAI operates a civil enclave from 70.66 acres of land. Operators like Indigo, Air India & Spicejet are presently operating 80 flight movements in a week. It is suitable for the operation of A-320 type of aircraft. The Terminal Building at the current airport is likely to saturate soon and due to land constraints, there is no further scope of expansion of the Civil Enclave.

Table 1: Project Details

| 1 Nature and size of the Project | | | |
|--|--|-----------------|------------------|
| Name of the project | Development of New Greenfield Airport at Doloo, Silchar, Cachar district, Assam by Airports Authority of India | | |
| Category of the Project | As per EIA Notification dated 14th Sept., 2006 as amended from time to time; the project falls in Category A, Activity 7(a). | | |
| 2 Location Details | | | |
| Village /Town/Plot No. | Village-Doloo | | |
| Tehsil | Silchar Sadar | | |
| District | Cachar | | |
| State | Assam | | |
| Latitude and Longitude | Points | Latitude | Longitude |
| | Core | 24°55'56.85"N | 92°48'52.40"E |
| Toposheet No. | G46016, G46012, G46U13 & G46U9 | | |
| 3 Area Details | | | |
| Total Project Area | 997.4 Acres | | |
| 4 Environmental Setting Details (with approximate aerial distance & direction from plant site) | | | |
| Nearest Settlement | Mulidahar Grant village adjacent towards SW direction. | | |
| Nearest Highway | NH-27 parallel adjacent towards South direction. SH-38 at 8.3 km distance towards SW direction. | | |
| Nearest Railway station | Moinarband Railway Station 8.3 km in South | | |

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| | | direction. |
| | Nearest Airport | Silchar Airport at 14 kms towards East direction. |
| | National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc. within 10 km radius | Barail Wildlife Sanctuary at 3.3 Kms towards North direction. |
| | Nearby Water Bodies | Dalu River adjacent towards East direction. |
| | Defence Installations | None within 10 km radius from Centre of plot |
| | Seismic Zone | Zone V |
| 5 | Cost Details | |
| | Total Cost of the Project | 1400.0 Crores |
| | Budget for EMP (construction+ Operation) | Capital Cost of Rs. 30 Cr. |
| 6 | Basic Requirements for the project | |
| | Fresh Water (m ³ /day) | 203 KLD (Source: Ground Water) |
| | Manpower | During Construction: 10 (permanent) + 350 (temporary) During Operation: 40 (permanent) |
| | Electricity Requirement | 3000 kVA or 2400 kW Source: State Electricity Board |
| | Power Backup | DG Sets - 4 x 1,250 kVA (3W+1S) Solar Power - 500 kWP (20.83%) |
| | Working Days | 365 days |

Project Proponent:

Table 2: Project Proponent Details

| | |
|--------------------|---|
| Name | Mr. M.C. Singh |
| Designation | APD, Silchar Airport |
| Registered Address | Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi 110003 |
| Project Address | Doloo, Silchar, Cachar district, Assam |
| Mobile No. | 9435700587 |
| Mail Id | apdsilchar@aai.aero |

Process Description and Technology:

AAI has to develop New Greenfield Airport for Code-4C at Doloo, Silchar, Assam. Total land of 997.4 acre has been earmarked for the development of Proposed Airport.

Existing Facilities

Existing Airport is located at Kumbhirgram, about 22 km from Silchar. The current airport at Silchar belongs to IAF and AAI operates a civil enclave from 70.66 acres of land. Operators like Indigo, Air India & Spicejet are presently operating 80 flight movements in a week. It is suitable for the operation of A-320 type of aircraft.

Proposed Facilities

Airport Authority of India has proposed to develop a new Greenfield Airport at Doloo, Silchar as the existing Terminal Building at the current airport is likely to saturate soon and due to land constraints, there is no further scope of expansion of the Civil Enclave.

The proposed site for development of the Greenfield airport for Code-4C is located at 22 km away from the Current Civil Enclave. A total land area of 997.4 acres has been earmarked for the development of the proposed Airport.

3. DESCRIPTION OF THE ENVIRONMENT**Table 3: Summary of Baseline Monitoring Study**

| S. No | Parameters | Baseline Status |
|---|---|---|
| 1. | Ambient Air Quality | |
| i. | PM10 | 27.0 ug/m ³ to 47.0 ug/m ³ |
| ii. | PM2.5 | 11.0 ug/m ³ to 25.8 ug/m ³ |
| iii. | SO ₂ | 4.2 ug/m ³ to 15.2 ug/m ³ |
| iv. | NO ₂ | 9.4 ug/m ³ to 23.06 ug/m ³ |
| v. | CO | 0.42 mg/m ³ and 0.93 mg/m ³ |
| Values are well within the stipulated standard of CPCB. | | |
| 2. | Noise Level Monitoring | |
| i. | Day Time (6:00 a.m. to 10:00 p.m.) | 47.24 Leq dB to 53.75 Leq dB |
| ii. | Night Time (10:00 p.m. to 6:00 a.m.) | 38.12 Leq dB to 42.8 Leq dB |
| The observed noise levels were found slightly higher than the stipulated standards of CPCB. | | |
| 3. | Soil Quality and Characteristics | |
| i. | pH | 7.15 to 7.59 |
| ii. | Organic Matter | 0.58% to 0.94% |
| iii. | Nitrogen | 162.79 Kg/ha. to 195.15 Kg/ha. |
| iv. | Phosphorus | 17.12 Kg/ha. to 29.15 Kg/ha. |
| v. | Potassium | 140.00 Kg/ha. to 163.15 Kg/ha. |
| 4. | Ground Water | |
| i. | pH | 7.51 to 7.88 |
| ii. | Total Hardness | 148 mg/l to 157 mg/l |
| iii. | Total Dissolved Solids | 213 mg/l to 222 mg/l. |
| 5. | Surface Water | |
| i. | pH | 7.44 to 7.78 |

| | | |
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| ii | Total Hardness | 216.0 mg/l to 288.0 mg/l |
| iii | Total Dissolved Solids | 397 mg/l to 679 mg/l |
| iv | BOD | 20 to 38(mg/l) |
| v | COD | 62 to 82 (mg/l) |
| The concentrations were found to be within permissible limits (Compared with IS 10500:2012) | | |

4. ANTICIPATED ENVIRONMENTAL IMPACT AND MITIGATION MEASURES

Table 4: Environmental Impact and Mitigation Measures

| S. No. | Particulars | Mitigation measures to be adopted |
|--------|-----------------------------|---|
| 1 | Air Environment | <ul style="list-style-type: none"> • ICAO emission standards will be maintained at the airport • Efforts will be done to reduce the use of fuel to save money and reduce emission • Single engine taxing will be adopted at the airport • Engine will be shut down during idling • Airport will be designed to reduce the taxing length of aircraft • Proper signage will be displayed at the airside for movement of vehicles and aircraft • Low Sulphur Diesel will be used in DG set • Regular Vehicle pollution check will be done for vehicle used in airside • Proper traffic management plan will be prepared to ensure no traffic congestion at internal road and NH-27. • Stack height to the DG set as per CPCB guideline will be provided • Wide access pathways and sufficient nos. of exit & entry shall be provided to minimize the congestion • All measures will be adopted to reduce fugitive emission during handling and refuelling of fuel. |
| 2. | Water Environment | <ul style="list-style-type: none"> • Proper oil & grease interceptors have been installed at wastewater outlet from the fuel depots, hotels/restaurants, and flight catering. The wastewater will be passed through oil and grease interceptors and then routed to STP. Sludge will be removed regularly and after appropriate treatment it will be used as manure. • Proper drainage will be provided to mitigate the impacts which can be due to run-off of the storm water. |
| 3. | Hazardous Waste Environment | <ul style="list-style-type: none"> • Used oil will be send to authorized recycler identified by SPCB. • Sludge from STP can be used in-house in green belt plantation. • Discarded Containers/ Empty Barrels will be sent to vendors/ SPCB approved scrap dealer. |
| 4. | Noise Environment | <ul style="list-style-type: none"> • Personal protective equipment-like ear plugs and ear muffs will be provided to employees working in the noise prone areas. • Time to time oiling and servicing and Maintenance of machineries will be done. |

| | | |
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| | | <ul style="list-style-type: none"> Acoustic enclosure for heavy machines/ equipment/ DG sets would be used. The Noise free machines of latest technology will be installed A high standard of maintenance and proper lubricants will be practiced for plant machinery and equipment, which helps to avert potential noise problems. |
| 5. | Occupational Health & Safety | <ul style="list-style-type: none"> All safety signs will be placed at proper location. First aid kits will be made available at every department. Pre-employment medical check-up and periodical medical check-up shall be undertaken to know the occupational health hazards at the early stage. A well-developed firefighting system is already Implemented at the airport premises. Apart from all engineering control measures, if required necessary PPEs shall be provided as last protection measures to the employees. Good housekeeping also plays important role in avoiding the undesirable incidences / accidents, hence good housekeeping practices will be employed throughout the Airport premises |

5. ANALYSIS OF ALTERNATIVES

A team of officials from AAI consisting of Shri Varun Lau, JGM(Arch), Shri Manjit Singh DGM (ATM)-(PLG), Shri Soumen Poddar, AGM(ATM), Shri Sunil Kumar SM(Ops), RHQ NER and Shri Rajpal Lavasia Manager Engg. (Civil)CHQ-NER along with the officials from State Government of Assam carried out study at sites identified by State Government namely Doloo Tea estate, Khoreel Tea estate and Silcoorie Tea estate from 20.01.2020 to 22.01.2020. As per site analysis based on parameters like connectivity, physical features, and planning aspects, Doloo Tea estate site can be considered for development of Greenfield Airport at Silchar compared to Khoreel Tea estate and Silcoorie Tea estate site.

6. ENVIRONMENTAL MONITORING PROGRAM

Monitoring of environmental samples will be done as per the guidelines provided by MoEF&CC/ CPCB. The method followed will be recommended/standard method approved/recommended by MoEF&CC/CPCB/SPCB.

Table 5: Environmental Monitoring Program

| S. No. | Environmental Components | Monitoring Points/Locations |
|--------|--------------------------|---|
| 1. | Ambient Air | 8 locations (upwind, downwind & crosswind directions) within 10 km radius around the project site |
| 2. | Water | Ground water samples were collected from 6 different locations and Surface Water quality |

| | | |
|----|----------------------------|---|
| | | from 7 locations (including upstream & Downstream) within the study area. |
| 3. | Noise | 8 locations within 10 km radius around the project site. |
| 4. | Greenbelt/Vegetation Cover | Greenbelt area around the project boundary & lawn area. |
| 5. | Soil | 6 locations within 10 km radius around the project site. |

7. ADDITIONAL STUDIES

This report is prepared based on the one non-monsoon season (three months) baseline monitoring data during 1st October to 31st December 2023, Post-monsoon season, by field study. Data from the secondary sources are used for comparison between present environmental conditions and our laboratory results. The data includes meteorological conditions, ambient air quality, noise, water quality and soil quality. Site survey has been conducted for studying the flora and fauna, socio- economic conditions land use etc. Additional information is also collected from several agencies and departments, both under State and Central Governments pertaining to above. The collected data have been analysed in detail for identifying, predicting, and evaluating the environmental impacts of the proposed project. The anticipated impacts on environment are assessed and suitable environmental management plan has been suggested.

8. PROJECT BENEFITS

Direct and indirect employment opportunities will be generated which will result in the growth and development of the surrounding areas.

Special emphasis on financial and social benefits will be given to the local people including the tribal population, if any, in the area. Development of social amenities will be in the form of medical facilities, education, and the creation of self-help groups.

9. ENVIRONMENT MANAGEMENT PLAN

Airports Authority of India has committed to implement all the pollution control measures to protect the surrounding environment. The project can improve the regional, state, and national economy. Industrial growth is an indication of socio-economic development. The implementation of this project will improve the physical and social infrastructure of the surrounding area.

The tentative total capital investment on environmental control measures is envisaged to be about 30 crores (approx. 4.3 crores during construction phase & Rs 25.7 Crores during operation phase) which is about 2% out of a total proposed project cost i.e., **Rs 1400.0 Crores.**