

WEST BENGAL POLLUTION CONTROL BOARD

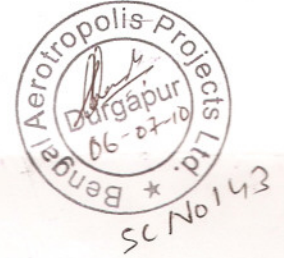
Paribesh Bhawan
10A, Block-LA, Sector-III
Bidhannagar, Kolkata-700 098

Memo No. 417 2N-07/2009(E)

Dated 30/06/2010



From :
Member Secretary,
West Bengal Pollution Control Board



To : M/s. Bengal Aerotropolis Projects Ltd.
7/5, Bengal Ambuja Housing Complex 'Urvashi'
City Centre, Durgapur-713216.

Sub : Consent to Establish (NOC) from Environmental Point of View

Ref : Your letter No. BAPL/DGP/AIRPORT(ENV)/WBPCB/10 Dated 31.05.2010
11/265

Dear Sirs,

In response to the application for Consent to Establish (NOC) for proposed Unit of M/s Bengal Aerotropolis Projects Ltd. for manufacturing/storage/installation development of Domestic Airport "AEROTROPOLIS COMPLEX" at Mouza-Khandra, Ukhra, Amlouka, Banguri, Patsaora, Dakshinkhanda, * this is to inform you that this Board hereby grants the Consent to Establish (NOC) from the environmental point of the above subject to the following conditions and special conditions annexed.
***PS-Andal & Faridpur, Dist-Burdwan, West Bengal.**

1. The quality of sewage and trade effluent to be discharged from your factory shall satisfy the permissible limits as prescribed in IS : 2490 (Pt. I) of 1974, and/or its subsequent amendment and Environment (Protection) Rules 1986.
2. Suitable measures to treat your effluent shall be adopted by you in order to reduce the pollutional load so that the quality of the effluent satisfies the standards mentioned above.
3. You shall have to apply to this Board for its consent to operate and discharge of sewage and trade effluent according to the provisions of the water (Prevention & Control of Pollution) Act, 1974. No sewage or trade effluent shall be discharged by you without prior consent of this Board.
4. All emission from your factory shall conform to the standards as laid down by this Board.
5. No. emission shall be permitted without prior approval of this Board and you shall apply to this Board for its consent to operate and atmospheric emission as per provision of the Air (Prevention & Control Pollution) act, 1981.
6. No industrial plant, furnace, flues, chimneys, control equipment, etc. shall be constructed/reconstructed/erected/re-erected without prior approval of this Board.

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CHIEF ENGINEER (PLANNING)
W. B. POLLUTION CONTROL BOARD

OC NO82454

7. You shall comply with
- (i) Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
 - (ii) Water (Prevention and Control of Pollution) Cess Act, 1978, if applicable.
 - (iii) Environment (Protection) Act, 1986
 - (iv) Environment (Protection) Rules, 1986
 - (v) Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000
 - (vi) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000
 - (vii) Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms or Cell Rules, 1989
 - (viii) The Public Liability Insurance Act, 1991 and Amended Act, 1992
 - (ix) The Public Liability Insurance Rules, 1991 and Amended Rules 1993
 - (x) Biomedical Wastes (Management & Handling) Rules, 1998 and Amended Rules 2000 if applicable.
 - (xi) Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
 - (xii) Ozone Depleting Substances (Regulation & Control) Rules, 2000, if applicable
8. You will have to abide by any other stipulations as may be prescribed by any authority/local bodies/Government Departments etc.

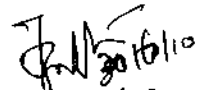
SPECIAL CONDITION:

please refer to Annexure

Gross capital investment Rs.1128.175 million.

Any violation of the aforesaid conditions shall entail cancellation of this Consent to Establish (NOC)

Yours faithfully,


(Chief Engineer (Plng.))
Member, Pollution Control Board
West Bengal
W. B. POLLUTION CONTROL BOARD
KOLKATA - 700 098
Dated

2N-07/2009 (E)

Memo No.

Copy forwarded for information to :

1. Chief Inspector of Factories, Government of West Bengal, N. S. Building, Kolkata-700 001
2. Director of Industries/Director of Cottage & Small Scale Industries, Government of West Bengal, N. S. Building, Kolkata-700 001
3. Guard file, West Bengal Pollution Control Board.
4. Environmental Engineer, I/II/Alipur R.O./Howrah R.O./Hooghly R.O./B.R.O./D.R.O./Haldia R.O./S.R.O./Malda R.O./Asansol Sub-R.O./WBPC Board

Himalaya Bhawar
Delhi Road, Dankuni
Dist. Hooghly

Vill, Panpur
Kalyani Expressway
P.O. Narayanpur
Dist. 24 Pgs. (N)

Sahid Khudiram Sarani
City Centre, Durgapur-16
Dist. Burdwan

7, Haradeb Bhattacharjee
Lane, P.S.-Shibpur
Howrah-711102

Paribesh Bhawan
10A, LA-Block, Sector-III
Bidhannagar
Kolkata-700 098

Block-05 at 40
Flats Complex
Adjacent to Priyambada
Housing Estate
P.O. : Khanjanchak,
P.S. Durgachak
Haldia-721602
Dist. : Purba Medinipur

Paribahan Nagar
Matigara, Siliguri
Dist-Darjeeling

10, Carnac Street
2nd Floor
Kolkata-700 017

Satya Chowdhury
Indoor Stadium
Balurchar Bandh Road
Malda-732101

Asansol Sub-Regional Office
Ghanty Mansion (2nd Floor)
60, G. T. Road
Asansol-713 301


(Chief Engineer (Plng.))
Member, Pollution Control Board
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A. Emission:-

1. DG Sets - 4 nos. 1350 KVA.

Stack –

- i. DG sets to be provided with acoustic enclosures and residential silencer.
- ii. Stacks to have sampling port, platform and ladder as per the Emission Regulation Part - III of CPCB.
- iii. Emission standards, Fuel specification and Stack height should comply with the prescribed limits under the notification of Ministry of Environment & Forest, Govt. of India, G.S.R. 489(E) [09.07.2002] and subsequent amendments.

B. Effluent:-


Domestic – wastewater shall be treated in STP. Treated wastewater shall be completely reused for landscaping, flushing, HVAC etc. Zero discharge of effluent shall be practised. Treated sewage shall conform to E(P) Rules. Sewage Treatment Plants should be monitored on a regular basis.

C. Solid Waste :-

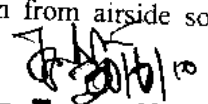
- i. The proponent should abide by the Municipal Solid Wastes (Management and Handling) Rules, 2000. Aircraft waste should be handled and disposed in such a way so that it does not pose any environmental, health and safety risks. Terminal building waste should be handled and disposed in consultation with the concerned local authority. Avoidance and minimization of waste generation should be implemented where ever possible.
- ii. The proponent must follow a comprehensive Solid Waste Management and Disposal Scheme including collection, storage, segregation of biodegradable and non-biodegradable wastes. The proponent should provide different coloured bins for different categories of waste and ensure complete segregation of biodegradable and non-biodegradable wastes. The solid waste from different collection and storage bins should be finally collected at transfer stations. Further segregation will be done at transfer stations to collect recyclables such as plastic, polythene, glass, metals, textiles, rubbers, leathers, paper etc. Separate compartments shall be provided for each type of recyclables.
- iii. Proper waste management plan should be in place which should include timely removal of waste, cleaning and maintenance of waste storage and handling areas, maintenance of database on the quantities of waste generated, recycled and disposed etc. The authority should take necessary actions for proper disposal of garbage in consultation with the concerned local authorities to avoid chances of aircraft bird hit.
- iv. The hazardous wastes should be stored separately in isolated covered facilities and disposed off as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. The hazardous wastes should be disposed off through registered recyclers only.
- v. Various types of electrical and electronic wastes generated in the buildings, which includes PC, Xerox machine components etc. should be collected separately for transportation to the authorized recyclers approved by the State / Central Pollution Control Boards. There should also be provision for storage of these wastes in the building before transportation. The e-waste collected should be processed in authorized recycling unit. The proponent should abide by the Direction issued by the Department of Environment, Government of West Bengal, vide No. EN/2348:T-IV-3/003/2009 dated 09.09.2009.

D. General:-

1. The Project Proponent shall have to obtain prior concurrence from the concerned authority for ensuring supply of water and disposal of solid wastes.
2. ICAO requirements for noise management at airports are to be followed. Reduction of noise at source should be achieved through proper land use planning, restrictions on the use of the noisiest aircrafts etc. Noise control measures such as noise absorbing building material in closed buildings, noise barriers in ground run bays, acoustic enclosures


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- for DG sets, ear plugs for operating personnel etc. are to be ensured. The Project Proponent should ensure that the ambient noise level is maintained within permissible limits during the construction and operation phases.
3. The proponent should strictly comply with the standards / guidelines for control of noise from stationery Diesel generator sets. These standards and guidelines are prescribed under the notifications of Ministry of Environment & Forest, Govt. of India, G.S.R. 371(E) [17.05.2002], G.S.R. 489(E) [09.07.2002] and subsequent amendments. The proponent should obtain necessary clearance for DG Sets from the Directorate of Electricity before applying for Consent-to-Operate.
 4. The following activities are restricted during the night time (10 P.M. to 6 A.M.), if there is significant human settlement in the vicinity
 - a) Piling work.
 - b) Operation of Ready Mix Plant, if installed and Vibrator.
 - c) Loading and unloading of construction materials.
 5. Fly Ash is to be used for construction as per Notification No. S.O. 763(E) dated 14.09.1999 amended vide Notification No. S.O. 979(E) dated 27.8.2003 and S.O. 2804(E) dated 03.11.2009 of the Ministry of Environment & Forests, Govt. of India.
 6. The project proponent should take necessary care not to cause any inconvenience to the residents of surrounding neighbourhood. Regular supervision should be in place all through the construction phase so as to avoid disturbance to the surroundings. Adequate measures are to be taken to reduce vibration during piling work.
 7. Necessary dust barrier should be provided during construction phase. Before taking up the construction work it is preferable to enclose the area with some enclosure. Provision of screen wall should be made surrounding the batching plant, if installed for control of fugitive emission from such operation.
 8. Water sprinkling arrangement should be ensured at every loading and unloading point to prevent spreading of dust. Rubbish, debris, broken materials and others must be kept properly within project area at suitable place with proper water sprinkling to prevent fugitive dust spreading.
 9. Provision of drinking water, wastewater disposal and solid waste management should be ensured for labour camps. Proper sanitation facilities should be provided for construction workers to ensure environmental sanitation. Health and safety of the workers should be ensured during construction.
 10. The Project Proponent will ensure that no accumulation of any kind of water occurs within the project area to prevent breeding of various disease spreading vectors. Appropriate arrangement is to be done for rainwater harvesting within the site. The proponent must practice rainwater harvesting on regular basis. Water bodies, if any, should not be filled up with out prior permission from the concerned authority. No water body should be lined and no embankments should be cemented. The water body, if any, is to be kept in natural condition without disturbing the ecological habitat.
 11. Total water requirement shall not exceed that mentioned in the Environmental Clearance. Ground water should not be abstracted without prior permission of the Local body as well as the Competent Authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
 12. Adequate stormwater drainage network to be designed for the project without disturbing the surrounding settlements. Storm water management plan should be implemented so as to prevent sudden discharge of excessive volumes of storm water to the receiving waters thus reducing the shock load on the local drainage system and impact on receiving water body. Storm water drain and check dams may be constructed to arrest the flow of silt loads emanating from airport during monsoon season. The cargo areas should be paved. Impervious roads, lined impervious drains should be provided. The surface drains should be routed to settlement tank/ pits etc.
 13. The decisions of the Public Hearing should be implemented. Adequate arrangements should be made for alternative drainage system before initiation of realignment of existing Tamla Nala, to avoid any drainage problem in the surrounding and or downstream area. The realignment of Tamla Nala should be taken up only after obtaining necessary permission from appropriate authority and ensuring adequate provisions for substitute drainage system.
 14. Mitigation measures for controlling emissions from operational sources as introduced by International Civil Aviation Organization (ICAO) are to be followed. Guidance on mitigation from airside sources, such as the procedures


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Special Conditions issued to M/s. Bengal Aerotropolis Projects Limited for the proposed Domestic Airport "Aerotropolis Complex" at Mouzas – Khandra, Ukhra, Amlouka, Banguri, Patsaora, Dakshinkhanda, PS – Andal & Faridpur, Dist. – Burdwan, West Bengal.

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specified in ICAO Circular 303, AN176: and "Operational opportunities to minimize fuel use and emissions"; and the IATA "Guidance Material and Best Practices for Fuel Environmental Management" published Dec.2004 may be referred.


15. Regular monitoring of the ambient air quality shall be carried out in and around the airport and records shall be maintained. Ambient air quality monitoring (PM, SO₂, NO_x, CO, HC etc.) should be carried out in atleast three locations. A well-equipped laboratory should be established to monitor the air, water and soil quality. The quality of ambient air, surface and ground water and soil shall be monitored periodically in all seasons and the result to be submitted regularly to the State Board.
16. Efficient management of indoor air quality must be ensured for health and safety of the users. The HVAC&R systems should be so designed to maintain proper Indoor Air Quality.
17. The wastes have to be managed after segregation and identifying the method of management. 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) is to be effectively carried out. The oily sludge from ETP and garbage are to be disposed off. Minimization of solid waste by using environmentally compatible disposable material; recycling of wastes etc. is to be done.
18. Adequate green belt is to be developed within the project site. Provision should be kept for adequate buffer zone. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. The plantation species should be carefully chosen to avoid bird nesting and to improve pollution control and noise control measures. Proper steps are to be taken so that the flora and fauna are not affected during the construction phase. The proponent should strictly abide by The West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007. No trees can be felled without prior permission from the Tree Cutting Authority constituted as per the West Bengal Trees (Protection and Conservation in Non-Forest Areas) Act, 2006 and subsequent rules.
19. In case of any Scheduled-1 fauna found in the area, the necessary plan for their conservation should be prepared in consultation with State forest Departments. Existing archaeology, if any, should be protected from any adverse impacts. Preservation of cultural, historical and religious sites should be carried out.
20. Traffic circulation planning and Road design should be done with due consideration for environment and safety of users. The airport should have a well-planned network of access roads. Provision of roads dedicated purely for airport access as well as other, non - dedicated roads should be done. The access road network must also have sufficient capacity to cope with peak hour traffic to and from the airport. The use of through - ticketing to link air and rail or bus services to encourage the use of mass transit over private cars should be considered.
21. Use of energy efficient construction materials should be ensured. Water efficient devices / fixtures should be installed. Energy efficient lighting systems should be installed. The lighting design and the heating, ventilation and air conditioning systems should conform to the recommendations of the Energy Conservation Building Code 2007 of the Bureau of Energy Efficiency, GoI. Energy generation on-site, use of alternative energy fuels, construction of green building in the airports, installation of low energy lighting systems within the terminals and office spaces etc. should be considered.
22. The project proponent should provide guidelines to the users to ensure conservation of energy and water. In-house environmental awareness campaigns should be carried out at regular intervals to ensure environmental protection. Use of efficient irrigation equipment, evaporative cooling unit in air-conditioning system etc should be considered. The project proponent should resort to solar energy at least for peripheral lighting and water heating, as far as possible. Environmental Audits should be conducted on a regular basis.
23. Provision of Effective Controls and Building Management Systems such as Automatic Fire Alarm and Fire Detection and Suppression System, Building Automation System for Energy Conservation, Management Information Systems etc. must be ensured. Automatic lighting control, occupancy sensors, heat exchanger, high efficiency chillers etc. should be provided for energy conservation. Use of intelligent lighting should be considered for energy conservation.


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24. Firefighting systems should be designed in compliance with the WBFS and NBC norms. Preventive measures should be adopted for Risk & Disaster Management as per the provisions of the National Building Code 2005. All mandatory approvals and permission as required from Director of Explosives, Fire Department etc. should be obtained. All other necessary permission/clearances from the concerned authorities department related to water supply, electricity etc. shall be obtained. Adequate access to fire tenders should be provided. CO monitoring facility with automatic alarm should be provided at basement car parking, if any.
25. Adequate safety measures shall be provided for underground fuel storage tanks and supply lines for Aviation Turbine Fuel (ATF) including under ground fuel hydrant system and HSD for ground service vehicles and DG set. Proper fire detection & protection systems to be provided for controlling fire and explosion hazards. Leak detection on underground pipes, containment of any surface spillage are to be monitored. Adequate systems should be provided for emergency containment in the event of a major spill during monsoon season.
26. Employees working in high noise zones are to be provided with health protection devices like earplugs / ear muffs. Air pollution control measures are to be adopted. Health camps both for employees and local populations are to be conducted.
27. The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. Appropriate Rehabilitation and Resettlement planning should be done in case of any displacement.
28. The implementation of Environmental Management Plan should be carried out, as proposed. Regular monitoring should be carried out during construction and operation phases. Environmental Management Information System shall be maintained properly. A dedicated Environmental Management cell should be set up.
29. The authority should comply with different directions/guidelines issued by the Airfield Environment Management Committee from time to time.
30. The proponent should abide by the Direction issued by the Department of Environment, Government of West Bengal, vide No. EN/3170/T-IV-7/001/2009 dated 10.12.2009.
31. The post project environmental monitoring should include the following –
 - i. Air pollution and meteorological data for compilation of emission inventory and estimation of the contribution to regional emissions.
 - ii. Ground water down stream of airport will be monitored. Heavy metal monitoring in surrounding wells and water bodies should be taken up if necessary.
 - iii. Noise level monitoring by online integrated noise meters within airport premises continuously. This meter will be connected to central monitoring station where all the data is stored and processed.
32. Appropriate Emergency Planning should be done for the airport. Standard operational procedures and Action plans with proper organizational structure should be in place for efficient Risk and Disaster Management.
33. Submission of half yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year should be done.
34. No expansion of the project should be undertaken without prior permission of the State Board. The unit should not start operation without obtaining 'Consent to Operate' from this Board.
35. The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project and the master plan.
36. The proponent should strictly abide by the conditions stipulated in the Environmental Clearance accorded by the Ministry of Environment & Forests (MoEF), Government of India, vide No. 10-119/2008-IA-III dated 05.02.2010.
37. This NOC is valid upto **31.05.2015** for development of Greenfield Domestic Airport on an area of 650 acres. The airport is expected to handle 7187 aircrafts and 2.98 lakhs passenger by the year 2012-2013 and 29935 aircrafts and 20.33 lakhs passenger by the year 2037-2038. The length of the runway shall be 3315m. It is also proposed to have adequate parking space for 500 cars, 200 taxis, 300 two wheelers and 50 coaches/buses.


Chief Engineer (Planning)

West Bengal Pollution Control Board

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