



**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
(SEIAA), ORISSA.**

(Constituted vide order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.) Qr. No. 5RF-2/1, Unit-IX, Bhubaneswar-751022
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Ref. No. _____

Dt. _____

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Special Secretary to Govt.
& Member Secretary, SEIAA

To

Shri Harendra Singh, Vice President,
M/s. ASSOTECH BEBL Infrastructure Pvt. Ltd.
A-354, Sector –19, Noida – 201301

Sub: Proposal for construction of group housing project of the Cosmopolis of M/s ASSOTECH BEBL Infrastructure Pvt. Ltd. at Dumduma, Bhubaneswar.

Sir,

This is to intimate you as follows:-

A) With reference to your letter no nil dated 05.06.2009, No ABIL/Cosmopolis/2010/69 dated 03.03.2010, No. ABIL/Cosmopolis/BBSR/78 dated 15.05.2010, 11.08.2010 and 28.08.2010 on the above mentioned subject, I am directed to say that the State EIA Authority, Orissa, Bhubaneswar has considered the application on the proposal of group housing “the Cosmopolis” of M/s ASSOTECH BEBL Infrastructure Pvt. Ltd. at Dumduma, Bhubaneswar, Orissa. The proponent M/s ASSOTECH BEBL had submitted their clarifications on the points raised and those points were further discussed with the consultant M/s Sun Consultancy & Services, Bhubaneswar. The proposed development is a building project having multiple floors. The project consists of 690 apartments. There will be four towers and each tower with G+16 floors shall amount to a total of 522 apartments while one tower would be service apartment of G+16=168 apartments with other amenities. Total plot Area is Ac.36138.371 sqm. Total built up area is 79,378.59m². Green belt landscaping an open space are is 85% of the total project area. The building is completely residential in nature. Bhubaneswar Development Authority has approved the building plan. The total water requirement during construction phase is 50-100 KLD and during operational phase it is 542 KLD. Source of water will be Ground water during construction phase. The water requirement will be met from Municipal supply and ground water during operational phase. Around 347 KLD of waste water will be generated which will be treated in Sewage Treatment Plant (STP) of capacity 420 KLD. Treated water will be re-used for dual flushing, green belt and landscaping. Part of the treated water will be discharged to the

nearby drain. Total solid waste generation will be 57.06 MT/month. The power requirement is 4 MVA. Total cost of the project is Rs. 150 crores.

Based on information furnished and discussion with the proponent and consultant M/s Sun Consultancy Services, Bhubaneswar and on recommendations of SEAC, the State EIA Authority, Orissa hereby accords Environmental Clearance in favour of the project with validity till 06.04.2012 during which construction should be completed under the provisions of the Environment Impact Assessment Notification, 2006 & 2009 and subsequent amendment thereto under various MOEF, Govt. of India circulars there under subject to the following stipulated conditions:-

B) Regarding violation of EIA Notification, 2006 by you in constructing/ developing before taking prior Environmental Clearance, the matter is being dealt separately by the State Government for action for such violation.

Stipulated Conditions (of A):-

I. GENERAL

- i) The applicant (Project proponents) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by them in Form-1, Form-1A, and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
- ii) The applicant will take statutory clearance /approval /permissions from the concerned authorities in respect of his project as and when required.
- iii) The applicants will submit half-yearly compliance report for post-environmental clearance monitoring in respect of the stipulated terms and conditions in the Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Orissa, on 1st June and 1st December of each calendar year.
- iv) The applicants will adopt the prescribed norms, and standards provided in the National Building Code of India, 2005 specially relating to:
 - a) Fire protection and life safety of occupants of the buildings.
 - b) Safety of personnel during construction, operation and demolition of buildings.
 - c) Lighting and natural ventilation of buildings.
 - d) Safety from electrical fire, shock and lightening of the buildings.
 - e) Air-conditions, heating and mechanical ventilation of the buildings
 - f) Acoustics and noise control of the buildings.
 - g) Maintenance and functioning with emissions from generators supplying power to common space/ residential in case of power failure along with fuel handling/ storage.
 - h) Installation of lifts and escalators in the buildings.
 - i) Water supply, drainage and sanitation including solid waste management.
 - j) Landscaping of surrounding areas of the buildings.

II. CONSTRUCTION PHASE

- (i) Provision shall be made for the housing of construction labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (ii) A First-Aid Room will be provided in the project site both during construction and operation of the project.
- (iii) All the top soil excavated during construction activities should be stored separately for use in land filling, horticulture/landscape development within the project site.
- (iv) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and will be disposed off taking the necessary precautions for general safety and health aspects of people only in approved sites with the approval of competent authority.
- (v) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (vi) Construction spoils, including bituminous material and other hazardous materials should not be allowed to contaminate watercourses, ground water and dump sites by following safe dumping/ disposal practice as per statutory rules and norms with necessary approval of the Orissa Pollution Control Board.
- (vii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and should conform to Environment (Protection) Rules 1986 prescribed for air and noise emission standards.
- (viii) The diesel required for operating DG sets shall be stored in underground tanks and, if required, clearance from the Chief Controller of Explosives shall be taken.
- (ix) Vehicles used for bringing construction materials to the site should be in good condition and should have a pollution check certificate and conform to statutory air and noise emission standards and should be operated only during non-peak hours of the day.
- (x) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/OPCB.
- (xi) Fly ash bricks should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended on 27th August, 2003. The above condition is applicable as the project site is located within the 100 Km of Thermal Power Stations.
- (xii) Ready mixed concrete would be used in building construction.
- (xiii) Storm water control and its re-use should be as per CGWB and BIS standards for these applications.
- (xiv) Water demand during construction should be optimized by adopting bet practices without compromising quality.
- (xv) Permission to draw minimal quantity of ground water shall be obtained from the competent Authority prior to construction/ operation of the project.

- (xvi) Separation of grey and black water supplies and collection from residential units should be done by the use of dual plumbing line. Grey and black water should be treated separately before recycling/reuse.
- (xvii) Fixtures for showers, toilet flushing and drinking water should be of low flow type and restricted to requirements by use of aerators, avoiding wastage pressure reducing devices or sensor based controls.
- (xviii) Use of glass may be maximum upto 40% of total outer wall area to reduce the energy consumption and load on air-conditioning. If necessary, high quality double glass with special reflective coating may be used in the windows.
- (xix) Roof should meet the prescribed requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.
- (xx) Opaque wall should meet prescriptive requirements as per Energy Conservation Building Code.
- (xxi) The approval of the competent Authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments etc. as per National Building Code of India, 2005 including protection measures from lightening etc.
- (xxii) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase to avoid disturbances and pollution to the surroundings.

III. OPERATION PHASE

- i) The installation of the Sewage Treatment Plant (STP) should be certified by a competent agency and a report in this regard should be submitted to the SEIAA, Orissa before the project is commissioned for operation. Treated effluent from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Orissa State Pollution Control Board. Necessary measures should be taken to mitigate the odour problem from STP.
- ii) The STP sludge should not be dried nor incinerated within the project site and should be disposed off as per the norms of SPCB, Orissa.
- iii) The project proponent will ensure that under no circumstances, the environment is polluted due to non-functioning /under performance of sewerage disposal system of the project. To achieve this, a stand-by STP with similar capacity should be installed to be put into service during the maintenance / over hauling of the original STP.
- iv) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material. Necessary approval /permission may be obtained from the concerned authorities.
- v) Diesel power generating sets proposed as source of break-up power for lifts elevators and common area illumination during operation phase should be of enclosed type and conform to Environment Protection (EP) rules 1986. The height of the stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets put together. Low sulphur diesel should be used. The location of the DG sets may be

- decided in consultation with Orissa State Pollution Control Board. Care may be taken to avoid disposal of smoke/ pollutants from DG sets in the residential area.
- vi) 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 sites shall be restricted to the permissible levels to comply with the prevalent regulations.
 - vii) Plantation of trees shall be done as per approved layout plan.
 - viii) Rain water harvesting for roof run-off, and surface run-off as plan submitted should be implemented. Before recharging the run-off, pre-treatment must be done to remove suspended matter, oil, grease and other soluble components as per norms. The bore-well for rainwater recharging should be kept at least 5 mts. above the highest groundwater table. The technology may preferably be adopted from a commercial firm with performance guarantee.
 - ix) Weep holes in the compound walls shall be provided to ensure natural drainage of excessive rain water in the project area during the monsoon period after the harvesting operations.
 - x) The ground water level and its quality should be monitored regularly in consultation with Central/ State Ground Water Authority.
 - xi) Extracts from the CGWB website and letter produced by the consultant stated that Bhubaneswar is covered under safe zone as regards ground water reserves. Any industry (the Housing concern was taken as one of the industrial units) drawing <1,000m³/day does not need permission. They further clarified that they have applied for PHED water supply and the department stated that if supply pipelines are laid in the vicinity in future, they may get water for their housing complex. The proponent shall furnish supportive document in this regard.
 - xii) The proponent should specify the number, diameter and exact depth of the bore wells they have put/ going to put for withdrawal of water during the construction phase to SEIAA within a month of receiving the environmental clearance.
 - xiii) The proponent shall put sealed water meters to each pump and maintain a log book of daily withdrawals during the construction phase and minimize water use to save Ground water reserves.
 - xiv) Use of Ground Water may be restricted during operational phase only with permission from competent authority and PHED supplies may be ensured before handing over of the completed dwelling units.
 - xv) A reputed ground water survey agency may be employed to make an estimate of the reserves at the spot during summer (February to May) when the water reserves are stabilized and submit it for the approval of SEIAA within July 31st, 2011 failing which construction may be suspended.
 - xvi) The grey water generated would be separately treated in STP with secondary (bio) treatments before recycle instead of mixing up with ordinary domestic use water to which they agreed.
 - xvii) The consultant could not clarify as to what kind of treatment is required for swimming pool water and where is the facility proposed. So, the swimming pool waste water may be treated in a separate STP like non grey water twice in a week in addition to their earlier commitments in this regard.

- xviii) The unit has only produced an acknowledgement from BMC for their solid waste disposal. The proponent shall furnish copy of the permission to SEIAA within a month of receiving EC.
- xix) The height of the chimneys to be put up for standby diesel generating units, through as per requirement, are still below the height of the buildings close by, which would affect the ambient air quality of the residential units. Further, in order to ensure upward draught of the emissions to the heights proposed, further engineering designs are to be produced to SEIAA to convince that emissions will be propelled to that height. It is also suggested to put black carbon filters to minimize smoke in the emissions.
- xx) The proponent's clarifications on the extent (25%) of use of solar energy for street lighting should be strictly followed and fail safe measures for generation, storage and supplies of solar energy for such purpose should be ensured and annual compliance reports to be furnished to SEIAA by their Environment Cell for the EC period.
- xxi) Traffic congestion near the entry and exit points from the roads adjoining the proposed projects site must be avoided. Parking of vehicles by both residents and visitors should be fully internalized and no public space should be utilized for this purpose.
- xxii) A Report the energy conservation measures confirming to energy conservation norms finalized by the Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Orissa in three months time before operation/ habitation.
- xxiii) Provisions of solar hot water storage/ supplies at the roof top may be made as per statutory norms of CPCB/MoEF/SPCB, Orissa.
- xxiv) Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs /TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid toxic contamination. Use of solar panels may be adopted to the maximum extent possible, especially for street lights.
- xxv) The building blocks should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation including plantation/ horticulture.
- xxvi) The proponent shall furnish detailed information on disposal of E-wastes which includes obsolete personal computers and associated components and dispose the e-wastes as per CPCB /MOEF guidelines. A detailed proposal to this effect shall be submitted to the Authority (SEIAA).
- xxvii) The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes like Annual allocation and maintenance /monitoring etc. and expenditure for this funds should be reported to the SEIAA, Orissa.
- xxviii) The above mentioned stipulated conditions shall be complied in time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation

of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

Member Secretary,

Memo No _____/Dt. _____

Copy to

1. Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi for kind information.
2. Principal Secretary, Forests & Environment Dept., Government of Odisha for kind information.
3. Chairman, State Pollution Control Board, Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharpur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Vice Chairman, Bhubaneswar Development Authority, Akash Sobha Building, Pandit Jawaharlal Nehru Marg, Bhubaneswar-751001 for kind information.
7. Chief Engineer, PH (Urban), Orissa, 1st Floor, Heads of Dept. Building, Bhubaneswar-751001 for kind information.
8. Chief Engineer-cum-Member Secretary, Orissa Water Supply & Sewerage Board, Satya Nagar, Bhubaneswar-751007 for kind information.
9. Collector & district Magistrate, Khurda for kind information and necessary action.
10. Chairman/Member/Member Secretary, SEIAA for kind information.
11. Chairman, SEAC/Secretary, SEAC, Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
12. Guard file for record.

Member Secretary,

SEIAA- 154/10

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Special Secretary to Govt.
& Member Secretary, SEIAA

To

Shri Harendra Singh, Vice President,
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A-354, Sector –19, Noida – 201301

Sub: Proposal for construction of group housing project of the Cosmopolis of M/s ASSOTECH BEBL Infrastructure Pvt. Ltd. at Dumduma, Bhubaneswar.

Sir,

Please refer our letter no. 579/SEIAA dated 04.12.2010 regarding the above subject you are requested to read.

“Regarding violation of EIA notification, 2006 by you in constructing/ developing before taking prior environmental clearance, the matter is being dealt separately by the State Government for action for such violation”

at the end of 3rd para (item - xxviii) at page 7(seven) in place of its present position under second para at page 2 (two).

Yours faithfully,

Member Secretary

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