

Bengal Ambuja Housing Development Limited.

"Registered Office"

"VISHWAKARMA", 86 C, Topsia Road (S) Kolkata 700046

"Project Site" Premises No. -405, Borough 12, Ward No 109, Kolkata - 700099,

Six Monthly Compliance Report of "UTALIKA" for the period of April 2020 TO September 2020



An artistic impression

Bengal Ambuja Housing Development Limited.**Ref : AP/ UTALIKA / EC/ SEIA/ Compliance/010/20-21****Date: 26/11/2020**

To,
Secretary State Level Environmental Impact Assessment Authority, WB.
Department of Environment,
5th Floor, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III,
Bidhannagar, Kolkata – 700 106

Dear Sir,

Subject: Submission of six monthly compliance reports for the period of April 2020 TO Septemebr 2020 of “UTALIKA” at Premises No. 405, Borough - 12, J1 No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur-, Kolkata - 700 099

We are pleased to submit the six monthly monitoring & compliance reports to you of our above mentioned project at Kolkata, West Bengal. The project is under construction stage. A portion of the said project has completed and obtained Consent for Operation for LIG & MIG Block .

This year due to Covid 19 pandemic, construction work at site was kept in hold till August 2020 for the safety of the employee and workers.

Considering the above stated status Environmental Monitoring was not conducted for the period of April 20 to June 20. Monitoring will be started from October 2020. Monitoring report for the period of October 20 to march 21 will be furnished along with next compliance report.

We have furnished here with the compliance report based on the stipulation mentioned in the above-mentioned EC. The report is also available in the company website. <http://www.ambujaneotia.com>.

This is for your kind information and record in this regard.

Thanking you,
Yours faithfully,

For **Bengal Ambuja Housing Development Limited.**

Anindya Pal

Asst. General Manager – Compliance

Cc. In charge EMI Cell West Bengal Pollution Control Board, Paribesh Bhawan, 10 A, Block – LA, Sector III, Saltlake, Kolkata – 700 098

Bengal Ambuja Housing Development Limited.**SIX MONTHLY COMPLIANCE REPORT ON ENVIRONMENTAL****Purpose of the Report**

This six-monthly report is being submitted as per the condition stipulated in the Environmental Clearance Notification.

The environmental assessment is being carried out to verify:

- ❖ That the project does not have any adverse environmental impacts in the project area and its surrounding
- ❖ Compliance with the conditions stipulated in the Environmental Clearance Letter.
- ❖ That the Project Management is implementing the environmental mitigation measures as suggested in the approved Form-1, Form-1A, Environmental Management Plan (EMP) and building plans.
- ❖ The project proponent is implementing the environmental safeguards in true spirit.
- ❖ The compliance report has been presented in this report for the phase of 5 nos. of towers G+25, 1 no. of 2B+G+19, HIG Podium G+3, LIG podium G, 72 Numbers of Offices, No service apartments, Retails unit 14 numbers storied building which will be constructed.

Bengal Ambuja Housing Development Limited.



Geo satellite image of site and surrounding

Bengal Ambuja Housing Development Limited.

Project at a glance:

SALIENT FEATURES OF PROJECT

SALIENT FEATURES OF PROJECT	
Project Name	UTALIKA
Project Address	Premises No. 405, Borough - 12, J1 No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur-, Kolkata - 700 099
EC No.	2809/EN/T-II-1/022/2012
Date of issuance	18.11.2014
EC under revised Expansion Category	Environmental Clearance under revised Expansion Category for Tower C submitted to SEIA , WB and TOR has issued. Baseline data generation is under process.
Consent to Establish (NOC) No.	NO124891
Vide Memo No	180-2N-07/2012
Date of issuance	09/03/2015
NOC Validity	29/02/2022
Consent to Operate	Partial Consent to Operate for LIG & MIG Block has been obtained vide CFO No: CO128976
Land area	81,682.48 sq.m.
Built up area	3,00,925.649 sq.m.
Ground coverage	26,233.178 sq.m (34.579% of existing boundary area consider for FAR) , 26,233.178 sqm. (32.11% of total land area as per deed)
Building description	5 nos. of towers G+25, 1 no. of 2B+G+19, HIG Podium G+3, LIG podium G , 72 Numbers of Offices, No service apartments, Retails unit 14 numbers storied building
Exclusive Tree Plantation Area	16,423.21 sq.m. (20.10% of land area)
Nos. of trees planted	1200 nos. big trees and 716 numbers medium and small trees
Total Water requirement	980 KLD (Operation stage)
Fresh Water requirement :	568 KLD (KMC supply)
Wastewater generated	840 KLD (to be treated in STP)
Total treated waste water	748 KLD
Treated wastewater recycled	412 KLD
Treated wastewater discharged	336 KLD (to Municipal drain)
Solid waste disposal	3,486 kg / day (garbage compactor & composter to be installed)
Internal Road Area	1,24,17.7 sq.m. (15.2% of land area)
Water body	23,008.27 sq.m. (28.17% of land area)
No. of Parking spaces proposed	1751 nos. [1700 cars (covered) & 51 (open)]
Total Power requirement	12050 KVA, CESC
Backup Power	DG Sets (1x320 KVA, 1 x415 KVA, 1 x1600 KVA and 4x2000 KVA)
Completion Certificate	LIG - MIG CC has been obtained on 25.10.2019. Completion case No . 2019120097. Construction of HIG phase is on progress .

Bengal Ambuja Housing Development Limited.

COPY OF ENVIRONMENT CLEARANCE

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
 Purna Bhavan, Block 'FD'-415A, 4th Floor, Sector – III,
 Salt Lake, Kolkata – 700 106
 Telefax No. 033 2337 0268
 Website : www.environmentwb.gov.in

No. 2809 /EN/T-II-1/022/2012

Date : 18 / 11 /2014

To
 M/s. Bengal Ambuja Housing Development Limited
 Vishwakarma
 86C, Topsia Road South
 Kolkata – 700 046

Subject : *Environmental Clearance for the Proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough – 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS – Purba Jadavpur, Kolkata – 700 099, Dist. - 24 Parganas (South), West Bengal.*

Sir,

This has a reference to your application dated 29/03/2012 and subsequent communications for Environmental Clearance for the Proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough – 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS – Purba Jadavpur, Kolkata – 700 099, Dist. - 24 Parganas (South), West Bengal.

The proposal has been examined and processed in accordance with EIA Notification, of 2006. It is noted that the proposed project comprising of 5 nos. towers G+25 storied, 1 tower 2B+G+21, podium G+3 and podium G and having 1088 flats for residential purpose, 72 nos. office, 72 nos. service apartments Retail units, Club and other amenities.

The project is registered as Green Building under IGBC vide registration no. GH121431.

It is noted that the salient features of the project, for which Environmental clearance has been considered are as follows :

Land Area	: 81,682.48 sq.m.
No. of building blocks	: 5 nos. G+25, 1no. 2B+G+19, HIG podium G+3, LIG podium G, 72 nos. of offices, no service apartments, retail units 14 numbers
No. of flats	: 1,084 (HIG-539, LIG-422, MIG-123)
Expected Population	: 2695 – HIG, 2110 – LIG, 615 – MIG, 1014 –Office, 917 – Retail, 2100 – Club, Service and other floating guest
Total Water requirement	: 980 KLD (Operation stage)
Fresh Water requirement	: 568 KLD (KMC supply)
Wastewater generated	: 840 KLD (to be treated in STP)
Total treated waste water	: 748 KLD
Treated wastewater recycled	: 412 KLD
Treated wastewater discharged	: 336 KLD (to Municipal drain)
Solid waste disposal	: 3,486 kg / day (garbage compactor & composter to be installed)

Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough – 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS – Purba Jadavpur, Kolkata – 700 099, Dist. - 24 Parganas (South), West Bengal

Total Built-up Area	: 3,00,925.649 sq.m.
Ground Coverage	: 26,233.178 sq.m (34.579% of existing boundary area consider for FAR) , 26,233.178 sqm. (32.11% of total land area as per deed)
Internal Road Area	: 1,24,17.7 sq.m. (15.2% of land area)
Exclusive Tree Plantation Area	: 16,423.21 sq.m. (20.10% of land area)
Nos. of trees planted	: 1200 nos. big trees and 716 numbers medium and small trees
Water body	: 23,008.27 sq.m. (28.17% of land area)
No. of Parking spaces proposed	: 1751 nos. [1700 cars (covered) & 51 (open)]
Total Power requirement	: 12050 KVA, CESC
Backup Power	: DG Sets (1x320 KVA, 1x415 KVA, 1x1600 KVA and 4x2000 KVA)

State Level Environment Impact Assessment Authority (SEIAA), examined the proposal and also perused recommendations of the State Level Expert Appraisal Committee (SEAC). After due consideration of the project proposal, and after considering the recommendations of the State Level Expert Appraisal Committee (SEAC), the State Level Environment Impact Assessment Authority accords Environmental Clearance to the project as per provisions of the EIA notification no. S.O. 1533 (E) dt. 14th September, 2006 of Ministry of Environment & Forests, GOI, subject to strict compliance of terms and conditions as mentioned below.

Part A – SPECIFIC CONDITIONS

I. Construction Phase

Facility of labourers during construction: -

- i. Provision of drinking water, wastewater disposal and solid waste management should be ensured for labour camps. Water usage during construction should be optimized to avoid any wastage.
- ii. Proper sanitation facilities should be provided for construction workers to ensure environmental sanitation. Sewage generated from the areas occupied by the construction labourers have to be directed into the existing sewage drain of the area. In case of non availability of the sewer system, an onsite treatment system has to be provided.
- iii. The scaffolds, stairs and platforms for construction works and the workers must be secured as far as possible to prevent any accident.
- iv. Health and safety of the workers should be ensured during construction. Personnel protective equipment like shoes, helmets, earmuffs, earplugs etc. should be provided to the workers. For vibration control damped tools must be used and the number of hours that a worker uses them must be limited. The Management must ensure that the workers put them while doing work that needs such protection, if any.
- v. Rest and convenience shelter for workers with crèche facility, if required, particularly women, must be provided with proper toilet facilities.

Steps to avoid disturbance during construction:-

- i. All the topsoil excavated during construction activities should be under cover/stored by retaining walls for use in horticulture / landscape development within the project site. Adequate erosion and sediment control measures to be adopted before ensuring construction activities.
- ii. Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans should be developed for prior to beginning of demolition

Bengal Ambuja Housing Development Limited.

Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough - 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

- and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.
- iii. Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighbouring communities and disposed off taking the necessary precautions for general safety and health aspects.
- iv. Diesel generator sets during construction phase should have acoustic enclosures and should conform to E(P) Rules prescribed for air and noise emission standards.
- v. Vehicles / equipment deployed during construction phase should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- vi. Ambient noise levels should conform to residential standards both during day and night. Fortnightly monitoring of ambient air quality (SPM, SO2 and NOx) and equivalent noise levels should be ensured during construction phase.
- vii. Construction spoils including bituminous material and other hazardous materials including oil from construction equipments must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water. If necessary, oil trap should be installed where there is deployment of heavy machineries.
- viii. Regular supervision of the above and other measures should be in place all through the construction phase so as to avoid disturbance to the surroundings. Discomfort in the neighbourhood due to the proposed project activity should be minimized as far as practicable.
- ix. Loading and unloading operations should not be carried out in open areas and should be preferably done during day time, if there is any major settlement in the surrounding areas. The construction activities including Piling work, Operation of Ready Mix Plant and Vibrator etc. should not be carried out during the night time (10 P.M. to 6 A.M.). Only essential operations, if any, may be carried out for a limited period during nighttime.
- x. The proponent must ensure that no driven piles shall be proposed for this project, if there is any major settlement in the surrounding areas.
- xi. 15m-screen and adequate sprinkler arrangement shall be provided. Care should be taken to keep all material storages adequately covered and contained so that they are not exposed to winds.
- xii. Use of Ready-Mix concrete is recommended for this project.
- xiii. Adequate measures to be adopted to avoid wastage of water for curing of concrete structures.
- xiv. Adequate mitigative measures should be adopted to control dust emissions, noise and vibrations from construction activities. Vehicles and construction machineries should be properly maintained. Vehicles should conform to Pollution under control (PUC) norms.
- xv. Locally available materials with less transportation cost should be used preferably.
- xvi. Promotion of use of cleaner fuel and fuel quality improvement should be done. Excessive energy consumption and fuel usage should be avoided.
- xvii. Accumulation / stagnation of water should be avoided to ensure vector control.

Selection of materials for better energy efficiency:-

- i. Use of energy efficient construction materials should be ensured to achieve the desired thermal comfort.
- ii. Design layout should ensure adequate solar access and ventilation. Proper planning and window design for daylight integration should be considered.
- iii. 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.
- iv. Construction should conform to the requirements of local seismic regulations. The project proponent should obtain permission for the plans and designs including structural design, standard and specifications from concerned authority.



Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough - 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

- v. Construction technologies that require less material and possess high strength should be adopted. Materials with low embodied energy and high strength should be used preferably.
- vi. The building will be constructed and provisioned to use natural sunlight to the maximum during the day time, during use.
- vii. Use of alternate building materials and alternate construction techniques should be considered apart from the conventional materials and methods. Use of hollow unit masonry should be considered.
- viii. Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. should be promoted. Solar energy should be used for outdoor lighting. Adequate no. of solar lights should be installed for external lighting as per norms. All common area lighting will be LED system.
- ix. Solar water heating arrangement will be done for water heating in canteen area as proposed.
- x. Passive solar cooling to be incorporated in building design. Buildings should be oriented for ensuring natural ventilation and daylighting.
- xi. Proper insulation of roof should be provided to achieve desired thermal comfort. Use of light coloured, reflective roofs having an SRI (solar reflectance index) of 50% or more should be incorporated.
- xii. Use of high albedo or reflective pavements to keep parking lots, pavements and inside roads cool should be incorporated.
- xiii. Guidelines to the occupants should include usage efficiency measures such as energy efficient lighting and water efficient system.
- xiv. Reduce hard paving-onsite (open area surrounding building premises) and/or provide shade on hard paved surfaces to minimize heat island effect and imperviousness of the site.
- xv. Adequate open space, greenery and water bodies to be provided as per rules.
- xvi. Any proposed building with air-conditioning facility should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency. Chillers should be CFC & HCFC free.
- xvii. Restrict the use of glazed surface as per National Building Code 2005.

Water Body Conservation:-

- i. Water body of area 23008.27 sq.m should not be lined and no embankments should be cemented. The water body are to be kept in natural conditions without disturbing the ecological habitat.

Plantation Proposal:-

- i. The unit should strictly abide by The West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007. The proponent should undertake plantation of trees over atleast 20% of the total area.
- ii. No tree 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.
- iii. The proponent should plant at least **1916 trees** as proposed. 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.
- iv. Provision for roof top gardening is mandatory.
- v. The project proponent should undertake plantation as per recommendations of Zoological Survey of India made in their report "Rapid assessment to document Migratory Birds and the role of proposed residential project UTALIKA".

Water supply:-

- i. Water requirement during construction phase shall be met from KMC supply. Ground water should not be abstracted without prior permission of the competent authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.



Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough - 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

Sewage Treatment Plant:-

- i. As per the proposal submitted by the proponent waste water shall be treated in septic tank. Construction waste water will be discharged into Municipal drain after removal of grit and debris in sedimentation trap.

Storm water Management & Mitigation of Heat Island Effect:-

- i. Imperviousness of the site shall not exceed the NBC (National Building Code 2005) standards for imperviousness factor applicable to different types of area.
- ii. Total paved area of site under parking, roads, paths or any other use should not exceed 25% of the site area.
- iii. Minimum 50% of paved area on site should have pervious paving or shaded under vegetation or topped with finish having solar reflectance of 0.5 or higher.
- iv. Adequate storm water 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 drainage system and impact on receiving water body.
- v. Disruption to the natural hydrology of the site should be minimised by reducing impervious cover, increasing on site infiltration and managing storm water run off.
- vi. Heat island effect should be minimized by use of shading or reflective surfaces, mainly the surfaces that contribute to the heat island effect i.e. streets, sidewalks, parking lots and buildings. White roofs should be provided in the buildings.

Rain Water Harvesting Scheme:-

- i. The proponent must follow the Rainwater Harvesting Guidelines of the State Expert Appraisal Committee (SEAC) available in the website (<http://www.wbpcb.gov.in>).
- ii. The proponent must collect rainwater from roof-top catchments and reuse for various purposes after necessary cleaning. Adequate retention time and storage provisions should be provided for harvesting rainwater.
- iii. The sub-surface recharge proposal including the design of recharge structure and location of recharge structure as submitted before the State Expert Appraisal Committee should be done.
- iv. Adequate water storage for firefighting should be provided as per norms.

Municipal Solid Waste Management :-

- i. Adequate provision shall be made for storage and segregation of solid waste and adequate means of access shall be provided.

Transport Management:-

- i. Both internal and external traffic planning and management should be adequate to ensure uninterrupted traffic movement in the area during construction as well as operation phase.
- ii. The design of service road and the entry and exit from the project area should conform to the norms & standards of competent authority for traffic management. Bell mouth type arrangement should be made at the entry & exit. Proper traffic management plan should be adopted in consultation with Traffic authorities.
- iii. Clarified Wastewater will be used for sprinkling water on the unpaved internal roads on a regular basis.

Others:-

- i. All mandatory approvals and permission as required from Director of Explosives, Fire Department etc. should be obtained.
- ii. Provision of Effective Controls and Building Management Systems such as Automatic Fire Alarm and Fire Detection and Suppression System etc. must be ensured.
- iii. Use of Energy efficient lighting systems should be promoted for energy conservation.
- iv. Efficient management of indoor air quality must be ensured for health and safety of the users.



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Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 405, Borough - 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

- v. Adequate measures to be adopted for water conservation during construction and operation stage. Use of efficient irrigation equipment, evaporative cooling unit in air-conditioning system etc should be considered.
- vi. Rest room facilities should be provided for service population.
- vii. Provisions should be kept for the integration of solar water heating system.
- viii. Adequate access to fire tenders should be provided.
- ix. CO monitoring facility with automatic alarm should be provided at basement car parking, if any.

II. Operation Phase**Water supply :-**

- i. Water requirement during operation phase shall be met from KMC supply. Ground water should not be abstracted without prior permission of the competent authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
- ii. Use of water meter conforming to ISO standards should be installed at the inlet point of water uptake to monitor the daily water consumption. Use of water efficient devices / fixtures and appliances should be promoted. Installation of dual flushing system should be considered to conserve water.
- iii. The proponent must practice rainwater harvesting on regular basis.

Sewage Treatment Plant:-

- i. As per the proposal submitted by the proponent, waste water shall be treated in STP. Treated waste water shall be partly reused for flushing, landscaping; internal road and pavement cleaning etc. and rest will be discharged to KMC sewer line. Discharge of treated sewage should conform to E(P) Rules. STP should be monitored on a regular basis.
- ii. Reuse of treated wastewater should be carried out as proposed.

Emission from Diesel Generator Set:-

- i. Noise barriers will be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards. Diesel generator sets should be provided with integral acoustic enclosure at the manufacturing stage itself as per CPCB norms.
- ii. The stack height and emissions from D.G. sets should conform to the norms of Central Pollution Control Board. The certification of space design for DG sets should be done by competent authority.

Ensure Energy Efficiency:-

- i. Use of energy efficient construction materials to achieve the desired thermal comfort should be incorporated. The desired level of R and U factors must be achieved. U factor for the top roof should not exceed 0.4 Watt/sq.m/degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 should be strictly followed.
- ii. Use of energy efficient electrical systems should be promoted. High efficiency lamps with electronic ballasts should be used.
- iii. Energy efficient Motors and properly rated Transformers should be installed. Manufacturer's certificate to this effect shall be obtained and kept on record. Back up power supply should be based on cleaner fuel.
- iv. The power cabling shall be adequately sized as to maintain the distribution losses not to exceed 1% of the total power usage. Record of transmission losses shall be maintained. The proponent shall install permanent electrical metering to record demand (kVA), energy (kWh) and total power factor.
- v. The project proponent should use solar energy at least for street lighting.

Transport Management:-

- ii. Use of public mode of transportation should be promoted. Use of the least polluting type of transportation should be promoted. Adequate parking space should be provided as per norms.



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Bengal Ambuja Housing Development Limited.

Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 403, Borough - 12, Ji No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 403, Borough - 12, Ji No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadavpur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

iii. Pathways should be covered or shadowed by tree canopy as far as practicable. Transport system should be such that traffic will be calm in neighbourhoods. Traffic within the project site should be restricted by regulation. Adequate vertical and horizontal clearances of overhead electric power and telecommunication lines should be provided.

Solid Waste Management:-

- i. The proponent should abide by the Municipal Solid Wastes (Management and Handling) Rules, 2000. The proponent must develop the Solid Waste Management and Disposal Scheme ensuring storage and segregation of biodegradable and non-biodegradable wastes. The solid waste is to be disposed off in consultation with municipality.
- ii. The proponent must install on-site compost plant for treatment of biodegradable fraction of Municipal Solid Waste and will be incorporated in the building layout plan. Sufficient space for installation of on-site compost plant should be provided and operation of the compost plant considering full occupancy of the apartments i.e the capacity of garbage disposal unit should be selected accordingly.
- iii. The handling agency should also take care of the recyclable wastes like plastic, paper board, glass etc. and also inert materials in case the respective municipal authorities want to avoid any kind of wastes from the housing complex.
- iv. The proponent should have sufficient area for horticulture where the compost generated can be used as fertilizer and soil supplement and also have arrangement for sale of excess quantity of compost.
- v. Provision for treatment of leachate generation and odour control in on-site compost plant should be made.
- vi. 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.
- vii. The proponent should abide by the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Collection and storage of hazardous wastes during Pre-construction and Post-construction activity should be planned properly. The expected hazardous wastes should be disposed off separately as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- viii. Spent oil from DG Sets should be stored in HDPE drums in isolated covered facility and disposed off as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Spent oil from DG Sets should be disposed off through registered recyclers only.

Others :-

- i. The implementation of Environmental Management Plan should be carried out, as proposed. Regular monitoring should be carried out during construction and operation phases.
- ii. 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.
- iii. Fire fighting 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.
- iv. The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. At least 2% of the total project cost should be utilized for Corporate Social Responsibility programmes.
- v. 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.
- vi. Environmental Management Information System shall be maintained properly.
- vii. The proponent should restrict the use of glazed surface as per National Building Code, 2005.

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vi. The project proponent should comply with the recommendations of Zoological Survey of India made in their report .

vii. **The project proponent should include the following in the first compliance report-**

- i. **Power consumption (expected) per unit base area of the buildings**
- ii. **Heat released for running AC / HVAC for the individual buildings, and the location and elevation at which this will be released.**
- iii. **Fraction of covered area that will have sufficient natural lighting on an average sunlit day.**
- iv. **Fraction of energy needs met by solar energy source (photo voltaic as well as heating).**

Part-B GENERAL CONDITIONS

- i. The environmental clearance accorded shall be valid for a period of 5 years for the proposed project.
- ii. Prior Consent-to-Establish (NOC) for the proposed project must be obtained from WBPCB by the proponent. All other statutory clearances should be obtained by project proponent from the competent authorities.
- iii. The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project.
- iv. The environmental safeguards contained in the EIA/EMP report should be implemented in letter and spirit.
- v. All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.
- vi. Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits.
- vii. The project proponent should make financial provision in the total budget of the project for implementation of the suggested safeguard measures.
- viii. Six monthly monitoring reports should be submitted to the West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards and should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.
- ix. In case of any violation of the conditions laid down in this Environmental Clearance, Section 16 of The Environment (Protection) Act, 1986, will be applicable. In case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, West Bengal.
- x. The State Level Environment Impact Assessment Authority, West Bengal reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.
- xi. The Project Proponent should inform the public that the proposed project has been accorded environmental clearance by the SEIAA, West Bengal and copies of the clearance letter are available with the State Pollution Control Board / Committee and may also be seen at website of the SEIAA, West Bengal (<http://environmentwb.gov.in>). This should 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.
- xii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Civil Aviation Department (if required) etc. shall be obtained by project proponents from the competent authorities.

8

Bengal Ambuja Housing Development Limited.

Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 403, Baraugh - 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadarapur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

Conditions for Environmental Clearance for the proposed Residential Complex "UTALIKA" by M/s. Bengal Ambuja Housing Development Ltd. at Premises No. 403, Baraugh - 12, JI No. 21, Mukundapur, KMC Ward No. 109, PS - Purba Jadarapur, Kolkata - 700 099, Dist. - 24 Parganas (South), West Bengal.

- xiii. Provision for incorporation of appropriate conditions in the Sale Agreement / Deed, for ensuring sustained Operation and Maintenance (O&M) of the common facilities (STP, Rainwater harvesting system, Solid waste management system, Solar street lights etc.) even after transfer of ownership of the project, should be made in explicit and transparent manner.
- xiv. The above stipulations would be enforced along with those under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008, the Public Liability Insurance Act, 1991, the Environment Impact Assessment Notification 2006 and their amendments.
- xv. The contact details of the proponent and the name of the consultant are given below -

Name of the Contact person with Designation	Mr. C.P Kakarania,
Address	Vishwakarma, 86C Topsia Road(S), Kolkata-700086
Telephone Number, Fax Number	3322850028, 3322850610
Name of the Consultant	M/s. Ghosh, Bose & Associates Pvt. Ltd.

Yours faithfully,

(Jose T. Mathew)
Chief Environment Officer &
Member Secretary, SEIAA

No. 2809 /EN/T-II-1/022/2012/1(4)

Date : 18 / 11 /2014

Copy forwarded to :-

1. Secretary, SEAC & M.S. WBPCB
2. Monitoring Cell, Department of Environment, Government of West Bengal.
3. Officer-in-Charge, Regional Office (Eastern Zone), Ministry of Environment & Forests, Government of India, A-3, Chandrashekharpur, Bhubaneswar - 751 023, Orissa.
4. Guard file / Record file.

Sd/-
(Jose T. Mathew)
Chief Environment Officer &
Member Secretary, SEIAA

Annexure - I

LIST OF TREES PROPOSED FOR PLANTATION

Sl. No.	SCIENTIFIC NAME	COMMON NAME	QUANTITY
1.	<i>Polyalthia longifolia</i>	Debdaru	100
2.	<i>Michelia champaca</i>	Champa	30
3.	<i>Butea monosperma</i>	Palash	50
4.	<i>Azadirachta indica</i>	Neem Tree	75
5.	<i>Delonix regia</i>	Gulmohor	55
6.	<i>Mangifera indica</i>	Mango	80
7.	<i>Lagerstroemia speciosa</i>	Jarul	40
8.	<i>Cassia fistula</i>	Amaltash	80
9.	<i>Spathodea campanulata</i>	African tulip tree	50
10.	<i>Peltophorum pterocarpium</i>	Radhachura	40
11.	<i>Saraca indica</i>	Ashoka	55
12.	<i>Jacaranda ovalifolia</i>	Jacaranda	50
13.	<i>Bauhinia variegata</i>	Bauhinia	70
14.	<i>Terminalia arjuna</i>	Arjun	50
15.	<i>Eugenia jambolana</i>	Jamun	50
16.	<i>Ficus benjamina</i>	Java fig	25
17.	<i>Mimusopselengi variegata</i>	Bokul	40
18.	<i>Terminalia catappa</i>	Badam	30
19.	<i>Bombax ceiba</i>	Simul	30
20.	<i>Dellonia indica</i>	Elephant apple	60
21.	<i>Moringa oleifera</i>	Sojne data	70
22.	<i>Saraca asoka</i>	Ashok	70
	Total		1200

EC will be revised for Tower C . TOR has been obtained for applied Expansion EIA report is under preparation .

Bengal Ambuja Housing Development Limited.


COPY OF NOC

SPEED POST

NOC NO124891
WEST BENGAL POLLUTION CONTROL BOARD
 Paribesh Bhawan
 10A, Block-LA, Sector-III
 Bichannagar, Kolkata-700 098

Memo No. **180-28-07/2012(E)** Dated **09.03.2015**

From: Member Secretary, West Bengal Pollution Control Board



To: **M/s. BENGAL AMBUJA HOUSING DEVELOPMENT LTD., "VISHKARMA", 86C, Top Silk Road (South), Kolkata - 700 046.**

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

Ref: (i) Your letter No. **111** Dated **03.02.2015**
 (ii) **GC issued by SETIA vide no. 2009/EN/2-21-2/022/2012 dtd. 18.11.2014.**

Dear Sirs,

In response to the application for Consent to Establish (NOC) for proposed Unit of **M/s. Bengal Ambuja Housing Development Ltd. for "UTALIKA", construction of Residential Complex having 8 towers of G+29, 1 no. B+G+19, HIG podium G+2, LIG podium G+ of TBA = 300,925,649 sq.m. 40% Barakhola, G+ no. 135(P), 136(P), 137(P), 126/165(P), 127/169(P), 128/170(P), 129/171(P) & 124/167(P) in scheme No. Ambuja U.L.No. 21, KMC** 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.

*** Ward no. 109, PS-Purba Jagadpuri, Kolkata - 700 099.**

- The quality of sewage and trade effluent to be discharged from your factory shall satisfy the permissible limits as prescribed in IS : 2400 (Pt. I) of 1974, and/or its subsequent amendment and Environment (Protection) Rules 1986.
- 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.
- 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.
- All emission from your factory shall conform to the standards as laid down by this Board.
- 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.
- No industrial plant, furnace, flues, chimneys, control equipment, etc. shall be constructed/reconstructed/erected/re-erected without prior approval of this Board.

Member Secretary
 West Bengal Pollution Control Board
 Dept. of Environment, GovWB

NOC NO124891

7. You shall comply with

- Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
- Water (Prevention and Control of Pollution) Cess Act, 1978, if applicable.
- Environment (Protection) Act, 1986
- Environment (Protection) Rules, 1986
- Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000
- Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000
- Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms or Cell Rules, 1989
- The Public Liability Insurance Act, 1991 and Amended Act, 1992
- The Public Liability Insurance Rules, 1991 and Amended Rules 1993
- Biomedical Wastes (Management & Handling) Rules, 1996 and Amended Rules 2000 if applicable.
- Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
- 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:

Gross capital investment of the proposed project; ₹. 8246673000/-
Please refer to Annexure attached herewith.

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

Yours faithfully,
 Member Secretary/SR, ENV, ENGR.
 West Bengal Pollution Control Board
 (SRM CELL)

Memo No. **180-28-07-2012(E)** Dtd. **09.03.2015**

Copy forwarded for information to:

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

Himalaya Bhawan 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	10, Camac Street 2nd Floor Kolkata-700 017
Paribesh Bhawan 10A, LA-Block, Sector-III Salt Lake City, 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	
Satyajit Chowdhury Indoor Stadium Baluchar Bandh Road Makda-732101	Asansol Sub-Regional Office ADDA Commercial Market (2nd Floor) Opposite Asansol Fire Station G.T. Road, Asansol-713 301		Member Secretary/SR, E, E. West Bengal Pollution Control Board (SRM CELL) Dept. of Environment, GovWB

Bengal Ambuja Housing Development Limited.

Annexure I to NOC Sl. No. **NO124891**

Special Conditions issued to M/s. Bengal Ambuja Housing Development Ltd. at premises no. 405, Barakhola, Dag no. 135(P), 136(P), 137(P), 126/165(P), 127/169(P), 128/170(P), 129/171(P) & 124/167(P), Mouza-Barakhola, J.L. No. 21, P.S: Purba Jadavpur, KMC Ward no. 109, Dist: 24 Pgs(s), Pin-700099,

pg 1 of 2

A. Emission:-

1. DG Sets - 1x320 KVA, 1x415 KVA, 1x1600 KVA, 4x2000 KVA .

Stack -

- i. 7.60 m for 320 KVA, 8.07m for 415 KVA, 12m for 1600 KVA, 13m each for 2000 KVA DG sets above the roof of DG room 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 - waste water shall be treated in adequately designed STP. Treated waste water shall be fully reused. Discharge of treated sewage shall conform to E(P) Rules. Sewage Treatment Plants should be monitored on a regular basis and records should be maintained properly.

C. Solid Waste:- to be collected and disposed off regularly as per the Municipal Solid Wastes (Management and Handling) Rules, 2000. The project proponent shall install in-house compactor and compost plant for treatment and disposal of biodegradable fraction of MSW.

D. General:-

1. The Project Proponent shall have to obtain prior concurrence from the concerned municipality for ensuring supply of water, partial discharge of treated sewage and disposal of solid wastes.
2. D.G. Set noise level should not exceed the permissible limit. The Project Proponent should ensure that the ambient noise level is maintained within permissible limits during the construction phase.
3. The proponent should strictly comply with the standards / guidelines for control of noise from stationary 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.
4. The proponent should obtain necessary clearance for DG Sets from the Directorate of Electricity before applying for Consent-to-Operate.
5. The following activities are restricted during the night time (10 pm to 6 am), if there is any 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.
6. Adequate measures are to be taken to reduce vibration during piling work.
7. 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.
8. 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.
9. 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.
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.
11. 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.
12. Appropriate arrangement is to be done for rainwater harvesting within the site. The proponent must practice rainwater harvesting on regular basis.

M. K. Ghosh
Sr. Environmental Engineer
WB Pollution Control Board
20-11-2019

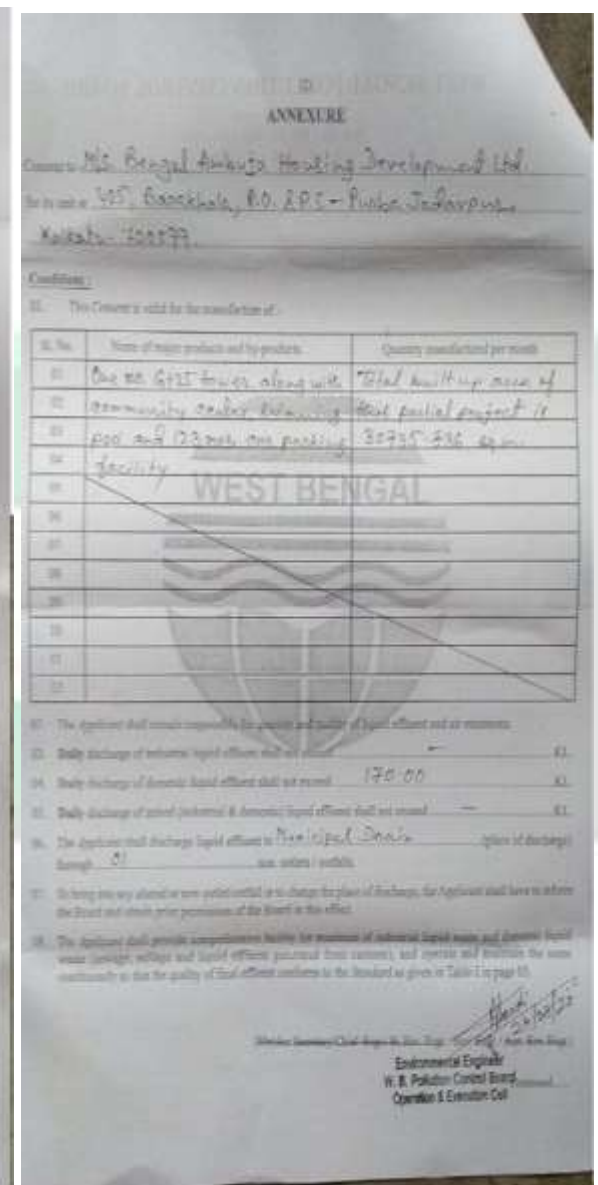
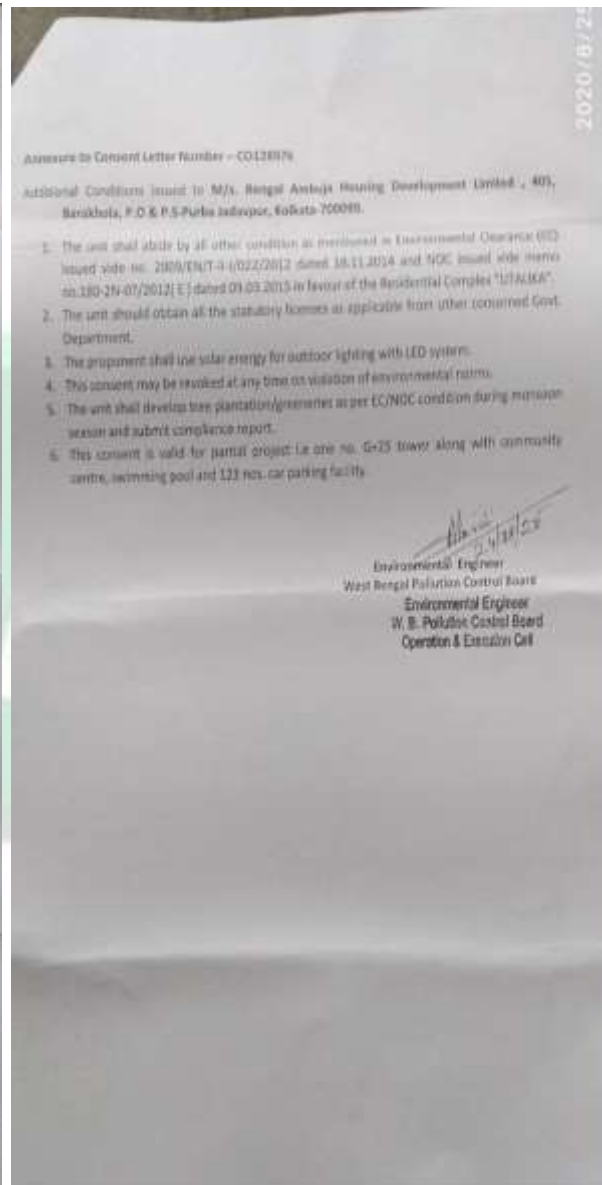
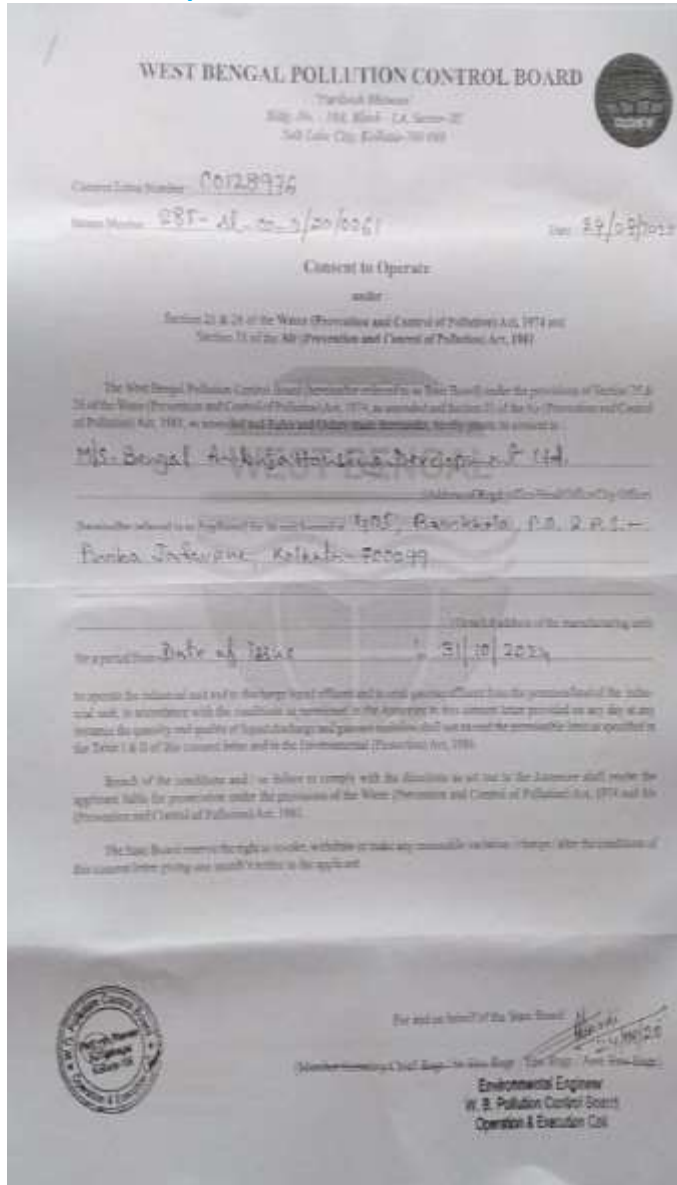
Special Conditions issued to M/s. Bengal Ambuja Housing Development Ltd. at premises no. 405, Barakhola, Dag no. 135(P), 136(P), 137(P), 126/165(P), 127/169(P), 128/170(P), 129/171(P) & 124/167(P), Mouza-Barakhola, J.L. No. 21, P.S: Purba Jadavpur, KMC Ward no. 109, Dist: 24 Pgs(s), Pin-700099,

pg 2 of 2

13. 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.
14. Provision of screen wall should be made surrounding the batching plant, if installed for control of fugitive emission from such operation.
15. 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.
16. 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. **The proponent should plant atleast 1200 big trees and 716 nos. of medium & small trees as proposed.**
17. Proper steps are to be taken so that the flora and fauna are not affected during the construction phase.
18. Adequate firefighting storage should be provided as per Rules.
19. Adequate parking space should be provided within the project site as per Rules.
20. Road design should be done with due consideration for environment and safety of users. The entry and exit points should be designed properly without disturbing the existing traffic.
21. Use of energy efficient construction materials should be ensured. Water efficient devices / fixtures should be installed. Energy efficient systems should be installed.
22. Adequate provision shall be made for storage of solid waste and adequate means of access shall be provided. Vats / bins should be provided inside the project area from where the wastes are to be disposed off by arrangement with the local body.
23. The proponent shall undertake awareness programmes for the residents to promote water and energy conservation and to ensure environmental protection.
24. No expansion of the project should be undertaken without prior permission of the State Board.
25. The unit should not start operation without obtaining 'Consent to Operate' from this Board.
26. The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project.
27. Water body of area 23008.27 sq.m to be kept in natural conditions without disturbing the ecological habitat. Water body should not be lined and embankments should not be cemented.
28. 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 (Annexure II).
29. All the recommendations as proposed in the EIA/EMP reports to be complied with.
30. The proponent should strictly abide by the conditions stipulated in the Environmental Clearance accorded by the State Environment Impact Assessment Authority (SEIAA), West Bengal, vide No. 2809/EN/T-II-1/022/2012 dated 18.11.2014.
31. This NOC is valid up to **29.02.2020** for construction of proposed residential complex "UTALIKA" having 5 towers of G+25 storied, 1 tower of B+G+19 storied, HIG podium-G+3 storied and LIG podium G storied along with parking facilities for Car-1751 nos (covered-1700 nos. & open-51 nos.) The Total Built-up Area of proposed project shall be **3,00,925.649 sq m. having 1084 nos. of flats (HIG-539, LIG-422, MIG-123), 72 nos. of offices and 14 retail units.**

M. K. Ghosh
Member Secretary
West Bengal Pollution Control Board
Sr. Environmental Engineer
WB Pollution Control Board
Dept. of Environment, GoWB

Consent for operate of LIG & MIG Block



Bengal Ambuja Housing Development Limited.

20128976

Name: M/s. Bengal Ambuja Housing Development Ltd.
Address: 405, Banakhala, P.O. P.S. - Purba Jharkhand, Kolkata - 700099.

Outlet No.	Name of effluent	Parameters	Standard	Frequency of effluent sampling
01	Effluent	Total Suspended Solids Biochemical Oxygen Demand (at 20°C) Chemical Oxygen Demand pH & Colour	Borewell: 100 to 150 Surface: 100 to 150 Surface: 100 to 150 Surface: 100 to 150	Weekly

19. The Applicant shall in the Pool Category of the Water (Prevention and Control of Pollution) Act, 1974 and Rules made thereunder and the Applicant shall comply with the provisions of the said Act and Rules made thereunder.

20. Daily water consumption for the following purposes should not exceed:-

- Industrial cooling, spraying to raise pH and boiler feed water (Water used for parking should be included in this category of use) 884,000 KL
- Domestic purpose --- KL
- Processing slurry water gets polluted and the pollutants are easily biodegradable --- KL
- Processing slurry water gets polluted and the pollutants are not easily biodegradable --- KL

The Applicant shall regularly submit to the Board the Returns of Water Consumption in the prescribed form and pay the dues as specified under Section 3 of the said Act.

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

20128976

Name: M/s. Bengal Ambuja Housing Development Ltd.
Address: 405, Banakhala, P.O. P.S. - Purba Jharkhand, Kolkata - 700099.

1. The Applicant shall, avoid, possible device for reducing the volume of water used and for efficient purposes a controlled discharge system must be installed at the site. Board

2. All the effluents generated in the process shall be treated as per the standards laid down by the Board and shall be discharged to the water bodies.

3. The Applicant shall install comprehensive water saving system consisting of pollution control equipment as a water saving device for prevention of air emissions and sprays and ensure the same shall be easily accessible to all employees in all of the premises of the site as per in Table II below.

Stack No.	Stack height from G.L. (in mts)	Stack attached to process and total capacity (in mts)	Volume flow rate (in m ³ /hr)	Velocity along chimney (in m/s)	Concentration of pollutants not to exceed		Frequency of routine sampling
					SPM (mg/m ³)	CO (ppm)	
S-1	70 m	1000 (20000000)	---	---	---	---	Yearly
S-2	---	---	---	---	---	---	---
S-3	---	---	---	---	---	---	---
S-4	---	---	---	---	---	---	---
S-5	---	---	---	---	---	---	---
S-6	---	---	---	---	---	---	---
S-7	---	---	---	---	---	---	---
S-8	---	---	---	---	---	---	---
S-9	---	---	---	---	---	---	---
S-10	---	---	---	---	---	---	---

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

20128976

Name: M/s. Bengal Ambuja Housing Development Ltd.
Address: 405, Banakhala, P.O. P.S. - Purba Jharkhand, Kolkata - 700099.

14. The Applicant shall provide paths in the stacks and other necessary pressure facilities such as ladder, platform, etc. for monitoring sampling the air emissions and the same shall be made available for inspection and use by the Board's staff as well as other Board's authorized agencies.

15. The Applicant shall measure the following fuel consumption pattern:-

Sl. No.	Type of fuel	Quantity consumed per day	Fuel burning operation where its fuel is used
01	LSD	9600 LT/month	D.B. Jet
02	---	---	---
03	---	---	---
04	---	---	---
05	---	---	---

16. The Applicant shall maintain the generation and treatment disposal of non-hazardous solid waste as specified below:-

Type of waste	Quantity	Treatment	Disposal
Sludge	900 kg/month	---	In the site
Overhaulable and non-hazardous waste	1000 kg/month	---	In the site

17. The Applicant shall take appropriate measures to control acidic levels from its own sources within the premises within the limit given below:

Time	Limit in pH (A) I _{max}
Day Time (8h a.m. to 6 p.m.)	2.5
Night Time (6 p.m. to 6 a.m.)	5.5

18. The Applicant shall at all times maintain good housekeeping, proper working order, and operate efficiently for control of pollution from all sources so as to be in close touch with surrounding communities and to achieve compliance with the terms and conditions of the consent.

19. The Applicant shall bring about at least 33% of the available open land under the green coverage/plantation.

20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant in maintenance compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The Applicant shall ensure that hygiene status in their premises are controlled so as to maintain clean and safe environment to and around the factory premises.

23. The Applicant shall provide drainage system for collecting industrial and domestic liquid waste. Storm water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Bengal Ambuja Housing Development Limited.**COPY OF FIRE NOC**

GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIRECTOR GENERAL
WEST BENGAL FIRE & EMERGENCY SERVICES
13-D Mirza Ghalib Street, Kolkata- 700 016

Memo No : IND/WB/FES/20172018/6555

DATE: 08/08/2018

From :
The Director
Fire Prevention Wing,
West Bengal Fire & Emergency Services.

To :
WEST BENGAL HOUSING BOARD
405, BORAKHOLA,
MUKUNDAPUR ROAD, WARD NO-109, BOROUGH-XII, KOLKATA-700099
Kalighat F.S., Survey Park,
Kolkata - 700099 .

Sub :Revised Fire Safety Recommendation for G+XXV storied LIG/MIG Tower, G+XXV Storied Tower A, G+XXV storied Tower B, G+XXV storied Tower D, G+XXV storied Tower E and Podium within a residential complex namely Bengal Ambuja Housing Development Limited at Premises no. 405, Borakhola, Mukundapur Road, Ward No-109, Borough- XII, Kolkata- 700099

This is in reference to your Application No. IND/WB/FES/20172018/6555, dated 08/08/2018, regarding the Fire Safety Measure for G+XXV storied LIG/MIG Tower, G+XXV Storied Tower A, G+XXV storied Tower B, G+XXV storied Tower D, G+XXV storied Tower E and Podium within a residential complex namely Bengal Ambuja Housing Development Limited at Premises no. 405, Borakhola, Mukundapur Road, Ward No-109, Borough- XII, Kolkata- 700099.

The plan submitted by you was scrutinized and marked as found necessary from Fire Safety point of view. In returning one set of plan with recommendation, this is issuing Revised Fire Safety Recommendation in favour of the aforesaid building subject to the compliance of the following fire safety measure.

Recommendation:

GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIRECTOR GENERAL
WEST BENGAL FIRE & EMERGENCY SERVICES
13-D Mirza Ghalib Street, Kolkata- 700 016

Memo No : IND/WB/FES/20192020/54606

DATE: 24/06/2019

From :
The Director
Fire Prevention Wing,
West Bengal Fire & Emergency Services.

To :
UTALIKA - LIG&MIG , WEST BENGAL HOUSING BOARD
405 BARAKHOLA, MUKANDAPUR, PS- PURBA JADAVPUR, KOLKATA - 700099
Baisnabghata Patuli F. S., Purba Jadavpur,
Kolkata - 700099 .

Sub :Fire Safety Certificate for existing construction of G+25 storied LIG & MIG Block along with Podium and Residential Activity Centre only under group Residential Building of Utalika Project at premises no 405, Barakhola, Mukandapur, PS- Purba Jadavpur, Kolkata - 700099.

This is in reference to your Application No. IND/WB/FES/20192020/54606, dated 24/06/2019, regarding the Fire Safety Certificate for existing construction of G+25 storied LIG & MIG Block along with Podium and Residential Activity Centre only under group Residential Building of Utalika Project at premises no 405, Barakhola, Mukandapur, PS- Purba Jadavpur, Kolkata - 700099..

The performance of the Fire Fighting System as incorporated in the buildings were tested at random and found satisfactorily working condition. In view of the above this office is releasing the Fire Safety Certificate for occupancy of the aforesaid building.

However to up-keep the Fire Safety Measure of the aforesaid building the following safety measures need to be incorporated / maintained.

1. Driveway must be free of any type of obstruction for easy movement of Fire Appliances. No parking will be allowed on the Drive way.

Bengal Ambuja Housing Development Limited.

Special Feature of the Project: - The project is registered under IGBC Green Home certification



Pre certified Platinum rated green home project from IGBC

Construction activity is going on at site

Bengal Ambuja Housing Development Limited.



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Glance Office at site and surrounding

Construction Phase	
Facility of labours during construction	
Specific Conditions of EC	Status of Implementation
Provision of drinking water, wastewater disposal and solid waste management should be ensured for labour camps. Water usage during construction should be optimized to avoid any wastage.	The project site office has been developed .Drinking water facility has been created for workers. Provision of drinking water has been made available for labour. Drinking water quality periodically tested by NABL accredited laboratory as per IS 10500:2012 code. Waste water disposal system for site office is well established through septic tank. Provision of Bio -toilet will be considered for labour camp and at site .
Proper sanitation facilities should be provided for construction workers to ensure environmental sanitation. Sewage generated from the areas occupied by the construction labourers have to be directed into the existing sewage drain of the area. In case of non availability of the sewer system, an onsite treatment system has to be provided.	Proper sanitation facilitated with Bio – Toilet system will be implemented at site when the construction work will starts fully. By using Bio-Digester or Bio Toilet, the human wastage will be decomposed and then the swear will be discharged to KMC line.
The scaffolds, stairs and platforms for construction works and the workers must be secured as far as possible to prevent any accident.	It is not applicable now because pre construction stage is going on. After starting construction of structure works rules Regular supervision for safety will be carried out. Medical checkup of labours will also be conducted in regular intervals
Health and safety of the workers should be ensured during construction. Personnel protective equipment like helmets, earmuffs, earplugs etc. should be provided to the workers. For vibration control damped tools must be used and the number of hours that a worker uses them must be limited	Ambuja Neotia group is already having a corporate Safety committee. A site specific safety team has already been formed under the supervision of corporate safety committee. Personnel protective equipment like helmets, earmuffs, earplugs etc has been provided to workers during construction phase. Regular supervision for safety has been carried out. Medical checkup of labours will be conducted in regular intervals.
Rest and convenience shelter for workers with creche facility, if required, particularly women, must be provided with proper toilet facilities.	Rest room with all facilities will be developed after starting main construction work at site at present
Steps to avoid disturbance during construction	

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<p>All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site. Adequate erosion and sediment control measures to be adopted before ensuing construction activities.</p>	<p>Minimum amount of excavated of topsoil has already been stored in separate places inside the site boundary in a proper way. Top soils (6 inches from the present ground level) will be stored in different pockets to avoid blockage of movement inside the project boundary) Excavated topsoil will be used for landscaping, back filling within the project site. Adequate erosion and sediment control measures will be adopted from the starting point of construction activities within the project site. Sedimentation pit will be developed to control the runoff.</p>
<p>Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans should be developed for prior to beginning of demolition and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.</p>	<p>It is a vacant land. The permission will not require. The land has been taken in joint venture with West Bengal Housing Board for developing this residential project covering house for LIG and MIG group of people.</p>
<p>Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighbouring communities and disposed off taking the necessary precautions for general safety and health aspects.</p>	<p>Very less quantity of excavated material is stored inside the project right now. It is maintained as per the norms .The excavated material including muck and debris during construction phase will not creates any adverse effects on the neighboring communities. Disposal will be done with necessary precautions for general safety and health aspects. Sprinkling arrangement will be implemented to control the dust dispersion from site.</p>
<p>Diesel generator sets during construction phase should have acoustic enclosures and should conform to E(P) Rules prescribed for air and noise emission standards</p>	<p>DG sets with acoustic enclosures will be installed for constructional purpose as an emergency supply. Construction power as per E (P) Rules prescribed for air and noise emission standards along with power supply from WBSEB. Silent DG set will be used at the project site during construction stage by the contractor .It will be monitored by NABL accredited and WBPCB recognized laboratory periodically.</p>
<p>Vehicles / equipment deployed during construction phase should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.</p>	<p>Condition of Vehicles and construction equipments has been regularly checked. Pollution certificate of vehicle has been checked at the entry point of the project site. Failure vehicles are not allowed to enter inside the boundary.</p>
<p>Ambient noise levels should conform to residential standards both during day and night. Fortnightly monitoring of ambient air quality (SPM, SO₂ and NO_x) and equivalent noise levels should be ensured during construction phase.</p>	<p>Ambient noise levels has already been checked as per residential standards both during day and night by the NABL accredited and WBPCB recognized laboratory in regular intervals. Ambient air quality monitoring has been carried out at few locations, to assess the ambient air quality. This will enable to have a comparative analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The locations of the ambient air quality monitoring stations has been finalized based on the final environmental Clearance of the project. Parameter of ambient air quality has been finalized based on the Environmental clearance.</p>
<p>Construction spoils including bituminous material and other hazardous materials including oil from construction equipments must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not</p>	<p>Construction spoils , including bituminous material and other hazardous materials including oil from construction equipments will not be allowed to contaminate watercourses and the dumpsites for such material will be secured so that it will not leaching into the ground water. Secondary containments will</p>

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leach into the ground water. If necessary, oil trap should be installed where there is deployment of heavy machineries.	be provided to check the contamination. The storage Diesel drums will be being kept on the Secondary Containments to protect waste of natural resource.
Regular supervision of the above and other measures should be in place all through the construction phase so as to avoid disturbance to the surroundings. Discomfort in the neighborhood due to the proposed project activity should be minimized as far as practicable.	Supervision has been done at regular basis to avoid disturbance of surroundings.
Loading and unloading operations should not be carried out in open areas and should be preferably done during day time, if there is any major settlement in the surrounding areas. The construction activities including Piling work, Operation of Ready Mix Plant and Vibrator etc. should not be carried out during the night time (10 P.M. to 6 A.M.).	Loading and unloading operations has not been carried out in open areas. A covered area has been demarcated for loading & unloading of materials. Construction activity like pilling etc will be restricted at day time.
The proponent must ensure that no driven piles shall be proposed for this project.	Only Bore piles with hydraulic rotary will be done at the site
15m-screen and adequate sprinkler arrangement shall be provided. Care should be taken to keep all material storages adequately covered and contained so that they are not exposed to winds.	A dust protective screen has been provided through out the boundary of the project. Adequate water sprinkling is available for dust minimization. All storage materials are adequately covered so that they are not exposed to winds.
Use of Ready-Mix concrete is recommended for this project.	Ready-Mix concrete will be used for this project.
Adequate measures to be adopted to avoid wastage of water for curing of concrete structures.	An adequate measure will be adopted to avoid wastage of water. During Construction water will be reused where ever possible at different purpose of construction. Wet jute with cloth rapping both will be used for RCC curing to minimize the water requirement.
Adequate mitigative measures should be adopted to control dust emissions, noise and vibrations from construction activities. Vehicles and construction machineries should be properly maintained. Vehicles should conform to Pollution under control (PUC) norms.	Adequate mitigative measures to control dust emissions, noise and vibrations from construction activities will be taken. Adequate water sprinkler arrangement will be made available for the dust minimization. Erosion and sediment control measures will be adopted and implemented at the time of construction of the project site.
Locally available materials with less transportation cost should be used preferably.	Local materials will be used to reduce transportation cost for the project site and side by side the automobile emission and depletion of natural resources.
Promotion of use of cleaner fuel and fuel quality improvement should be done. Excessive energy consumption and fuel usage should be avoided.	HSD will be used to minimize the energy consumption and excessive fuel usages for control the environmental pollution
Accumulation / stagnation of water should be avoided to ensure vector control.	Special care will be given to avoid water logging and accumulation of water . Pest control Spraying will be done weekly basis for control of vector and pest.
Selection of materials for better energy efficiency	

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Use of energy efficient construction materials should be ensured to achieve the desired thermal comfort.	Energy efficient construction materials will be used for achieving the desired thermal comfort. Building design has been developed considering energy efficiency factor. Energy conservation method has been adopted in the design feature. Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. will be used. The project is registered under Green building Pre certification and as per the norms energy efficiency more than ASHREY standard is mandatory.
Design layout should ensure adequate solar access and ventilation. Proper planning and window design for daylight integration should be considered.	Design layout of the building has been developed in such a way that natural ventilation and natural day light entered in the building. The sun path of the project has been established to ensure the design layout of the project to achieve the desired result.
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.	Blended cement with fly ash and fly ash bricks will be used as per MoEF notification. Fly Ash bricks will also be used in landscaping work. Only PPC cement will be used which is blended with more than 25% of fly ash . ACC block will also be used for brick wall.
Construction should conform to the requirements of local seismic regulations. The project proponent should obtain permission for the plans and designs including structural design, standard and specifications from concerned authority.	Structural design has been developed by the authorized structural designer for confirming and fulfillment of local seismic regulations. The structural design has also been vetted by Kolkata Municipality Corporation during sanctioning the building plan.
Construction technologies that require less material and possess high strength should be adopted. Materials with low embodied energy and high strength should be used preferably.	An energy efficient construction material will be used for achieving the desired thermal comfort. The design will be developed considering energy efficiency factor.
The building will be constructed and provisioned to use natural sunlight to the maximum during the day time , during use .	The design of the building will increase energy efficiency by involving maximum use of day light
Use of alternate building materials and alternate construction techniques should be considered apart from the conventional materials and methods. Use of hollow unit masonry should be considered.	Energy conservation method to be adopted. LED lighting will be installed along with Solar panel / light . Energy modeling will be cared out to get the desired result of energy saving.
Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. should be promoted. Solar energy should be used for outdoor lighting. Adequate no. of solar lights should be installed for external lighting as per norms. All common area lighting will be LED system.	Energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. will be used . Solar lighting will be used in the project and the landscaping area.
Solar water heating arrangement will be done for water heating in canteen area as proposed	Solar panel will be installed for water heating
Passive solar cooling to be incorporated in building design. Buildings should be oriented for ensuring natural ventilation and day lighting.	Based on the sun path result passive solar cooling has been incorporated in building design for ensuring natural ventilation and day lighting.

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Proper insulation of roof should be provided to achieve desired thermal comfort. Use of light coloured, reflective roofs having an SRI (solar reflectance index) of 50% or more should be incorporated.	Proper insulation of roof to be implemented to achieve desired thermal comfort. The roof may be insulated by extruded polystyrene rigid foam insulation. Albedo paint with high SRI will be used.
Use of high albedo or reflective pavements to keep parking lots, pavements and inside roads cool should be incorporated.	Open parking will be allocated on the grass pavers block instead of pavers block to reduce the hit island effect.
Guidelines to the occupants should include usage efficiency measures such as energy efficient lighting and water efficient system.	A guideline book (GREEN BOOK) will be handed over to the occupant / society during handing over to them. The GREEN book contains all possible environmental safe gird to achieve
Reduce hard paving-onsite (open area surrounding building premises) and/or provide shade on hard paved surfaces to minimize heat island effect and imperviousness of the site.	Hard paving area/ Internal road have been restricted to 13.64% of total land area. Road and paved area will be shaded by foliated tree. The project is having tow big water bodies (28.17% of land area) which will be kept as natural so pervious mess of the land has automatically reached at maximum pick.
Adequate open space, greenery and water bodies to be provided as per rules.	Considering the total land are as per deed, ground coverage is only 32.115% , 28.17% of land area is natural water body , road area is only 13.64% and green area is 20.07% of land area.
Any proposed building with air-conditioning facility should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency. Chillers will be CFC & HCFC free.	Air-conditioning system to be installed as per norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency.
Restrict the use of glazed surface as per National Building Code 2005	Glazing on façade will be restricted as per NBC and double glazing provided to reduce solar heat gain.
Water Body Conservation	
Water body, if any, should not be lined and their embankments should not be cemented. The water bodies are to be kept in natural conditions without disturbing the ecological habitat.	28.17% of land area is natural water body. These water bodies will be kept as natural. No embankment will be done as per the norms.
Plantation Proposal	
The unit should strictly abide by The West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007. The proponent should undertake plantation of trees over at least 20% of the total area.	Plantation programme will be developed on 20.07% of the total land area. The plantation programme has already been started at the surrounding of newly made site office
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.	1916 numbers of tree will be planted as per the design of landscaping.
The proponent should plant at least 1916 trees, as proposed. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy	1916 numbers of tree will be planted as per the design of landscaping. Landscaping plan will be developed considering the usage of native species and wide foliage and canopy.

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<p>cover are desirable. Water intensive and/or invasive species should not be used for landscaping.</p>	
<p>Water supply</p>	
<p>Water requirement during construction phase shall be met from KMC supply. Ground water should not be abstracted without prior permission of the competent authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.</p>	<p>Plan has been sanctioned by Kolkata Municipality Corporation considering the supply of water supply. Concurrence letter from the authority has already been obtained.</p>
<p>Sewage Treatment Plant</p>	
<p>As per the proposal submitted by the proponent waste water shall be treated in septic tank. Construction waste water will be discharged into Municipal drain after removal of grit and debris in sedimentation trap.</p>	<p>STP will be installed at the project. 748 KLD STP treated water will be recycled and 399 KLD treated effluent will be discharged to KMC sewer line.</p>
<p>Storm water Management & Mitigation of Heat Island Effect</p>	
<p>Imperviousness of the site shall not exceed the NBC (National Building Code 2005) standards for imperviousness factor applicable to different types of area.</p>	<p>Internal road area is only 13.64% of the total land area. Where as green area is 20.7 % and natural water bodies are 28.17% . Imperviousness is restricted in 13.64% of land area which well within the norms and perviousness is speared on 49.4% of land area.</p>
<p>Total paved area of site under parking, roads, paths or any other use should not exceed 25% of the site area.</p>	<p>Internal road area is only 13.64% of the total land area.</p>
<p>Minimum 50% of paved area on site should have pervious paving or shaded under vegetation or topped with finish having solar reflectance of 0.5 or higher.</p>	<p>Minimum 50% of paved area on site will be developed as pervious paving or shaded under vegetation or topped with finish with solar reflectance of 0.5 or higher</p>
<p>Adequate storm water 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 KMC drainage system and impact on receiving water body.</p>	<p>Adequate storm water drainage network will be developed as per design of project without disturbing the surrounding settlements.</p>
<p>Disruption to the natural hydrology of the site should be minimized by reducing impervious cover, increasing on site infiltration and managing storm water run off.</p>	<p>Ground water will not be withdrawn to meet the fresh water requirement of the project as KMC supply is available. Rainwater will be recharged and will be stored in the ponds and storage which is the positive in respect to geo-hydrological environment.</p>

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Heat island effect should be minimized by use of shading or reflective surfaces, mainly the surfaces that contribute to the heat island effect i.e. streets, sidewalks, parking lots and buildings. White roofs should be provided in the buildings.	Roof garden on podium level , application of SRI paint will reduce the heat island effect. More over 28.7 % of land area is covered under water body which will also reduce the heat island effect of the project.
Rain Water Harvesting Scheme	
The proponent must follow the Rainwater Harvesting Guidelines of the State Expert Appraisal Committee (SEAC) available in the website (http://www.wbpcb.gov.in)	Rain water harvesting scheme will be developed as per the proposal in line with the guideline.
The proponent must collect rainwater from roof-top catchments and reuse for various purposes after necessary cleaning. Water bodies should be created and used for storing rain water. Adequate retention time and storage provisions should be provided for harvesting rainwater.	Roof top run off will collected and will be used for gardening, cleaning etc purpose. Roof top collection will also be recharged.
The sub-surface recharge proposal including the design of recharge structure and location of recharge structure as submitted before the State Expert Appraisal Committee should be done.	Sub surface recharge has been proposed as per the SEAC guideline. The subsurface scheme has been approved the respected SEAC during the technical presentation of the project. 20243.45088 KL of rainwater will be generated from roof top. 7145.622528 KL of rainwater will be sent for subsurface recharge.
Adequate water storage for firefighting should be provided as per norms.	The project has already obtained provisional NOC from Fire department. Storage facility will be developed as per their recommendation.
Municipal Solid Waste Management	
Adequate provision shall be made for storage of solid waste and adequate means of access shall be provided.	Municipal solid waste will be treated at the premises by two ways. Non-biodegradable part will be compacted by compactor and biodegradable part will be treated through composting machine with a output of bio compost. No biodegradable compact part will be disposed off through KMC collection system. An adequate Municipal storage facility has been proposed under the guidance of KMC. The facility has been represented in the sanction plan.
Transport Management	
Both internal and external traffic planning and management should be adequate to ensure uninterrupted traffic movement in the area during construction as well as operation phase.	1751 number car parking has been posed in line with KMC rule to avoid any traffic congestion. Internal traffic movement and arrangement has been approved by KMC more than 100 numbers of extra parking has been allotted beyond the KMC building rule.
The design of service road and the entry and exit from the project area should conform to the norms & standards of competent authority for traffic management. Bell mouth type arrangement	Entry , exist of the project has been developed under the guideline of KMC and DC traffic. The road network has been reflected in the sanctioned drawing.

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should be made at the entry & exit. Proper traffic management plan should be adopted in consultation with Traffic authorities.	
Clarified Wastewater will be used for sprinkling water on the unpaved internal roads on a regular basis	Waste water will be reused for sprinkling on a regular basis
Others	
All mandatory approvals and permission as required from Director of Explosives, Fire Department etc. should be obtained.	Clearance from Airport authority of India, BSNL, and Fire NOC has already been obtained.
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.	Firefighting system will be installed under the guidance of Fire department as per the provisional clearance. BMS will be developed covering energy, operations and security etc.
Use of Energy efficient lighting systems should be promoted for energy conservation.	As it is a residential complex automatic heat exchanger, high COP chiller are not applicable. Energy conservation done as follows: <ul style="list-style-type: none"> • The apartments have been designed for ample cross-ventilation • The architectural design of the buildings have been created with respect to local climate, sun-path, etc. • The buildings are oriented in such a way that there is plenty of wind flowing through the complex • The building orientation also allows maximum entry of daylight and natural ventilation • Use of high efficiency motors, pumps and fans for air cooled HVAC • Use of HFC based refrigerants in the air-conditioning system to avoid ozone depletion • Fresh air requirement of as prescribed in the ASHRAE 62.1-2007 with 2010 amendment will be maintained for Indoor Air Quality in the commercial spaces. • It is proposed to control all common area lighting with photocell controllers which will switch on/off and dim the lights according to the ambient light conditions. • Solar lighting system is being proposed in the Landscaping and for street lighting.
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.	The building has been deigned emphasizing the natural ventilation. HVAC system will be provided by using DX or VRV system. Indore air quality will be maintained by natural ventilation system at residential part. Club and commercial part will be fitted with AHU to maintain the IAQ.
Adequate measures to be adopted for water conservation during construction and operation stage. Use of efficient irrigation equipment, evaporative cooling unit in air-conditioning system etc should be considered.	The duel flushing unit will be implemented.

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Rest room facilities should be provided for service population.	Servant room , rest room or facility management room, security room, maintenance room, service room has been allocated in the project.
Provisions should be kept for the integration of solar water heating system.	As this project is predominantly residential installation control for installation of solar heater is not in the hand of project proponent. Solar heater may be provided for restaurant as per the requirement.
Adequate access to fire tenders should be provided	9 meter internal road has been provided as per the recommendation of fire department for the movement of fire tender.
CO monitoring facility with automatic alarm should be provided at basement car parking, if any.	CO monitoring facility will be provided at basement car parking. (Tower - C)

Operation phase will be applicable after the construction phase is over

Operation Phase	
Water supply	
Conditions	Status of Implementation
Water requirement during operation phase shall be met from KMC supply. Ground water should not be abstracted without prior permission of the competent authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.	Fresh water requirement will be met form KMC supply. The project is having necessary permission for installing Bore wells from SWID. These bore well s well be kept as emergency source of water.
Use of water meter conforming to ISO standards should be installed at the inlet point of water uptake to monitor the daily water consumption. Use of water efficient devices / fixtures and appliances should be promoted.	Water meter will be installed.
The proponent must practice rainwater harvesting on regular basis.	As per the design and construction Rainwater harvesting will be maintained.
Sewage Treatment Plant	
As per the proposal submitted by the proponent wastewater shall be discharged to KMC sewer after treatment in STPs. Discharge of wastewater should conform to E(P) Rules.	Only treated effluent will be discharge in KMC line.
Reuse of treated waste should be carried out as proposed	It is zero discharge unit .
Emission from Diesel Generator Set	
Noise barriers will be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards.	DG sets will be installed with inbuilt acoustic enclosure.

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Diesel generator sets should be provided with integral acoustic enclosure at the manufacturing stage itself as per CPCB norms.	
The stack height and emissions from D.G. sets should conform to the norms of Central Pollution Control Board. The certification of space design for DG sets should be done by competent authority.	DG stack height will be maintained as per the stipulated norms of WBPCB in their Consent to Establish.
Ensure Energy Efficiency	
Use of energy efficient construction materials to achieve the desired thermal comfort should be incorporated. The desired level of R and U factors must be achieved. U factor for the top roof should not exceed 0.4 Watt/sq.m/degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 should be strictly followed.	Energy efficient construction materials will be used for achieving the desired thermal comfort. The design has been developed considering energy efficiency factor. Energy conservation method has been adopted in the design feature. Proper insulation of roof to be implemented to achieve desired thermal comfort. High SRI Albedo paint to be applied on the roof top. Roof top garden will be developed at podium level to reduce heat island effect. Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. which is used at the project site office and rest part will be implemented at the building after construction period is over. There will be a provision for using of energy efficient lighting systems will be applied. The project is registered under Green building Pre certification.
Use of energy efficient electrical systems should be promoted. High efficiency lamps with electronic ballasts should be used.	In order to achieve higher degree of power supply reliability, the designer has made an innovative approach of providing double bus arrangements. The facility will enable faster supply change over on the event of maintenance activities.
Energy efficient Motors and properly rated Transformers should be installed. Manufacturer's certificate to this effect shall be obtained and kept on record. Back up power supply should be based on cleaner fuel.	Energy efficient Motors and properly rated Transformers will be installed for the operational phase. Manufacturer's certificate to this effect shall be obtained and kept on record. Backup power supply will be based on cleaner fuel.
The power cabling shall be adequately sized as to maintain the distribution losses not to exceed 1% of the total power usage. Record of transmission losses shall be maintained. The proponent shall install permanent electrical metering to record demand (kVA), energy (kWh) and total power factor.	The power cabling will be adequately sized as to maintain the distribution losses not to exceed 1% of the total power usage.
The project proponent should use solar energy at least for street lighting.	Solar lighting will be provided for common area, landscape are etc.
Transport Management	
Use of public mode of transportation should be promoted for occupants. Use of the least polluting type of transportation should be promoted. Adequate parking space should be provided as per norms.	The project is strategically located to the E.N Bypass. Nearest railway station is Jadavpur, Nearest metro is New Garia. Proposed Metro is closed to the project site.
Pathways should be covered or shadowed by tree canopy. Transport system should be such that traffic will be calm in neighborhoods. Traffic within the project site should be restricted by regulation.	Internal road will be shaded by tree canopy. Traffic within the project will be controlled by facility management.

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<p>Adequate vertical and horizontal clearances of overhead electric power and telecommunication lines should be provided.</p>	
<p>Solid Waste Management</p>	
<p>The proponent should abide by the Municipal Solid Wastes (Management and Handling) Rules, 2000. The proponent must develop the Solid Waste Management and Disposal Scheme ensuring storage and segregation of biodegradable and non-biodegradable wastes. The solid waste is to be disposed off in consultation with municipality.</p>	<p>Solid waste generated (Mainly non bio degradable)form the project will be disposed off through KMC collection system. Separate storage and collection system will be provided.</p>
<p>The proponent must install on-site compost plant for treatment of biodegradable fraction of Municipal Solid Waste and will be incorporated in the building layout plan. Sufficient space for installation of on-site compost plant should be provided and operation of the compost plant considering full occupancy of the apartments i,e the capacity of garbage disposal unit should be selected accordingly.</p>	<p>Solid wastes generated from the complex will be scientifically segregated at the source. Biodegradable waste will be composted and compacted within the site. Waste segregation will be done in two parts</p> <ol style="list-style-type: none"> 1. Wet Organic Waste and 2) Dry Waste. Separate Bins will be earmarked for the DRY WASTE and Separate for the WET WASTE in every house and every floor. The DRY waste transported from the buildings will be stored in the Dry Bins and the Wet waste will be stored in the Wet Bins. A separate area has been marked in the sanctioned plan by Kolkata Municipal Corporation where a compactor and composter will be installed. 2. Municipal solid waste will be treated at the premises by two way. Non biodegradable part will be compacted by compactor and biodegradable part will be treated through composting machine with an output of biocompost. No biodegradable compact part will be disposed off through KMC collection system. An adequate Municipal storage facility has been proposed under the guidance of KMC. The facility has been represented in the sanction plan.
<p>The handling agency should also take care of the recyclable wastes like plastic, paper board,glass etc. and also inert materials in case the respective municipal authorities want to avoid any kind of wastes from the housing complex.</p>	<p>The non bio degradable wastes will be carried out by authorized vendor and bio degradable waste will be compacted in on site established well equipped compactor machine</p>
<p>The proponent should have sufficient area for horticulture where the compost generated can be used as fertilizer and soil supplement and also have arrangement for sale of excess quantity of compost.</p>	<p>The project proponent has sufficient area for composting the generated waste material. After composting the material can be used as fertilizer and soil supplement.</p>

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<p>Provision for treatment of leachate generation and odour control in on-site compost plant should be made.</p>	<p>Well technically equipped composed machine will be installed in operational phase which reduce odour, leachate generation and human resource</p>
<p>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.</p>	<p>Separate colored bins will be provided to house hold for collection of MSW. Segregated MSW will be stored in the garbage collection room as demarcated by KMC in the sanctioned drawing.</p>
<p>The proponent should abide by the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Collection and storage of hazardous wastes during Pre-construction and Post-construction activity should be planned properly. The expected hazardous wastes should be disposed off separately as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.</p>	<p>The project will be abide by the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 if hazardous waste generated form project.</p>
<p>Spent oil from DG Sets should be stored in HDPE drums in isolated covered facility and disposed off as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Spent oil from DG Sets should be disposed off through registered recyclers only.</p>	<p>Spent oil will be stored and disposed off as per the stipulated condition or condition mentioned in the environmental clearance.</p>
<p>Others</p>	
<p>The implementation of Environmental Management Plan should be carried out, as proposed. Regular monitoring should be carried out during construction and operation phases.</p>	<p>Implementation of Environmental Management plan will be done on the basis of final environmental clearance.</p>
<p>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.</p>	<p>A guide line will be provided in the form of GTC (General Terms & Conditions) during handing over the dwelling units to occupier</p>
<p>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.</p>	<p>Fire fitting system has been designed on the basis of provisional Fire NOC.</p>

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The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. At least 2% of the project cost should be utilized for Corporate Social Responsibility programmes.	CSR programme will be implemented as per the corporate rules and proposal.
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	Project Proponent (Bengal Ambuja Housing Development Limited [Joint venture company with Housing Board of Govt. Of W.B) will be abide by the notification Number No. EN/3170/T-IV-7/001/2009 dated 10.12.2009
Environmental Management Information System shall be maintained properly.	Environmental Management Information System will be maintained properly. The necessary information will be made available for stake holders.
The proponent should restrict the use of glazed surface as per National Building Code 2005.	Building design is complying the NBC 2005 with respect to usage of glazing. As it is predominantly residential building usage of glazing lesser than any office or IT ITS building.
The project proponent should comply with the recommendations of Zoological Survey of India made in their report .	A report on Impact on Avi- Fauna migration by Zoological Survey of India (Hq.), Kolkata is enclosed which reviles no adverse impact due this project.
The project proponent should include the following in the first compliance report — i. Power consumption (expected) per unit base area of the buildings --- ii. Heat released for running AC / HVAC for the individual buildings, and the location and elevation at which this will be released. --- iii. Fraction of covered area that will have sufficient natural lighting on an average sunlit day. --- iv. Fraction of energy needs met by solar energy source (photo voltaic as well as heating).	
General Conditions	
Conditions	Status of Implementation
The environmental clearance accorded shall be valid for a period of 5 years for the proposed project.	The environmental clearance has been issued on 18/11/2014 with vide memo no. 2809/EN/T-II-1/022/2012 by State level environment impact assessment authority. Sanctioned plan has been revised except Tower C
Prior Consent-to-Establish (NOC) for the proposed project must be obtained from WBPCB by the proponent. All other statutory	Consent-to-Establish (NOC) for UTALIKA has been issued on 09/03/2015with NOC no NO124891and memo no 180-2N-07/2012(E) by Pollution Control Board West Bengal

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clearances should be obtained by project proponent from the competent authorities.	
The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project.	The proponent has already been maintained a display board at the site, providing detailed information on the salient features of the proposed project.
The environmental safeguards contained in the EIA/EMP report should be implemented in letter and spirit.	EMP will be implemented as per the proposed plan in the EIA report.
All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.	During handing over all legal liability will be handed over if applicable.
Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits.	Necessary provision for fuel for cooking will be provided.
The project proponent should make financial provision in the total budget of the project for implementation of the suggested safeguard measures.	Financial Budget will be allocated for implementation of the suggested safeguard measures.
Six monthly monitoring reports should be submitted to the West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards and should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.	The Six monthly compliance report has been submitted for October 2018 to March 2019
In case of any violation of the conditions laid down in this Environmental Clearance, Section 16 of The Environment (Protection) Act, 1986, will be applicable. In case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, West Bengal.	The project is not started Proponent may not any legal violation with respect to Environmental Clearance, Section 16 of The Environment (Protection) Act, 1986, will not take place. Change of project profile after obtaining the final environmental clearance will be done only after revised Environmental Clearance..
The State Level Environment Impact Assessment Authority, West Bengal reserves the right to add additional safeguard measures	Not applicable at this moment

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<p>subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.</p>	
<p>The Project Proponent should inform the public that the proposed project has been accorded environmental clearance by the SEIAA, West Bengal and copies of the clearance letter are available with the State Pollution Control Board / Committee and may also be seen at website of the SEIAA, West Bengal (http://environmentwb.gov.in). This should 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.</p>	<p>Public notification has been published on local Bengali and English Newspaper</p>
<p>All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Civil Aviation Department (if required) etc. shall be obtained by project proponents from the competent authorities.</p>	<p>Clearance from Airport authority of India, BSNL, Fire NOC, EC and NOC has already been obtained.</p>
<p>Provision for incorporation of appropriate conditions in the Sale Agreement / Deed, for ensuring sustained Operation and Maintenance (O&M) of the common facilities (STP, Rainwater harvesting system, Solid waste management system, Solar street lights etc.) even after transfer of ownership of the project, should be made in explicit and transparent manner.</p>	<p>Maintenance of all environmental safe and sustainability matter will be reflected in GTC during handing over.</p>
<p>The above stipulations would be enforced along with those under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008, the Public Liability Insurance Act, 1991, the Environment Impact Assessment Notification 2006 and their amendments.</p>	<p>It will be maintained</p>

Bengal Ambuja Housing Development Limited.**Construction Phase****Specific Conditions**

Provision of drinking water, waste water disposal and solid waste management should be ensured for labour camps. Water usage during construction should be optimized to avoid any wastage.

The project site office has been build inside the project site .Drinking water facility has been created for workers .Provision of drinking water will be made at labour camp. Drinking water quality will be periodically tested by NABL accredited laboratory as per IS 10500:2012 code for the workers camp. At present no labour camp has been settled at site.

Waste water disposal system will be developed for workers.. Proper maintenance will be taken care by the project proponent.

Solid waste management has been implemented for the site and also for the labour camps. Bio -toilet will be installed for labour camp and at site. The generated waste water will be discharged to the sewer line of KMC through Bio – Septic Presently there is no labor camp at the project.

Solid waste management will be implemented for the site and also for the labour camps. The Generated Solid wastes from labours camp will be disposed through KMC Collection system. All labour and supervisors will be strictly instructed to avoid wastage of water.



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Proper sanitation facilities should be provided for construction workers to ensure environmental sanitation. Sewage generated from the areas occupied by the construction labourers have to be directed into the existing sewage drain of the area. In case of non availability of the sewer system, an onsite treatment system has to be provided.

Proper sanitation facilitated with Bio – Toilet system will be implemented at site when the construction work will starts fully. By using Bio-Digester or Bio Toilet, the human wastage will be decomposed and then the swear will be discharged to KMC line for workers hutment and for site office also.



The scaffolds, stairs and platforms for construction works and the workers must be secured as far as possible to prevent any accident.

It is not applicable now because pre construction stage has been going on. After starting main construction works will fulfill the Safety rules Regular supervision for safety will be carried out. Medical checkup of labours will be conducted in regular intervals

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Picture of medical camp at site

Health and safety of the workers should be ensured during construction. Personnel protective equipment like helmets, earmuffs, earplugs etc. should be provided to the workers. For vibration control damped tools must be used and the number of hours that a worker uses them must be limited.

Ambuja Neotia group is already having a corporate Safety committee. A site specific safety team has already been formed under the supervision of corporate safety committee. Personnel protective equipment like helmets, earmuffs, earplugs etc has been provided to workers during construction phase. Regular supervision for safety has been carried out. Medical checkup of labours will be conducted in regular intervals. Safety, Health and Environment is given utmost importance in Utalika project site. 100% compliance of personal protective equipment, training and regular pep talks are salient highlights of the project. Regular medical check-ups are also conducted to test the general health of the workers. Quarterly safety audits are conducted and the results are shared with the Top management. 100% compliance of personal protective equipment, use of proper electrical accessories and protection of height works are salient highlights of the project. Regular medical check-ups are also conducted to test the general health of the workers.

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Utalika- Sensitivity test of Residual Current Circuit Breakers



Utalika- Tool Box Meeting

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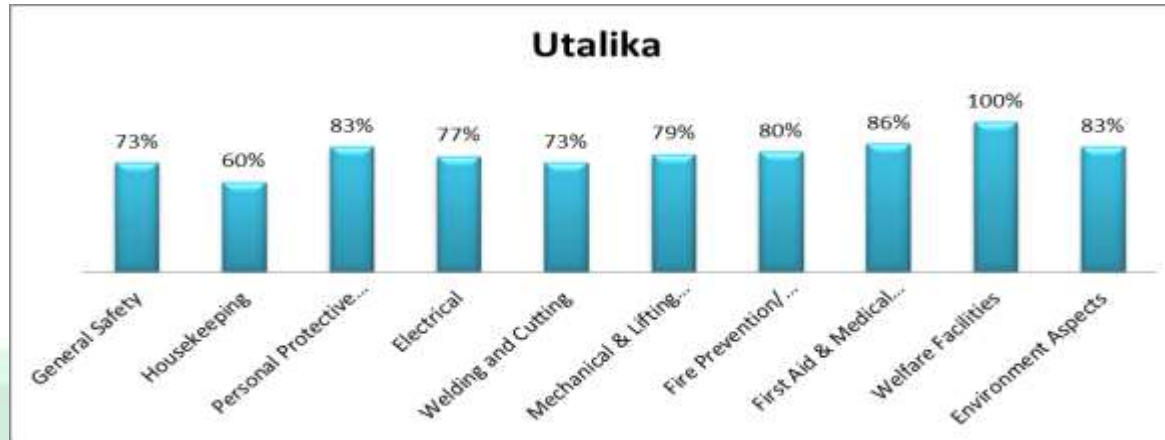


Utalika- Live demo on Use of Fall arrestor

Utalika- Yoga class for workers and managers



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Rest and convenience shelter for workers with creche facility, if required, particularly women, must be provided with proper toilet facilities.

Rest room with all facilities has been constructed with all required facilities. No women work force are involved in this project till date.



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All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site. Adequate erosion and sediment control measures to be adopted before ensuing construction activities.

Minimum amount of excavated of topsoil has already been stored in separate places in side the site boundary in a proper way. Top soils (6 inches from the present ground level) will be stored in different pockets to avoid blockage of movement inside the project boundary) Excavated topsoil will be used for landscaping, back filling within the project site. Adequate erosion and sediment control measures will be adopted from the starting point of construction activities within the project site. Sedimentation pit will be developed to control the runoff.



Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans should be developed for prior to beginning of demolition and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.

It is a vacant land . The permission will not required

Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighboring communities and disposed off taking the necessary precautions for general safety and health aspects.

There is no excavated material right now. It will be maintained after starts of main construction .The excavated material including muck and debris during construction phase will not creates any adverse effects on the neighboring communities. Disposal will be done with necessary precautions for general safety and health aspects. Sprinkling arrangement will be implemented to control the dust dispersion from site.

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Utalika- Dust suppression drive

Diesel generator sets during construction phase should have acoustic enclosures and should conform to E(P) Rules prescribed for air and noise emission standards

DG sets with acoustic enclosures will be installed for constructional purpose as an emergency supply. Construction power as per E (P) Rules prescribed for air and noise emission standards along with power supply from WBSEB. Silent DG set will be used at the project site during construction stage by the contractor .It will be monitored by NABL accredited and WBPCB recognized laboratory periodically.

Vehicles / equipment deployed during construction phase should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

Condition of Vehicles and construction equipments has been regularly checked. Pollution certificate of vehicle has been checked at the entry point of the project site

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Vehicle Pass Certificate

WB-01-B 6817680

Sl.No	22599
Pucno	BST/02/2002022599
Make	TATA
Model	2516
Veh Type	OTHERS
Fuel	DIESEL
Reg Year	2010
OdoMeter	0
EngNo	18505
ChassisNo	13339
Test Time	3:02:52 PM

Flash	Ins Code	RPMM Max.	Temp.
Avg.	RPMM Min.	RPMM Max.	Km/h
861	3106	88	
1	880	3239	102 35.7 88
2	878	3195	0.98 34.6 80
3	839	3228	0.87 31.9 91
4	848	3207	0.78 27.9 82
5	878	3247	1.13 30.5 85
6	872	3193	0.96 34.0 87
7	885	3193	0.79 28.1 87
8	873	3174	0.77 28.4 86
9	828	3153	0.64 24.3 88
10	880	3239	0.74 27.4 80
Mean	Pass	8.73	27.2

OilTemp: 88
Avg.RPMMin: 861
Avg.RPMMax: 3106
Owner Name: PINTU BHATTACHARJEE
Machine Name: SmokeMeter

Vehicle Pass Certificate

WB-01-B 6816109

Sl.No	21558
Pucno	BST/02/2002021558
Make	TATA
Model	2516
Veh Type	OTHERS
Fuel	DIESEL
Reg Year	2008
OdoMeter	0
EngNo	62410027
ChassisNo	208024
Test Time	10:38:41 AM

Flash	Ins Code	RPMM Max.	Temp.
Avg.	RPMM Min.	RPMM Max.	Km/h
805	2586	88	
1	829	2542	1.34 44.0 88
2	844	2317	0.91 32.4 89
3	853	2454	0.86 24.8 71
4	807	3103	0.87 31.3 76
5	810	2317	0.85 31.2 75
6	795	2282	0.89 22.2 79
7	795	2300	0.74 27.5 76
8	834	2297	0.84 24.2 76
Mean	Pass	9.82	23.7

OilTemp: 88
Avg.RPMMin: 805
Avg.RPMMax: 2586
Owner Name: M/S SATYAM
Machine Name: SmokeMeter

Ambient noise levels should conform to residential standards both during day and night. Fortnightly monitoring of ambient air quality (SPM, SO2 and NOx) and equivalent noise levels should be ensured during construction phase.

Ambient noise levels has already been checked as per residential standards both during day and night by the NABL accredited and WBPCB recognized laboratory in regular intervals. Ambient air quality monitoring has been carried out at few locations, to assess the ambient air quality. This will enable to have a comparative analytical understanding about air quality and the changes in the air environment in the study area with respect to the condition prevailing. The locations of the ambient air quality monitoring stations has been finalized based on the final environmental Clearance of the project. Parameter of ambient air quality has been finalized based on the Environmental clearance . Ambient air quality monitoring was conducted in respect of the following parameters:

- 1) Particulate Matter 2.5 (PM2.5)
- 2) Particulate Matter 10 (PM10)
- 3) Sulphur Dioxide (SO2)

Bengal Ambuja Housing Development Limited.**4) Oxides of Nitrogen (NOx)**

The duration of sampling of PM2.5, PM10, SO2 and NOx was 24 hourly continuous sampling per day. The monitoring was conducted for one day at each location. This is to allow a comparison with the National Ambient Air Quality Standards. The air samples were analyzed as per standard methods specified by Central Pollution Control Board (CPCB) and IS: 5182. The techniques used for ambient air quality monitoring with in minimum detectable levels. Fine Particulate Sampler APM 550 instruments have been used for monitoring Particulate Matter 2.5 (PM2.5 i.e. <2.5 microns), and Respirable Dust Sampler APM 450 was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO2, and NOx.

The main objective of noise monitoring in the study area is to assess the present ambient noise levels in project site & project boundary due to various construction allied activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at 3 locations inside the boundary of the project site.

Noise levels were measured using integrated sound level meter manufactured by Quest Technologies. The integrating sound level meter is an integrating/ logging type with Octaves filter attachment with frequency range of 31.5 to 16000 Hz. This instrument is capable of measuring the Sound Pressure Level (SPL), Leq and octave band frequency analysis. Noise level monitoring was carried out continuously for 24-hours with one hour interval starting at 0030 hrs to 0030 hrs next day. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument based on the sound pressure levels. Lday (Ld), Lnight (Ln) and Ldn values were computed using corresponding hourly Leq. Monitoring was carried out at 'A' response and fast mode.

Construction spoils including bituminous material and other hazardous materials including oil from construction equipments must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water. If necessary, oil trap should be installed where there is deployment of heavy machineries.

Construction spoils, including bituminous material and other hazardous materials including oil from construction equipments will not be allowed to contaminate watercourses and the dumpsites for such material will be secured so that it will not leaching into the ground water. Secondary containments will be provided to check the contamination. The storage Diesel drums will be being kept on the Secondary Containments to protect waste of natural resource.

Regular supervision of the above and other measures should be in place all through the construction phase so as to avoid disturbance to the surroundings. Discomfort in the neighborhood due to the proposed project activity should be minimized as far as practicable.

Supervision has been done at regular basis to avoid disturbance of surroundings.

Loading and unloading operations should not be carried out in open areas and should be preferably done during day time, if there is any major settlement in the surrounding areas. The construction activities including Piling work, Operation of Ready Mix Plant and Vibrator etc. should not be carried out during the night time (10 P.M. to 6 A.M.).

Loading and unloading operations has not been carried out in open areas. A covered area has been demarcated for loading & unloading of materials. Construction activity like pilling etc will be restricted at day time.

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The proponent must ensure that no driven piles shall be proposed for this project.

Only Bore piles with hydraulic rotary will be done at the site

15m-screen and adequate sprinkler arrangement shall be provided. Care should be taken to keep all material storages adequately covered and contained so that they are not exposed to winds.

A dust protective screen has been provided through out the boundary of the project. Adequate water sprinkling is available for dust minimization. All storage materials are adequately covered so that they are not exposed to winds.

Use of Ready-Mix concrete is recommended for this project.

Ready-Mix concrete is using for this project.



Adequate measures to be adopted to avoid wastage of water for curing of concrete structures.

An adequate measure has been adopted to avoid wastage of water. During Construction water is reused where ever possible at different purpose of construction. Wet jute with cloth rapping both will be used for RCC curing to minimize the water requirement.

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Adequate mitigative measures should be adopted to control dust emissions, noise and vibrations from construction activities. Vehicles and construction machineries should be properly maintained. Vehicles should conform to Pollution under control (PUC) norms.

Adequate mitigative measures to control dust emissions, noise and vibrations from construction activities will be taken. Adequate water sprinkler arrangement will be made available for the dust minimization. Erosion and sediment control measures will be adopted and implemented at the time of construction of the project site.

Locally available materials with less transportation cost should be used preferably.

Local materials will be used to reduce transportation cost for the project site and side by side the automobile emission and depletion of natural resources.

Promotion of use of cleaner fuel and fuel quality improvement should be done. Excessive energy consumption and fuel usage should be avoided.

HSD will be used to minimize the energy consumption and excessive fuel usages for control the environmental pollution

Accumulation / stagnation of water should be avoided to ensure vector control.

Special care will be given to avoid water logging and accumulation of water . Pest control Spraying will be done weekly basis for control of vector and pest.

Use of energy efficient construction materials should be ensured to achieve the desired thermal comfort.

Energy efficient construction materials will be used for achieving the desired thermal comfort. Building design has been developed considering energy efficiency factor. Energy conservation method has been adopted in the design feature. Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. will be used. The project is registered under Green building Pre certification and as per the norms energy efficiency more than ASHREY standard is mandatory.

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Design layout should ensure adequate solar access and ventilation. Proper planning and window design for daylight integration should be considered.

Design layout of the building has been developed in such a way that natural ventilation and natural day light entered in the building. The sun path of the project has been established to ensure the design layout of the project to achieve the desired result.

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.

Blended cement with fly ash and fly ash bricks will be used as per MoEF notification. Fly Ash bricks will also be used in landscaping work. Only PPC cement will be used which is blended with more than 25% of fly ash . ACC block will also be used for brick wall.



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Construction should conform to the requirements of local seismic regulations. The project proponent should obtain permission for the plans and designs including structural design, standard and specifications from concerned authority.

Structural design has been developed by the authorized structural designer for confirming and fulfillment of local seismic regulations. The structural design has also been vetted by Kolkata Municipality Corporation during sanctioning the building plan.

Construction technologies that require less material and possess high strength should be adopted. Materials with low embodied energy and high strength should be used preferably.

An energy efficient construction material will be used for achieving the desired thermal comfort. The design will be developed considering energy efficiency factor.

The building will be constructed and provisioned to use natural sunlight to the maximum during the day time, during use.

The design of the building will increase energy efficiency by involving maximum use of day light.



Sun path diagram ensuring sunlight to the project throughout different season

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Sun path diagram ensuring sunlight to the project throughout different season

Use of alternate building materials and alternate construction techniques should be considered apart from the conventional materials and methods. Use of hollow unit masonry should be considered.

Energy conservation method to be adopted. LED lighting will be installed along with Solar panel / light . Energy modeling will be cared out to get the desired result of energy saving. The project is registered under Green building certification.

Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. should be promoted. Solar energy should be used for outdoor lighting. Adequate no. of solar lights should be installed for external lighting as per norms. All common area lighting will be LED system.

Energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. will be used . Solar lighting will be used in the project and the landscaping area.

Solar water heating arrangement will be done for water heating in canteen area as proposed

Solar panel will be installed for water heating by the owner of the individual dwelling unit as per their requirement. As there is no hotel or restaurant where huge hot water requirement is predefined, solar water heater has been automatically excluded from the scope of management.

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Passive solar cooling to be incorporated in building design. Buildings should be oriented for ensuring natural ventilation and day lighting.

Based on the sun path result passive solar cooling has been incorporated in building design for ensuring natural ventilation and day lighting. Double glazing will be implemented to reduce solar heat gain.

Orientation of the building has been done in such a way that natural ventilation will take place. Wind from southern direction will flow towards northern direction. All buildings are facing towards south. Considering the sun path maximum exposure has been given towards south east direction. Shading coefficient of respective towers has been considered for cooling effect. But fenestration of natural light inside the dwelling unit will be high.



Natural ventilation wind flow

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Natural ventilation wind flow diagram through typical dwelling unit

Proper insulation of roof should be provided to achieve desired thermal comfort. Use of light coloured, reflective roofs having an SRI (solar reflectance index) of 50% or more should be incorporated.

Proper insulation of roof to be implemented to achieve desired thermal comfort. The roof may be insulated by extruded polystyrene rigid foam insulation. Albedo paint with high SRI will be used.

The project team will be utilise high SRI reflective paint over the roof area i.e. exposed to direct sunlight.

For example :

Total roof area in the project = 14698 sqft

Exposed Roof area proposed with high Albedo paint = 11079 sqft

Percentage roof area with high Albedo paint = 75.38%

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Shortlisted product – GS Primer – GS 108 White (GS1080)

Emissivity = 0.91


Reflectivity = 0.822

SRI = 103

Solar Reflective Index calculation

Test surface properties

Solar reflectance (0-1)	R	0.822
Thermal emittance (0-1)	E	0.91



SRI= 103

Use of high albedo or reflective pavements to keep parking lots, pavements and inside roads cool should be incorporated.

Open parking will be allocated on the grass pavers block instead of pavers block to reduce the hit island effect. High Albedo paint with 78 SRI will be applied on the roof top. Roof top garden will be developed to reduce heat island effect and HVAC load.

Guidelines to the occupants should include usage efficiency measures such as energy efficient lighting and water efficient system.

A guideline book (GREEN BOOK) will be handed over to the occupant / society during handing over to them. The GREEN book contains all possible environmental safe grid to achieve. Energy efficient lighting measures and water efficient system will be taken as per guideline.

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Reduce hard paving-onsite (open area surrounding building premises) and/or provide shade on hard paved surfaces to minimize heat island effect and imperviousness of the site.

Hard paving area/ Internal road have been restricted to 13.64% of total land area. Road and paved area will be shaded by foliated tree. The project is having tow big water bodies (28.17% of land area) which will be kept as natural so pervious mess of the land has automatically reached at maximum pick. Using of grass paper block instead of hard paving-onsite (open area surrounding building premises) to minimize heat island effect and imperviousness of the site.

Adequate open space, greenery and water bodies to be provided as per rules.

Considering the total land are as per deed, ground coverage is only 32.115% , 28.17% of land area is natural water body , road area is only 13.64% and green area is 20.07% of land area.

Any proposed building with air-conditioning facility should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency. Chillers will be CFC & HCFC free.

Air-conditioning system to be installed as per norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency.

Restrict the use of glazed surface as per National Building Code 2005

Glazing on façade will be restricted as per NBC and double glazing provided to reduce solar heat gain. The Building was developed on the basis of the prescriptive requirements of Appendix G of ASHRAE/IESNA Standard 90.1-2004. The building is simulated with its actual orientation and again after rotating the entire building 90,180,270 degrees, then averaging the results. The Building model input parameters are as follows

Building Envelope

- Exterior Wall Construction: Steel-frame construction, R-13 insulation, U-factor=0.124 Btu/hr.ft2.ºF
- Roof construction: Insulation entirely above deck, R=15ci,u-factor=0.063, Roof reflectivity=0.30
- Window to gross wall ratio: 21.30 % , uniformly distributed on all sides
- Fenestration Type:
 - U-Value : 1.22 Btu/hr.ft2.ºF
 - SHGC : 0.25
 - VLT : 25%
 - Shading Device: SUNSHADE



Combining the solar control properties of a tinted or reflective outboard lite (such as the Pilkington Arctic Blue™ High-Performance Tint shown here) with the thermal control properties of Pilkington Energy Advantage™ Low-E gives you an almost limitless

The selection of high performance glass become imperative for the southeast and southwest to reduce the energy load. It is recommended to use a SC value of between SC= 0.1 to 0.4 & a U- value of U = 1.7 to 3 W/m2 0 K..

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Water body, if any, should not be lined and no embankments should be cemented. The water bodies are to be kept in natural conditions without disturbing the ecological habitat.



28.17% of land area is natural water body. These water bodies will be kept as natural. No embankment will be done as per the norms.

The unit should strictly abide by The West Bengal Trees (Protection and Conservation in Non-Forest Areas) Rules, 2007. The proponent should undertake plantation of trees over at least 20% of the total area.

Plantation programme will be developed on 20.07% of the total land area. The plantation programme has already been started at the surrounding of newly made site office

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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.

1916 numbers of tree will be planted as per the design of landscaping.

The proponent should plant at least 1916 trees, as proposed. 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.

1916 numbers of tree will be planted as per the design of landscaping. Landscaping plan will be developed considering the usage of native species. The plantation programme will be taken as per construction schedule. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species has not been used for landscaping.



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Water requirement during construction phase shall be met from KMC supply. Ground water should not be abstracted without prior permission of the competent authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.

Plan has been sanctioned by Kolkata Municipality Corporation considering the supply of water supply. Concurrence letter from the authority has already been obtained.

As per the proposal submitted by the proponent waste water shall be treated in septic tank. Construction waste water will be discharged into Municipal drain after removal of grit and debris in sedimentation trap.

STP will be installed at the project. 748 KLD STP treated water will be recycled and 399 KLD treated effluent will be discharged to KMC sewer line. STP treated water will be used for landscaping, HVAC etc.

Imperviousness of the site shall not exceed the NBC (National Building Code 2005) standards for imperviousness factor applicable to different types of area.

Internal road area is only 13.64% of the total land area. Whereas green area is 20.7 % and natural water bodies are 28.17% Imperviousness is restricted in 13.64% of land area which well within the norms and perviousness is speared on 49.4% of land area.

Total paved area of site under parking, roads, paths or any other use should not exceed 25% of the site area.

Internal road area is only 13.64% of the total land area.

Minimum 50% of paved area on site should have pervious paving or shaded under vegetation or topped with finish having solar reflectance of 0.5 or higher.

Minimum 50% of paved area on site will be developed as pervious paving or shaded under vegetation or topped with finish with solar reflectance of 0.5 or higher

Adequate storm water 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 KMC drainage system and impact on receiving water body.

Adequate storm water drainage network will be developed as per design of project without disturbing the surrounding settlements. Storm water management plan will be implemented. Collecting pit will be installed for controlling surface runoff, specifically during monsoon.

Disruption to the natural hydrology of the site should be minimized by reducing impervious cover, increasing on site infiltration and managing storm water run off.

Bengal Ambuja Housing Development Limited.

Ground water will not be withdrawn to meet the fresh water requirement of the project as KMC supply is available. Rainwater will be recharged and will be stored in the ponds and storage which is the positive in respect to geo-hydrological environment. Rain water collection pit, storm water collection pit, natural landscaping etc will be minimize and manage storm water runoff and increasing infiltration. Collecting pit will be used for controlling surface runoff, specifically during monsoon. As runoff coefficient is not changed much due to usage of grass papered block and landscaping. Roof top collection goes to the Rainwater collection chamber.

Heat island effect should be minimized by use of shading or reflective surfaces, mainly the surfaces that contribute to the heat island effect i.e. streets, sidewalks, parking lots and buildings. White roofs should be provided in the buildings.

Roof garden on podium level , application of SRI paint will reduce the heat island effect. More over 28.7 % of land area is covered under water body which will also reduce the heat island effect of the project. Double glazing will reduced solar heat gain and plantation reduce heat inland effect. Albedo paint with high SRI will be applied on the roof . Plantation programme will be done in such a way that shading coefficient will increase on path way and on internal road.

To reduce Heat Island effect of the project following steps have been taken

- Ground coverage of the project is restricted to 34.57 % of land area
- 20.10% of land area is covered under green / plantation.
- 1200 number of big trees and 716 number of medium and small trees will be planted
- 28.17% of land area is water body. These two ponds will be kept as natural.

The podium area i.e 13.04% of land area will be covered by roof garden. As the podium roof will be covered by gardening and lawn automatically heat island area will be reduced. Generation of latent heat in during afternoon will be very less.

- Internal road area (hard paved area) has been kept within 15% of the land area. Internal road will be having shaded trees.
- The project team has proposed to provide 99.29% of parking space in the basement, ground floor, first floor, Second Floor, Third Floor of the project building. Radiation from the car after absorbing heat for whole day has been eliminated.
- Open car parking is restricted only within 0.71% of land area. Only 11 numbers of cars have been allocated for open type of parking.
- Reflective glass will not be used on window or as glazing on façade of the building. The chazza or sunshade will be provided for necessary shading to reduce the heat refraction.

The proponent must follow the Rainwater Harvesting Guidelines of the State Expert Appraisal Committee (SEAC) available in the website (<http://www.wbpcb.gov.in>)

Rainwater harvesting scheme will be proposed as per the SEAC guide line. Rainwater from roof-top will be collected in the rain water harvesting tanks.

The proponent must collect rainwater from roof-top catchments and reuse for various purposes after necessary cleaning. Water bodies should be created and used for storing rain water. Adequate retention time and storage provisions should be provided for harvesting rainwater.

Roof top run off will collected and will be used for gardening, cleaning etc purpose. Roof top collection will also be recharged.

Bengal Ambuja Housing Development Limited.

The sub-surface recharge proposal including the design of recharge structure and location of recharge structure as submitted before the State Expert Appraisal Committee should be done.

Sub surface recharge has been proposed as per the SEAC guideline. The subsurface scheme has been approved the respected SEAC during the technical presentation of the project.

20243.45088 KL of rainwater will be generated from roof top. 7145.622528 KL of rainwater will be sent for subsurface recharge.

Adequate water storage for firefighting should be provided as per norms.

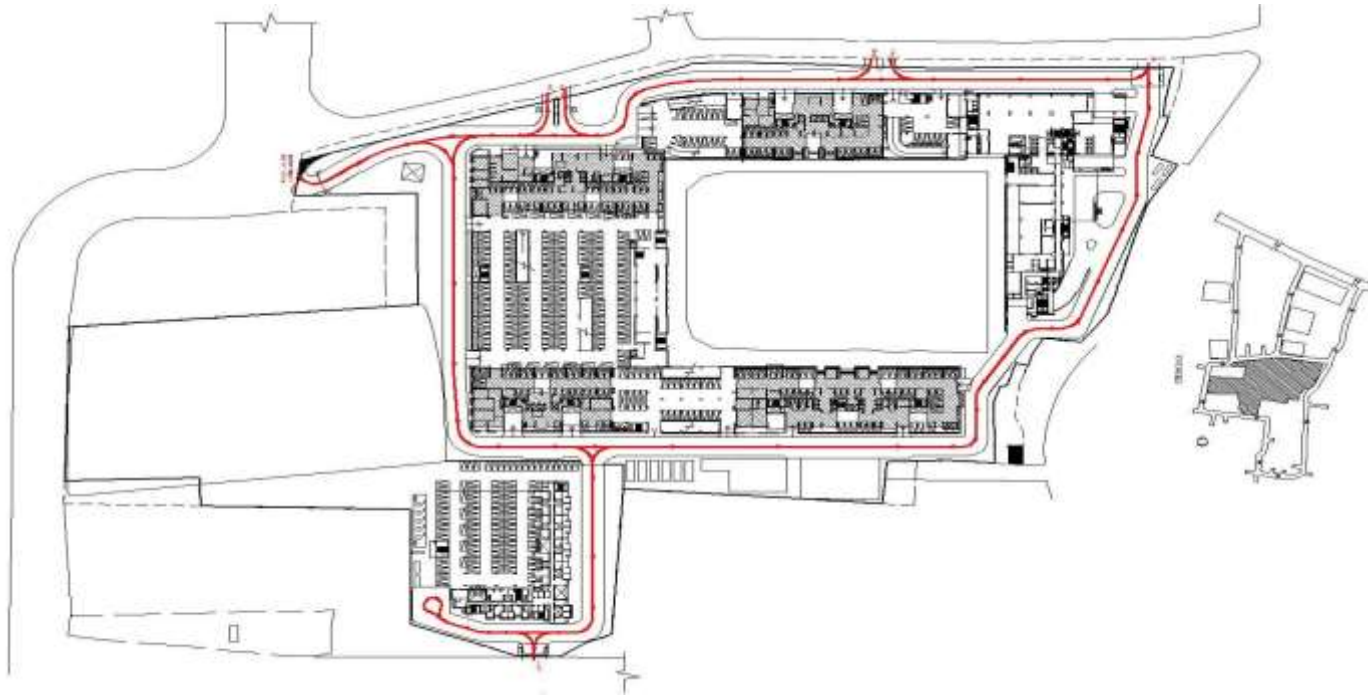
The project has already obtained provisional NOC from Fire department. Storage facility will be developed as per their recommendation.

Adequate provision shall be made for storage of solid waste and adequate means of access shall be provided.

Municipal solid waste will be treated at the premises by two ways. Non biodegradable part will be compacted by compactor and biodegradable part will be treated through composting machine with a output of biocompost. No biodegradable compact part will be disposed off through KMC collection system. An adequate Municipal storage facility has been proposed under the guidance of KMC. The facility has been represented in the sanction plan.

Both internal and external traffic planning and management should be adequate to ensure uninterrupted traffic movement in the area during construction as well as operation phase.

1751 number car parking has been posed in line with KMC rule to avoid any traffic congestion. Internal traffic movement and arrangement has been approved by KMC. As per the KMC building rule parking requirement is 1691 numbers. The project is providing 1751 numbers of parking provision to avoid traffic congestion outside the site boundary. The site is it self 20 acres during constriction all heavy vehicles will be taken into the site boundary.

Bengal Ambuja Housing Development Limited.**Internal traffic movement along with parking plan**

The design of service road and the entry and exit from the project area should conform to the norms & standards of competent authority for traffic management. Bell mouth type arrangement should be made at the entry & exit. Proper traffic management plan should be adopted in consultation with Traffic authorities.

Entry, exist of the project has been developed under the guideline of KMC and DC traffic. The road network has been reflected in the sanctioned drawing. The design of service road and the entry and exit from the project area will be constructed as per norms & standards of competent authority for traffic management.

Clarified Wastewater will be used for sprinkling water on the unpaved internal roads on a regular basis

Waste water will be reused for sprinkling on a regular basis

All mandatory approvals and permission as required from Director of Explosives, Fire Department etc. should be obtained.

Clearance from Airport authority of India, BSNL, Fire NOC has already been obtained.

Bengal Ambuja Housing Development Limited.**GOVERNMENT OF WEST BENGAL
OFFICE OF THE DIRECTOR GENERAL
WEST BENGAL FIRE & EMERGENCY SERVICES
13-D Mirza Ghalib Street, Kolkata- 700 016**

Memo No : IND/WB/FES/20172018/6555

DATE: 08/08/2018

From :

The Director
Fire Prevention Wing,
West Bengal Fire & Emergency Services.

Director
West Bengal Fire & Emergency Services

To :

WEST BENGAL HOUSING BOARD
405, BORAKHOLA,
MUKUNDAPUR ROAD, WARD NO-109, BOROUGH-XII, KOLKATA-700099
Kallighat F.S., Survey Park,
Kolkata - 700099 .

Sub :Revised Fire Safety Recommendation for G+XXV storied LIG/MIG Tower, G+XXV Storied Tower A, G+XXV storied Tower B, G+XXV storied Tower D, G+XXV storied Tower E and Podium within a residential complex namely Bengal Ambuja Housing Development Limited at Premises no. 405, Borakhola, Mukundapur Road, Ward No-109, Borough- XII, Kolkata- 700099

This is in reference to your Application No. IND/WB/FES/20172018/6555,dated 08/08/2018, regarding the Fire Safety Measure for G+XXV storied LIG/MIG Tower, G+XXV Storied Tower A, G+XXV storied Tower B, G+XXV storied Tower D, G+XXV storied Tower E and Podium within a residential complex namely Bengal Ambuja Housing Development Limited at Premises no. 405, Borakhola, Mukundapur Road, Ward No-109, Borough- XII, Kolkata- 700099.

The plan submitted by you was scrutinized and marked as found necessary from Fire Safety point of view. In returning one set of plan with recommendation, this is issuing Revised Fire Safety Recommendation in favour of the aforesaid building subject to the compliance of the following fire safety measure.

Recommendation:

1. The plan drawing submitted by you was scrutinised by this Office and marked as found necessary from Fire safety point of view. On returning one set of plan drawing, this Office is issuing Revised Fire Safety Recommendation for the above mentioned occupancy. The Fire Safety Recommendation issued earlier vide this Office memo. WBFES/457/15/Kol-RB/1563/12(1563/12) dated. 22.01.2015 will remain same and strictly to be followed.

Signature valid
Digitally signed by ASHUJIT
PANDEY
Date: 2018.08.08 14:19:58 IST

Revised Fire Safety Recommendation

Bengal Ambuja Housing Development Limited.



WEST BENGAL HOUSING BOARD
11F/11 Road Post No. AA-11/BLK-2)
Mouza- New Town Rajarhat, Rajarhat
New Town, District: NORTH 24
PARGANAS, State: West Bengal,
PIN:700158.

**भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA**

Date: 03-11-2017
Valid Upto: 02-11-2025

No Objection Certificate for Height Clearance

1. This NOC is issued by Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR751 (E) dated 30th Sep. 2015 for Safe and Regular Aircraft Operations.

2. This office has no objection to the construction of the proposed structure as per the following details:

NOC ID	BEHA/EAST/W/103717/253249
Applicant Name*	Bighan Barman
Site Address*	405 BARAKHOLA MUKUNDAPUR WARD NO 109 BOROUGH NH KOLKATA 700099 DIST SOUTH 24 PGS PS PURBA JADAVPUR MOUZA BARAKHOLA JL NO 21 KHATIAN NO RS 156 104 165 157 148 147, MUKUNDAPUR, Kolkata, West Bengal
Site Coordinates*	88 24 11-22 29 55, 88 24 13-22 29 33, 88 24 15-22 29 33, 88 24 15-22 29 36,
Site Elevation in mtrs AMSL as 4.74 M submitted by Applicant*	
Permissible Top Elevation in mtrs Above Mean Sea Level(AMSL.)	154.74M

*As provided by applicant

3. This NOC is subject to the terms and conditions as given below:

a. Permissible Top elevation has been issued on the basis of Site coordinates and Site Elevation submitted by Applicant. AAI neither owes the responsibility nor substantiates the correctness of the site coordinates & site elevation provided by the applicant. If at any stage it is established that the actual data is different, this NOC will stand null and void and action will be taken as per law. The office in-charge of the concerned aerodrome may initiate action under the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994"

b. The Structure height (including any superstructure) shall be calculated by subtracting the Site elevation in AMSL from the Permissible Top Elevation in AMSL. i.e. Maximum Structure Height = Permissible Top Elevation minus (-) Site Elevation.

c. The issue of the 'NOC' is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994.



**भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA**

d. No radio TV Antenna, lighting arresters, staircase, Mootee, Overhead water tank and attachments of fixtures of any kind shall project above the Permissible Top Elevation of 154.74M, as indicated in para 2.

e. Only use of oil fired or electric fired furnace is permissible, within 5 KM of the Aerodrome Reference Point.

f. The certificate is valid for a period of 8 years from the date of its issue. One time revalidation without assessment may be allowed, provided construction work has commenced, subject to the condition that such request shall be made within the validity period of the NOC and the delay is due to circumstances which are beyond the control of the developer.

g. No light or a combination of lights which by reason of its intensity, configuration or colour may cause confusion with the aerodrome ground lights of the Airport shall be installed at the site at any time, during or after the construction of the building. No activity shall be allowed which may affect the safe operations of flights.

h. The applicant will not complain/claim compensation against aircraft noise, vibrations, damages etc. caused by aircraft operations at or in the vicinity of the airport.

i. Day markings & night lighting with secondary power supply shall be provided as per the guidelines specified in chapter 6 and appendix 6 of Civil Aviation Requirement Series 'E' Part I Section 4, available on DGCA India website: www.dgca.in

j. The applicant is responsible to obtain all other statutory clearances from the concerned authorities including the approval of building plans. This NOC for height clearance is to ensure the safe and regular aircraft operations and shall not be used as document for any other purpose whatsoever, including ownership of land etc.

k. This NOC has been issued w.r.t. the Civil Airports. Applicant needs to seek separate NOC from Defence, if the site lies within their jurisdiction.

l. In case of any discrepancy/misinterpretation of NOC letter, English version shall be valid.

m. In case of any dispute w.r.t site elevation and/or AGL height, top elevation in AMSL shall prevail.

Chairman NOC Committee

Region Name: EAST

Address: General Manager, Airports
Authority of India, Regional
Headquarter, Eastern Region,
N.S.C.B.I. Airport,
Kolkata-700052

Email ID: gm.east@aaai.aero

Contact No: 033-25111293

मानव (एस्ट) ए.जी. एम. (एम.एम.)
आर.आर. ने.ए.ए.आर. ए.आर. ए.आर.
AAI, N.S.C.B.I. Airport
कोलकाता/Kolkata-700052

त्रयीय मुख्यालय पूर्वी क्षेत्र, नेताजी सुभाष चन्द्र बोस अंतराष्ट्रीय हवाई अड्डा -700052 दूरभाष संख्या: 91-33-2511 9 616

regional headquarter Eastern Region, Netaji Subhash Chandra Bose International Airport - 700052. Tel : 91-33-25119616

क्षेत्रीय मुख्यालय पूर्वी क्षेत्र, नेताजी सुभाष चन्द्र बोस अंतराष्ट्रीय हवाई अड्डा -700052 दूरभाष संख्या: 91-33-2511 9 616

Regional headquarter Eastern Region, Netaji Subhash Chandra Bose International Airport - 700052. Tel : 91-33-25119616

Sujit-Sen
(Sujit-Sen)

Clearance from Airport Authority of India

Bengal Ambuja Housing Development Limited.

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.

Fire fighting system will be installed under the guidance of Fire department as per the provisional clearance. BMS will be developed covering common lighting system, fire system and security etc.

Use of Energy efficient lighting systems should be promoted for energy conservation.

As it is a residential complex automatic heat exchanger, high COP chiller are not applicable.

Energy conservation done as follows:

- The apartments have been designed for ample cross-ventilation
- The architectural design of the buildings have been created with respect to local climate, sun-path, etc.
- The buildings are oriented in such a way that there is plenty of wind flowing through the complex
- The building orientation also allows maximum entry of daylight and natural ventilation
- Use of HFC based refrigerants in the air-conditioning system to avoid ozone depletion by implementing stipulated terms and condition to the dwellers
- It is proposed to control all common area lighting with photocell controllers which will switch on/off and dim the lights according to the ambient light conditions.
- Solar lighting system is being proposed in the Landscaping and for street lighting.

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.

The building has been designed emphasizing the natural ventilation. HVAC system will be provided by using DX or VRV system. Indoor air quality will be maintained by natural ventilation system at residential part. Club and commercial part will be fitted with AHU to maintain the IAQ.

Adequate measures to be adopted for water conservation during construction and operation stage. Use of efficient irrigation equipment, evaporative cooling unit in air-conditioning system etc should be considered.

The dual flushing unit will be implemented.

Rest room facilities should be provided for service population.

Servant room , rest room or facility management room, security room, maintenance room, service room has been allocated in the project.

Bengal Ambuja Housing Development Limited.**Provisions should be kept for the integration of solar water heating system.**

As this project is predominantly residential installation control for installation of solar heater is not in the hand of project proponent. Solar heater may be provided for restaurant as per the requirement.

Adequate access to fire tenders should be provided

Adequate access to fire tenders will be constructed as per Fire Department's norms. 9 meter internal road has been provided as per the recommendation of fire department for the movement of fire tender.

CO monitoring facility with automatic alarm should be provided at basement car parking, if any.

CO monitoring facility will be provided at basement car parking. (Tower - C)

The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. At least 2% of the project cost should be utilized for Corporate Social Responsibility programmes.

As a group corporate CSR activity has started at surrounding area in line with the local authority. Presently construction of community toilet facility has been taken under guidance of KMC.



Some CSR activity till date

Bengal Ambuja Housing Development Limited.**CSR Activity at Utalika site surroundings:****Gas oven repairing & maintenance training at Utalika area:**

'Skilling the unskilled' is a priority with our CSR team. Done with the ardent mission 'to build capacity to train youth for employment, entrepreneurship and community enterprise', we select underprivileged youths from areas surrounding our business locations, get them trained with time-tested skill institutions and transform them into confident and responsible future employees or entrepreneurs. Our skill training programme readies young people to join the mobile repair industry or work as electricians, computer technicians, plumbers and some also learn sewing so that they can join the tailoring business. This October 2018, just before the Durga Puja festivities, a batch constituting twenty unemployed youths completed a course in LPG oven repair and maintenance. All the trainees came from the surrounding areas of our Utalika Project. It was a 90-hour vigorous schedule in collaboration with Ramakrishna Mission Lokasiksha Parishad as our technical training partner.

Cost Account for CSR activity

Accounts Head: Gas oven repairing & maintenance training: Rs. 60,000 p.a



Bengal Ambuja Housing Development Limited.**Skill training at NIELIT, Jadavpur**

In the changing world scenario with regard to industry and the job market, there is now an overpowering need for skilled workers. Developing skill means developing a person and his value too. India is relatively young as a nation. More than 50% of its population is below the age of 26. The present central government is also motivating this huge number of youth by skill support. CSR team also believes in youth empowerment. Many rural boys and girls have been supported in various vocational courses. Very recently we got admitted two young boys in National Institute of Electronics & Information Technology, Jadavpur. This institute runs couple of courses collaborated with Electrical Engineering dept, Jadavpur viz.

- a) Training on Electricity & Safety Practices and
- b) Training on Installation and maintenance of Electrical & Electronic system

The two boys stay very near to our Utalika site and belong to economic distress background. These two have chosen two different trades. We are hopeful on successful completion of this six-month course; both will set off towards employability.

Suresh Neotia Fellowship (formerly Udayan Shalini Scholarship)

To bring higher education at the reach of all, especially the girl students, assistance in the means of scholarship is provided to 100 girl students. The initiative is being implemented by Udayan Care West Bengal, an established NGO. Ambuja Neotia is committed to support the students continuously for 3 years so as to let them complete their respective curriculums. The Fellowship supports several needy girl students from in and around Kolkata from XI till P.G. Candidates are selected through an eligibility test called NAT (Need-Ambition-Talent). Ambuja Neotia is supporting this noble cause since 2007 and is also the chief partner of this noble endeavour, by supporting 100 students. It has given wings to many deserving students, who despite financial pressures have gone on to specialize in subjects like engineering and have been able to step into the corporate world. Through constant support, care and mentoring many young girls are able to fulfill their aspirations.

Bengal Ambuja Housing Development Limited.
General Conditions

The environmental clearance accorded shall be valid for a period of 5 years for the proposed project.

The environmental clearance has been issued on 18/11/2014 with vide memo no. 2809/EN/T-II-1/022/2012 by State level environment impact assessment authority. Sanctioned plan has been revised except Tower C

Prior Consent-to-Establish (NOC) for the proposed project must be obtained from WBPCB by the proponent. All other statutory clearances should be obtained by project proponent from the competent authorities.

Consent-to-Establish (NOC) for UTALIKA has been issued on 09/03/2015 with NOC no NO124891 and memo no 180-2N-07/2012(E) by Pollution Control Board West Bengal

The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project.

The proponent has already been maintained a display board at the site, providing detailed information on the salient features of the proposed project.

The environmental safeguards contained in the EIA/EMP report should be implemented in letter and spirit.

EMP will be implemented as per the proposed plan in the EIA report.

All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other entity.

During handing over all legal liability will be handed over if applicable.

Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits.

Necessary provision for fuel for cooking will be provided.

The project proponent should make financial provision in the total budget of the project for implementation of the suggested safeguard measures.

Financial Budget will be allocated for implementation of the suggested safeguard measures.

Six monthly monitoring reports should be submitted to the West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards and should be given full cooperation, facilities and documents / data by

Bengal Ambuja Housing Development Limited.

the project proponents during their inspection. A complete set of all the documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.

The Six monthly compliance report has been submitted for April 2018 to September 2018

In case of any violation of the conditions laid down in this Environmental Clearance, Section 16 of The Environment (Protection) Act, 1986, will be applicable. In case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, West Bengal.

There is no legal violation with respect to Environmental Clearance.

The State Level Environment Impact Assessment Authority, West Bengal reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.

Not applicable at this moment

The Project Proponent should inform the public that the proposed project has been accorded environmental clearance by the SEIAA, West Bengal and copies of the clearance letter are available with the State Pollution Control Board / Committee and may also be seen at website of the SEIAA, West Bengal (<http://environmentwbb.gov.in>). This should 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.

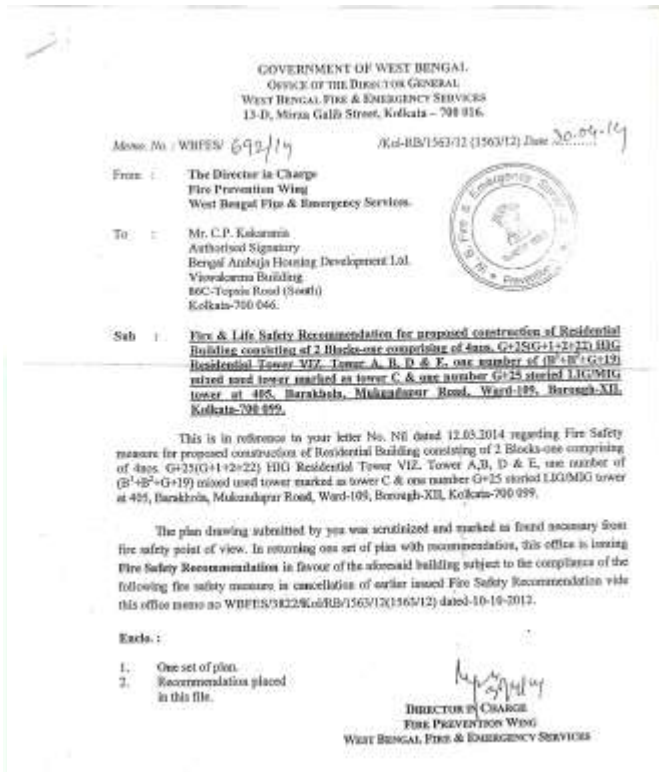
Public notification has been published on local Bengali and English Newspaper.

Bengal Ambuja Housing Development Limited.



All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Civil Aviation Department (if required) etc. shall be obtained by project proponents from the competent authorities. Clearance from Airport authority of India, BSNL, Fire NOC, EC and NOC has already been obtained.

Bengal Ambuja Housing Development Limited.



NOC from Fire Department



NOC from Airport authority



NOC from BSNL

Bengal Ambuja Housing Development Limited.

FORM 4
(See Rules 9(3) and 10(5))

004082

PERMIT FOR SINKING OF NEW WELL
(Under 7(3)(b), 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.)

PERMIT NO. **P00PREM405K1401TBE**

1. (a) Name of the applicant (user) : Smt. West Bengal Housing Board
 (b) Son / Daughter of :
 (c) Address of the applicant : 105, S. N. Banerjee Road, Kolkata-14
 (d) Category of farmer: (Please tick) : Small Farmer / Marginal Farmer / Others
 (in case of irrigation well)
 (e) Serial No. of application Form and date of submission : B/A 0340 SL-94 Dt. 13.06.2012
 (f) Specimen signature of the user : *Chandra P. Banerjee*

2. Location particulars--
 (a) District : Kolkata
 (b) Block, Mouza, J.L. No., Plot No. : PREMISES NO-405, Kolkata-14 (Barakhola)
 (c) Municipality / Corporation : Ward No. 109 Borough No. XII

3. Particulars of the proposed well and pumping device--
 (a) Type of the well : Tube well
 (b) Approx. depth of the well (m) : 27.4m
 (c) Purpose of the well : Domestic
 (d) Assembly size (for tube well) : 150mm X 150mm.
 (e) Approx. strainer length (for tube well) : 24m.
 (f) Diameter (for dug well) : x m.
 (g) Type of pump to be used : Submersible
 (h) H. P. of the pump : 7.5 HP
 (i) Operational device : Electric Engine
 (j) Rate of withdrawal (m³/hr.) : 40 (forty) m³/hr
 (k) Maximum allowable running hours per day : 06 (Six) hrs/day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (k), and is valid subject to the observance of the conditions stated overleaf.

Place: **Kolkata**
 Date: **12th Sept. 2012**
 18th

SEAL OF THE MEMBER SECRETARY
 SUPERINTENDING GEOLOGIST
 GEOLOGICAL CIRCLE
 SWARD, BARAKHOLA
 SL-94/2012

SEAL OF THE MEMBER SECRETARY
 N.B: Conditionality for Package Drinking Water Projects and Industries/ Infrastructures written on reverse page of the Certificate should be followed.

Contact Executive Engineer, Tube Well Department (Kolkata Municipal Corporation) for Continuation of License

B.C.L.450.00006

FORM 4
(See Rules 9(3) and 10(5))

004080

PERMIT FOR SINKING OF NEW WELL
(Under 7(3)(b), 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.)

PERMIT NO. **P0010912PREM405K1402TLE**

1. (a) Name of the applicant (user) : Smt. West Bengal Housing Board
 (b) Son / Daughter of :
 (c) Address of the applicant : 105, S. N. Banerjee Road, Kolkata-14
 (d) Category of farmer: (Please tick) : Small Farmer / Marginal Farmer / Others
 (in case of irrigation well)
 (e) Serial No. of application Form and date of submission : B/A 0340 ; SL-93 ; Dt-13.06.2012
 (f) Specimen signature of the user : *Chandra P. Banerjee*

2. Location particulars--
 (a) District : Kolkata
 (b) Block, Mouza, J.L. No., Plot No. : Premises No. 405, Kolkata-14 (Barakhola)
 (c) Municipality / Corporation : Ward : 109 ; Borough : XII

3. Particulars of the proposed well and pumping device--
 (a) Type of the well : Tube Well
 (b) Approx. depth of the well (m) : 27.4m
 (c) Purpose of the well : Domestic
 (d) Assembly size (for tube well) : 150mm X 150mm.
 (e) Approx. strainer length (for tube well) : 24m.
 (f) Diameter (for dug well) : x m.
 (g) Type of pump to be used : Submersible
 (h) H. P. of the pump : 7.5 HP
 (i) Operational device : Electric Engines
 (j) Rate of withdrawal (m³/hr.) : 35 (thirty five) m³/hr
 (k) Maximum allowable running hours per day : as (six) hrs/day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (k), and is valid subject to the observance of the conditions stated overleaf.

Place: **Kolkata**
 Date: **12th Sept. 2012**
 18th

SEAL OF THE MEMBER SECRETARY
 SUPERINTENDING GEOLOGIST
 GEOLOGICAL CIRCLE
 SWARD, BARAKHOLA
 SL-93/2012

SEAL OF THE MEMBER SECRETARY
 N.B: Conditionality for Package Drinking Water Projects and Industries/ Infrastructures written on reverse page of the Certificate should be followed.

Contact Executive Engineer, Tube Well Department (Kolkata Municipal Corporation) for Continuation of License

B.C.L.450.00006

Permission from SWID for installing two numbers of Bore wells

Bengal Ambuja Housing Development Limited.

Provision for incorporation of appropriate conditions in the Sale Agreement / Deed, for ensuring sustained Operation and Maintenance (O&M) of the common facilities (STP, Rainwater harvesting system, Solid waste management system, Solar street lights etc.) even after transfer of ownership of the project, should be made in explicit and transparent manner.

Maintenance of all environmental safe gird and sustainability matter will be reflected in GTC during handing over.

Environmental monitoring was not been conducted at site for the period of April 20 to September 20 due to present Covid 19 pandemic condition. Construction activity was also suspended during lockdown condition. Environmental Monitoring will be started from October 20.



UTALIKA