



"Registered office"

"Vishwakarma", 86C, Topsia Road (South), Kolkata - 700046, West Bengal

"Project Site "

at Haldia, Debhog, Dist. Purba Medinipur, West Bengal

**Six monthly compliance Report of "CITY CENTRE" (Phase I) Project at HALDIA for the period of
APRIL 2020 TO SEPTEMBER 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 20 to Septemebr 2020 of “CITY CENTRE” Phase I, at Haldia, Debhog, Dist. Purba Medinipur, West Bengal

We are pleased to submit the six monthly monitoring reports to you of our above mentioned project at Haldia , West Bengal. The construction part is over. Consent to operate has been received on 16.02.2015 to Haldia Pollution Control Board with vide CTO No. CO15583.

The compliance report has been prepared against the conditioned mentioned in the Environmental clearance vide Ref No. EN/19/T-II-1/002/2007 dt. 03.01.2012 and Consent to Operate of this project for the period of April 2020to September 2020.

This year due to Covid 19 pandemic, the mall since March end to September 20 for the safety of the employee and visitors as per Govt Direction.

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 are enclosing here with the compliance report for the period of April 2020to September 2020 of “CITY CENTRE” Phase I. 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.



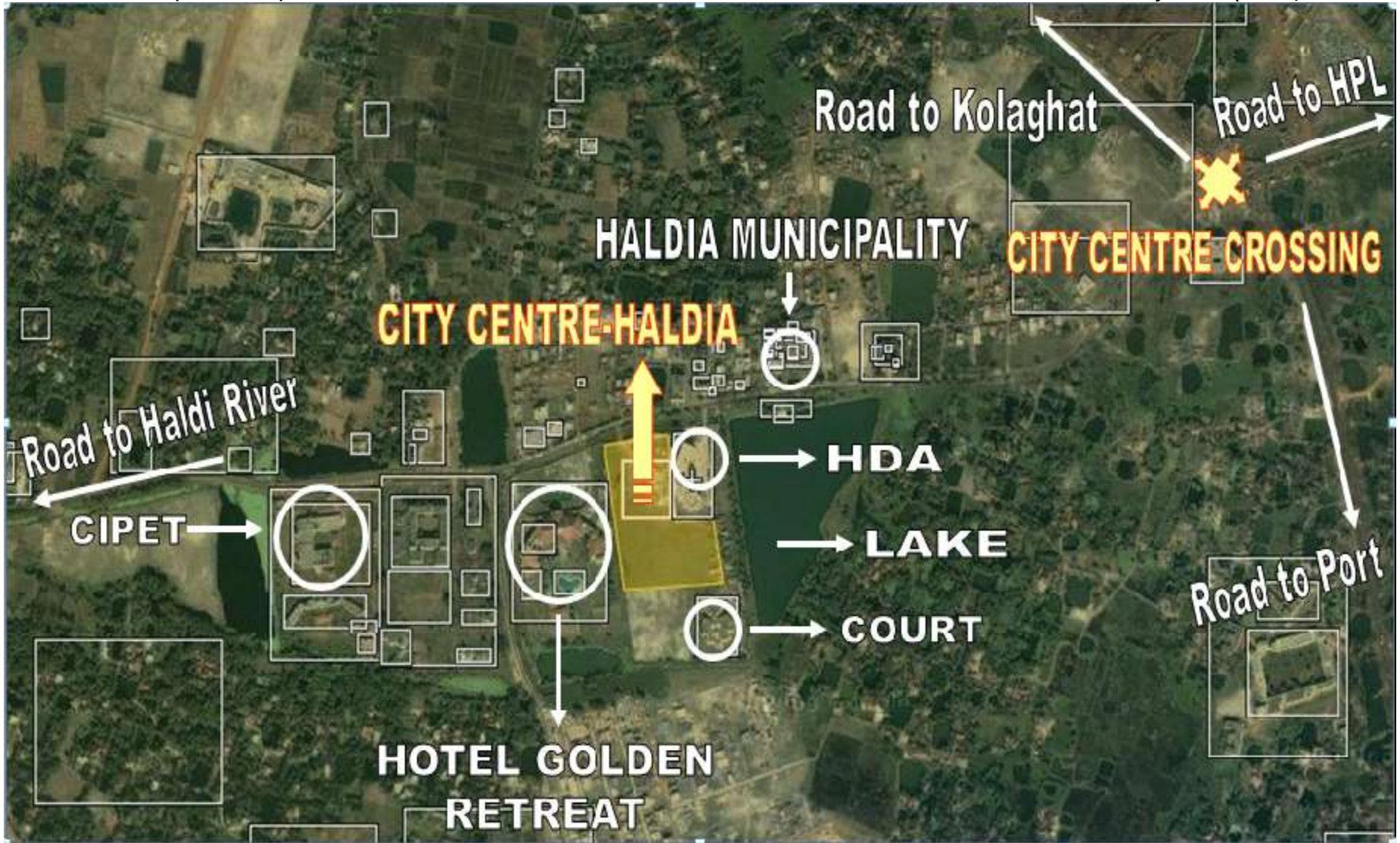
Six Monthly Compliance Report on Environmental Clearance

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 I Commercial Complex (Block-A: 2G+1 storied, Block B: G+1 storied and Block C: G+3 storied and basement) comprising of shopping mall, multiplex, food court and family entertainment center etc which are now in operational phase.



Location Map of City Centre HALDIA



PRESENT PICTURE –“HALDIA CITY CENTRE”

Project at a glance:

SALIENT FEATURES OF PROJECT	
Project Name	HALDIA CITY CENTRE (PHASE-I)
Project address:	Jl.No -149, Mouza – Debhog, PS.- Bhabanipur, District – Purba Medinipur, West Bengal
EC No.	EN/19/T-II-1/002/2007
Date of issuance	03/01/2012
Consent to Establish (NOC) No.	NO84440
Vide Memo No	132-2N-251/2006(E)
Date of issuance	12/03/2012
NOC Validity	31/03/2017
Amended NOC Memo No.	144-2N-251/2006(E) for DG sets (1 X 125KVA, 2 X 1500 KVA)
Date of issuance	12/02/2014
Consent to Operate No.	CTO No. CO15583
Date of issuance	16/02/2015
Consent to Operate No(Renewed)	CO114639
Date of issuance	31/07/2018
Consent to Operate Validity	31/07/2023
Land area	5.37 acres (2,1731.58 sqm)
Built up area	28,130.49 sqm
Ground coverage	7770.0 sqm. (35.75% of land area)
Building Profile	The Commercial Complex (Block-A: 2G+1 storied, Block B: G+1 storied and Block C: G+3 storied and basement) comprising of shopping mall, multiplex, food court and family entertainment center etc.
Landscape Green Area	26.8% of land area
Paved area	5,505.69 sqm (25.33% of total site area) * 2,124.69 sqm (9.78 % of total site area) - for PHASE-I
Domestic water requirement	80 KLD (Haldia Municipality supply)
Waste water generated	64 KLD (to be treated in STP)
Waste water discharged	61 KLD (to be reduce after treatment in STP)
Solid waste disposal	0.944 tonnes per day (to be disposed off through Haldia Municipality)
Total no. of trees proposed	130
No. of parking spaces	184 (Covered -134, Open – 50)
Total power requirement	3750 KW, WBSEB
Backup power as per EC	DG sets (1 X 150KVA, 1 X 1000 KVA, 3 X 1750 KVA)
Status of construction	Construction phase is over.

PERIOD: April 2020 TO Spet 2020

PROJECT NAME: Haldia City Centre (Phase-I)

The Project has obtained Consent for Operate from West Bengal Pollution Control Board vide CFO NO : CO114639

CO 114639

REGISTERED

WEST BENGAL POLLUTION CONTROL BOARD

'Farbesh Bhawan' Bldg. No. 10A, Block-LA, Sector-III, Salt Lake City, Kolkata - 700 098
(Orange/Green-Category Unit)



Memo Number: CO 114639 - W-EO-0118/0353 Date: 31/7/18

Consent to Operate under Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981.

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended, and Rules made thereunder hereby grants its Consent to

M/s. Bengal Ambuja Housing Development Limited - City Centre - Phase I
(hereinafter referred to as Applicant) for its unit located at P.O. Debnag, P.S. Haldia, Dist. Purba Medinipur, Pin - 721657

for a period from 01.08.2020 to 31.07.2022 to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises and of the industrial unit in accordance with the conditions as mentioned below provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in this consent letter and as specified in the Environmental (Protection) Act, 1986.

Breach of the conditions and/or failure to comply with the directions as mentioned below shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation/change/alter the conditions of this consent letter giving one month's notice to the applicant.

Conditions:

01. This consent is valid for the manufacture of Commercial Complex - City Centre Phase I at Plot No. 33, Block LA, Sector III, Salt Lake City, Kolkata - 700 098

Sl. No.	Name of major products and by-products	Quantity produced per month	Sl. No.	Name of major products and by-products	Quantity produced per month
01.			03.		
02.			04.		

02. The Applicant shall observe the following fuel consumption pattern.

Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day
01.			02.		
			03.		

03. The Applicant falls in the Orange category of the Water (Prevention and Control of Pollution) Act, 1974 and Rules made thereunder and shall comply with the provisions of said Act and Rules and regularly submit to the Board the Returns of Water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

04. Daily water consumption for the following purposes should not exceed.

Industrial cooling, spraying in mice pits and boiler feed water (water used for gardening should be included in this category of use)	Domestic purpose	Processing whereby water gets polluted and the pollutants are easily biodegradable	Processing whereby water gets polluted and the pollutants are not easily biodegradable
	<u>50 KL</u>		

05. Daily discharge of effluent shall not exceed

Industrial liquid effluent	Domestic liquid effluent	Mixed (Industrial & domestic) liquid effluent
No. of outlets	<u>01</u>	
Quantity	<u>63 KL</u>	<u>KL</u>
Place of discharge	<u>To be reused fully</u>	

06. The Applicant shall provide drainage system for conveying industrial & domestic liquid waste & separate drainage system for storm-water and shall provide comprehensive treatment facility for industrial and domestic liquid waste (sewage, sullage & liquid effluent generated from canteen) and operate and maintain the same to conform to the Standard for final effluent as given below.

Outlet No.	Nature of effluent	Parameters and standard (in mg/l, max)					Frequency of effluent sampling
		pH	BOD	COD	TSS	D&G	

* The unit shall maintain zero discharge

(2)
07. The Applicant shall provide comprehensive pollution control equipment and operate and maintain the same continuously to conform the quality of the final gaseous emission to the Standard as given below:

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (source and control system, if any)	Volume Nm ³ /hr	Velocity of gaseous emission (m/sec)	Concentration of parameters not to exceed		Frequency of sampling
					PM (mg/Nm ³)	CO (% v/v)	
S-1	14.0	DG set - 1 x 125 KVA	125	150	1%	Yearly	
S-2	16.0	DG set - 1 x 1500 KVA	1500	150	1%		
S-3	16.0	DG set - 1 x 1500 KVA	1500	150	1%		
S-4							

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

Type of waste	Quantity	Treatment	Disposal
Municipal solid waste	<u>0.944 MT/month</u>		<u>Through municipality</u>

09. The Applicant shall take adequate measures for control of noise levels from its own sources within its premises to conform to

Time	Limit in dB (A) L ₉₀	Time	Limit in dB (A) L ₉₀
Day time (06 a.m. to 06 p.m.)	<u>65</u>	Night Time (06 p.m. to 06 a.m.)	<u>55</u>

10. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions and shall furnish to the State Board all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.

11. The Applicant shall at all times maintain good house-keeping, proper working order, control pollution (including fugitive emissions) from all sources to maintain clean environment in & around factory premises and to surrounding areas/inhabitants.

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

13. The Applicant shall provide for sufficient alternate electric power source to operate all pollution control facilities. In absence of such alternate power source, the production should be stopped/reduced/controlled to conform the conditions of the Consent.

14. All the stacks connected to various sources of emissions must be painted/displayed to designate by numbers such as S-1, S-2 etc. and shall have ports, ladder, platform etc. for monitoring/ramping the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorized agencies.

15. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices and shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.

16. The Applicant shall allow the Officers of the State Board to enter into the premises of the unit at any reasonable time to inspect the pollution control systems and shall provide adequate and safe facility for collection of air, wastewater and solid waste samples for monitoring and measuring by the State Board's staff as well as State Board's authorized agencies.

17. The Applicant shall maintain an inspection Book in the factory premises which shall be made available to inspecting officers of the State Board for inspection, review and to write down any direction or observation as is deemed necessary during the inspection.

18. The Applicant shall inform to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any pollutants in excess of quality and quantity as mentioned above to any receiving water body/system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster and the Applicant shall take adequate steps to prevent such accidental event.

19. The Applicant shall apply for renewal of consent to State Board in prescribed form 60 (sixty) days before expiry of this Consent.

20. The Applicant shall not make any alteration/modification/expansion in the existing manufacturing process and equipment, pollution control system and shall not bring into any altered or new outfit/outlet or stack or change the place of discharge, without prior approval of the Board.

21. The Applicant shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, Hazardous Wastes (Management & Handling) Rules, 1989 and 'Public Liability Insurance Act, 1991.

Additional Conditions

(1) The unit shall comply with EC conditions for operation phase as stipulated

For and on behalf of the Board
Member Secretary/Chief Engr./Sr. Enk. Engr. (E)
 West Bengal Pollution Control Board
 Haldia Regional Office
 P.O. Debnag, P.S. Haldia, Dist. Purba Medinipur

WEST BENGAL POLLUTION CONTROL BOARD
 "Paribesh Bhawan", Bldg. No-10A, Block-LA, Sector-III, Salt Lake City, Kolkata-700 098
 (Orange/Minor Category Unit)

Consent Letter Number: C015583
 Memo Number: 1294-3868-NPB(HRD)K-2014 Date: 16-02-2015

Consent to operate under Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981.

The West Bengal Pollution Control Board (hereinafter referred to as 'State board') under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 as amended, and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended, and Rules and Orders made thereunder hereby grants Consent to:

M/s. BENGAL AMBUJA HOUSING DEVELOPMENT LTD. (For City Centre Phase-I Haldia)
 (hereinafter referred to as 'Applicant') for its unit located at TL NO. 193, Nayya Sobhag, P.S. Bahadurpur, Dist. Purba Medinipur, West Bengal. PIN-721657.
 (Detailed address of the manufacturing unit)

for a period from --- to UP to 31-07-2018 to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit in accordance with the conditions as mentioned below provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in this consent letter and as specified in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as mentioned below shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.

Conditions: (Block A - 202, 1st floor, Block B - 213, 1st floor, Block C - 215, 1st floor and basement)

01. This Consent is valid for the manufacture of TOTAL BUILDING AREA IS 28130.99 Sq. m.

Sl. No.	Name of major products and by-products	Quantity produced per month	Sl. No.	Name of major products and by-products	Quantity produced per month
01			03		
02			04		

02. The Applicant shall observe the following fuel consumption pattern:

Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day
01	Diesel	260 lit/hr	02			03		

03. The Applicant falls in the ORANGE category of the Water (Prevention and Control of Pollution) Act, 1974 and Rules made thereunder and shall comply with the provisions of said Act and Rules and regularly submit to the Board the Returns of Water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

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

Industrial cooling, spraying in main pits and boiler feed water (water used for gardening should be included in this category of use)	Domestic purpose	Processing whereby water gets polluted and the pollutants are easily biodegradable	Processing whereby water gets polluted and the pollutants are not easily biodegradable
19 KL	61 KL	-	-

05. Daily discharge effluent shall not exceed to be reused after treatment in STP

	Industrial Liquid effluent	Domestic Liquid effluent	Mixed (Industrial & domestic) liquid effluent
No. of outfalls			
Quantity		KL	KL
Place of discharge			KL

06. The Applicant shall provide drainage system for conveying industrial & domestic liquid waste & separate drainage system for storm water and shall provide comprehensive treatment facility for industrial and domestic liquid waste (sewage, sullage & liquid effluent generated from canteen) and operate and maintain the same to conform to the Standard for final effluent as given below:

Outlet No.	Nature of effluent	Parameters and standard (in mg/l, max)						Frequency of effluent sampling
		pH	BOD	COD	TSS	O & G		
				2	0	0	DISCHARGE	

WEST BENGAL POLLUTION CONTROL BOARD

07. The Applicant shall provide comprehensive pollution control equipment and operate and maintain the same continuously to conform the quality of the final gaseous emission to the Standard as given below:

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm ³ /hr.	Velocity of gaseous emission (m/sec)	Concentrations of parameters not to exceed			Frequency of sampling
					SPM (mg/Nm ³)	CO (ppmv)		
S-1	14.0	DG Set - 125 KVA	-	-	150	1%	-	YEARLY
S-2	16.0	DG Set - 1500 KVA	-	-	150	1%	-	YEARLY
S-3	16.0	DG Set - 1500 KVA	-	-	150	1%	-	YEARLY
S-4	-	-	-	-	-	-	-	-

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

Type of waste	Quantity	Treatment	Disposal
NON-HAZARDOUS SOLID WASTE	0.944 MT/MONTH	-	Through Municipality

09. The Applicant shall take adequate measures for control of noise levels from its own sources within its premises to conform to:

Time	Limit in dB(A) L _{eq}	Time	Limit in dB (A) L _{eq}
Day Time (06 a.m. to 6 p.m.)	65	Night Time (09 p.m. to 06 a.m.)	55

10. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions and shall furnish to the State Board all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.

11. The Applicant shall at all times maintain good house-keeping, proper working order, control pollution (including fugitive emissions) from all sources to maintain clean environment in & around factory premises and to surrounding areas / inhabitants.

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

13. The Applicant shall provide for sufficient alternate electric power source to operate all pollution control facilities. In absence of such alternate power source, the production should be stopped / reduced / controlled to conform the conditions of the Consent.

14. All the stacks connected to various sources of emissions must be painted/displayed to designate by numbers such as S-1, S-2 etc. and shall have ports, ladder, platform etc. for monitoring/sampling the air emission and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.

15. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices and shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.

16. The Applicant shall allow the Officers of the State Board to enter into the premises of the unit at any reasonable time to inspect the pollution control systems and shall provide adequate and safe facility for collection of air, wastewater and solid waste samples for monitoring and measuring by the State Board's staff as well as State Board's authorised agencies.

17. The Applicant shall maintain an Inspection Book in the factory premises which shall be made available to inspecting officers of the State Board for inspection, review and to write down any direction or observation as is deemed necessary during the inspection.

18. The Applicant shall maintain to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any pollutants in excess of quality and quantity as mentioned above to any receiving water body/system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster and the Applicant shall take adequate steps to prevent such accidental event.

19. The Applicant shall apply for renewal of consent to State Board in prescribed form 60 (sixty) days before expiry of this Consent.

20. The Applicant shall not make any alteration/modification/expansion in the existing manufacturing process and equipment, pollution control system and shall not bring into any altered or new outlet/outfall or stack or change the place of discharge, without prior approval of the Board.

21. The Applicant shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, Hazardous Wastes (Management & Handling) Rules, 1989 and Public Liability Insurance Act, 1991.

Additional Conditions: The unit should comply with the conditions as mentioned in the EC issued vide No. EN/119/T-11-3/002/2007 dated 03-01-2012, No. of State Board issued vide Memo No. 132-24-35/2006 dated 12-03-2012

Seal
 (Member Secretary / Chief Engr. / Sr. Env. Engr. / Asst. Env. Engr. / Jt. Scientist)
 Senior Environmental Engineer
 W.B. Pollution Control Board

Operational Phase	
Water supply	
Conditions	Status of Implementation
i) Water requirement during operation phase shall be met from municipal supply.	Municipal supply is already established at site. The requirement has been establish through municipal supply.
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.	Meter has been installed on operation phase of the building by occupant
iii) The proponent must practice rainwater harvesting on regular basis.	Rainwater harvesting scheme has been designed as per SEAC guideline and implementation is under construction.
Sewage Treatment Plant	
i) As per the proposal submitted by the proponent wastewater shall be treated in STP. Treated wastewater shall be mostly reused and partly discharged to municipal sewer line during rainy season only. Discharge of treated sewage should conform to E(P) Rules. Sewage Treatment Plants should be monitored on a regular basis.	ST.P has been installed as per designed considering EP Rule and PHE guideline.
ii) Reuse of treated wastewater should be carried out as proposed.	Reuse of S.T.P treated water has been developed as per design.
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.	During installation of DG sets as an emergency back up during operation of project noise pollution, stack emission has already been considered as per the relevant rules and regulation.
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.	According to Energy Conservation Building Code, for the Composite / Hot & Dry / Warm & Humid Climate, maximum U factor of the overall assembly is U-0.261W/m ² - °C. Minimum R value of the insulation alone should be R – 3.5 m ² - °C/W. These data hold good for 24 Hours use buildings like shopping mall, commercial center offices. For day time use buildings the values are U-0.409W/m ² - °C and R – 2.1 m ² - °C/W respectively. For a 6 inch RCC slab R value would be between 0.6 and 1.2. Regarding the Solar Reflective Index, according to ECBC, roofs with slope less than 20 degrees shall have an initial solar reflectance of no less than 0.70 and an initial emittance of no less than 0.75.
ii) The lightning design and the heating, ventilation and air conditioning systems should conform to the recommendations of the Energy Conservation Building Code 2007 of the Bureau of Energy Efficiency, Gol.	Lighting design has been considered as per the ECBC code. Light fixtures has been installed based on ECBC code..

iii) Use of energy efficient electrical systems should be promoted. High efficiency lamps with electronic ballasts should be used.	CFL/ LED (low energy consumed) fixture has been installed.
iv) Energy efficient Motors and properly rated Transformers should be installed. Manufacturer's certificate to this effect shall be obtained and kept on record. Backup power supply should be based on cleaner fuel.	Energy efficient motor has been installed during operational phase.
v) 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.	Power distribution cable has been planned as per the WBSEB guideline. Minimization of distribution loss is one of the major criteria.
vi) The project proponent should resort to solar energy at least for street lighting and water heating, if any.	Solar light has been installed at common area. As it is a commercial mall use of solar heater is not applicable.
Transport Management	
i) 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.	The project is located in close vicinity of bus stop and other local public transport system. Visitor of the mall can easily come down by using these public vehicles.
ii) Pathways should be covered or shadowed by tree canopy. Transport system should be such that traffic will be calm in neighborhoods. Traffic in residential areas should be restricted by regulation. Adequate vertical and horizontal clearances of overhead electric power and telecommunication lines should be provided.	Internal pathway has been covered by plantation. Shaded tree has been used for this purpose.
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 of in consultation with municipal authority.	Solid waste generated from the commercial mall and offices which is collected by the Haldia Municipality authority. Point Segregation of solid waste is implemented at site.
ii) The proponent should provide different colored 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.	Solid waste has been segregated at site in different color coded bins.
iii) The proponent should abide by the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Collection and storage of hazardous wastes during Preconstruction 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.	If any hazardous waste generated it has been handled as per the prescribe rule.
iv) 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 Tran boundary Movement) Rules, 2008. Spent oil from DG Sets should be disposed off through registered recyclers only.	Spent oil form DG sets has been stored in HDPE drums in an isolated covered area and it has been disposed off through authorized vender.

<p>v) Various types of electrical and electronic wastes generated in the buildings, which includes PC, Xerox machine components etc. should be collected separately for transportation to the authorized recyclers approved by the State / Central Pollution Control Boards. There should also be provision for storage of these wastes in the building before transportation. The e-waste collected should be processed in authorized recycling unit. The proponent should abide by the Direction issued by the Department of Environment, Government of West Bengal, vide No. EN/2348/T-IV-3/003/2009 dated 09.09.2009.</p>	<p>E waste has been handled as per the E-waste management rules.</p>
<p>Others</p>	
<p>i) 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>Environmental Management Plan for the construction period has been implemented. Environmental Management plan for the operational phase has also been implemented.</p>
<p>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.</p>	<p>An user guideline has been provided to the customer covering all environmental, fire safety and other legal aspects.</p>
<p>iii) The proponent should restrict the use of glazed surface as per National Building Code 2005.</p>	<p>NBC has been followed during design of the building. Natural ventilation has been emphasized.</p>
<p>iv) 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 clearance has already been accorded as per the guideline of WBFS.</p>
<p>v) The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. At least 5% of the project cost should be utilized for Corporate Social Responsibility programmes.</p>	<p>The project is covered under Corporate social responsibility plan.</p>
<p>General Conditions</p>	
<p>Conditions</p>	<p>Status of Implementation</p>
<p>i) The environmental clearance accorded shall be valid for a period of 5 years for the proposed project.</p>	<p>-----</p>
<p>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.</p>	<p>NOC obtained from West Bengal Pollution Control Board.</p>
<p>iii) The proponent should maintain a display board at the site, providing detailed information on the salient features of the proposed project.</p>	<p>The detailed salient features displayed at the site</p>
<p>iv) The environmental safeguards contained in the EMP report should be implemented in letter and spirit.</p>	<p>EMP is implemented as specified in the report.</p>
<p>v) 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.</p>	<p>There has been provision for the supply of kerosene or cooking gas to the labourers . All the labourers to be engaged for construction works has been screened for health periodically .</p>
<p>vi) The project proponent should make financial provision in the total budget of the project for implementation of the suggested safeguard measures.</p>	<p>EMP has been budgeted</p>

<p>vii) 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 Environmental Impact Assessment Authority ,West Bengal.</p>	<p>Periodically submitted to West Bengal Pollution Control Board, State Environmental Impact Assessment Authority.</p>
<p>viii) 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.</p>	<p>Not Applicable</p>
<p>ix) 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://enviswb.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>Bengal Ambuja Housing Development Limited published public notice at two local newspaper English and Bengali</p>
<p>x) All other statutory clearances such as the approvals for storage of diesel room Chief Controller of Explosives, Civil Aviation Department (if required) etc. shall be obtained by project proponents from the competent authorities.</p>	<p>Bengal Ambuja Housing Development Limited has all statutory clearance from the competent authorities.</p>
<p>xi) 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>The common facilities has been developed</p>
<p>xii) 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 Notiication 2006 and their amendments.</p>	<p>BAHDL obtained all statutory clearance from competent authority</p>

Specific Conditions

Construction Phase

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.



Provision of drinking water had been made available at labour camp. Drinking water quality is periodically tested by NABL accredited laboratory as per IS 10500 code.

Waste water disposal system had already been developed for workers. The generated waste water had been discharged to the sewer line of Haldia Municipality. Proper maintenance had been carried over by the project proponent

Solid waste management has been implemented for the site and also for the labour camps. The separate septic tank had been developed for workers hutment and for site office also. The generated solid waste has been carried out daily basis through Haldia Municipality Service.

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 facilities with Separate septic tank had been available at the site. Generated Solid wastes from labours disposed through sewer line of Haldia Municipality.

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.



Safety committee already provided personnel protective equipment like helmets, earmuffs, earplugs etc were being used properly by workers during construction phase. Regular supervision for safety had been carried out. Medical checkup of labours were being conducted in regular intervals.

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.

Excavation of topsoil had been over. The construction is going on. Excavated topsoil had already been used in back filling and Landscape development within the project site.

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.

The excavated material including muck and demolition debris during construction phase had not creates any adverse effects on the neighboring communities was properly handled and disposed off with necessary precautions for general safety and health aspects. The sprinkling arrangement had been implemented from that time and it is being maintained till now.

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



One number of 30 KVA DG set with acoustic enclosures had been installed for constructional purpose as per E (P) Rules prescribed for air and noise emission standards. Silent DG set had been used at the project site during construction stage by the contractor. It had been 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 nonpeak hours.

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

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

Ambient air levels had 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 had been carried out at two locations, one being near the gate of the site 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 are: (a) Near main gate & (b) Near Construction Zone.

Ambient air quality monitoring was conducted in respect of the following parameters:

- 1) Particulate Matter 2.5 (PM_{2.5})
- 2) Particulate Matter 10 (PM₁₀)
- 3) Sulphur Dioxide (SO₂)
- 4) Oxides of Nitrogen (NO_x)

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 4 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. Ambient air quality and noise levels monitoring report attached herewith.

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 and other hazardous materials including oil from construction equipments had not being allowed to contaminate watercourses and the dumpsites for such material must be secured so that it was not leaching into the ground water. Secondary containments were being provided to check the contamination. The storage Diesel drums were 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.

Supervision was done at regular basis to avoid disturbance of surroundings.

Mechanism of piles: No driven piles shall be proposed for this project.

Bore piles had been done at the site

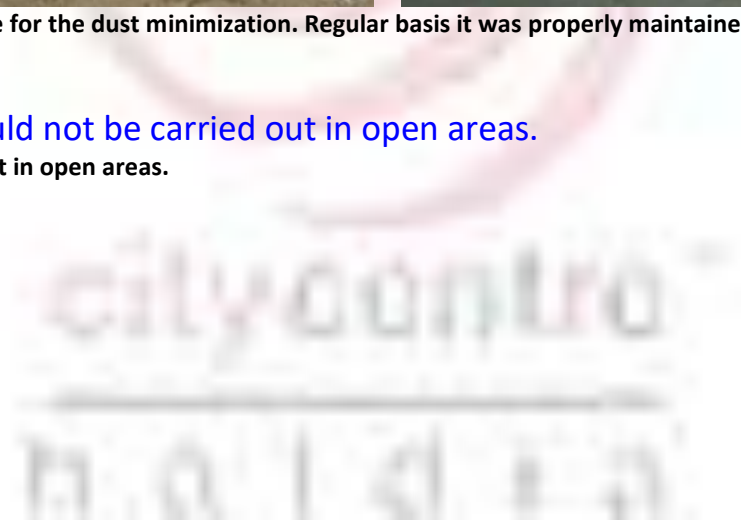
15m-screen and adequate sprinkler arrangement shall be provided. Care should be taken to keep all material storages adequately covered and contained so that they are not exposed to winds.



Adequate water sprinkler arrangement was available for the dust minimization. Regular basis it was properly maintained. All storage materials are adequately covered so that they are not exposed to winds.

Loading and unloading operations should not be carried out in open areas.

Loading and unloading operations was not carried out in open areas.



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



Ready-Mix concrete had been used for this project.

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

An adequate measure had been adopted to avoid wastage of water. During Construction water were being reused where ever possible at different purpose of construction. Wet jute cloth had been used for curing of RCC structure.

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 has been taken. Adequate water sprinkler arrangement was available for the dust minimization. Erosion and sediment control measures adopted and implemented at the time of construction of the project site. Vehicles and construction machineries had been with special taken care off.

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

Using of local materials were 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.

Use of cleaner fuel (HSD) 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 had been observed. Spraying has been done weekly basis for pest control

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

According to Energy Conservation Building Code, for the Composite / Hot & Dry / Warm & Humid Climate, maximum U factor of the overall assembly is $U-0.261W/m^2 - ^\circ C$. Minimum R value of the insulation alone should be $R - 3.5 m^2 - ^\circ C/W$. These data hold good for 24 Hours use buildings like shopping mall, commercial center offices . For day time use buildings the values are $U-0.409W/m^2 - ^\circ C$ and $R - 2.1 m^2 - ^\circ C/W$ respectively. For a 6 inch RCC slab R value would be between 0.6 and 1.2.

Regarding the Solar Reflective Index, according to ECBC, roofs with slope less than 20 degrees shall have an initial solar reflectance of no less than 0.70 and an initial emittance of no less than 0.75.

Energy efficient construction materials are being used for achieving the desired thermal comfort. The design has been developed considering energy efficiency factor. Energy conservation method has already been adopted. Use of energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. which is used at the project site office. There is a provision for using of energy efficient lighting systems, but it is not applied yet at the site.



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

Design layout developed in such a way that natural ventilation and natural day light entered in the building. Sun path analysis had been carry out for shading coefficient analysis. Summer season and winter season both had been considered for this analysis. Shading of one block always gives shading on other block in turns it gives cooling effect to the other blocks.











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 had been used as per MoEF notification. Fly Ash bricks were being used in landscaping work. Only PPC cement had been used which is blended with 25% of fly ash (max). ACC block has been 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 had been developed by the authorized structural designer for confirming and fulfillment of local seismic regulations.

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 had been used for achieving the desired thermal comfort. The design had been developed considering energy efficiency factor.

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 adopted. LED lighting had been installed and Solar panel will be installed as per construction schedule. Energy modeling carried out to finalize the electrical equipments.

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 as per norms.

Energy efficient lighting systems e.g. High Pressure Sodium Vapour (HPSV) Lamps, LED etc. had been used. Street lightings had already been fitted with HPSV lamps.

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

Passive solar cooling had been incorporated in building design for ensuring natural ventilation and day lighting. Double glazing had already been implemented to reduce solar heat gain.

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

Proper insulation of roof had been implemented to achieve desired thermal comfort.

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

High Albedo paint with 78 SRI to be applied on the roof top. Roof top garden had been 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.

Energy efficient lighting measures and water efficient system had been taken as per guideline.

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.

Using of grass paver block instead of hard paving-onsite (open area surrounding building premises) to minimize heat island effect and imperviousness of the site had been developed as per construction schedule.

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

Adequate open space, 20 % greenery and a water body had been developed as per rules.

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.

Air-conditioning system 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.

Double glazing provided to reduce solar heat gain.

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. No existing water body, if any, should be encroached / relocated / reshaped without prior permission of competent authorities.

There was no water body.

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. 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.

Plantation programme had been developed at least 20% of the total area as per Environmental Clearance.

The proponent should plant at least 130 trees. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

The plantation programme had been taken as per construction schedule. The landscape planning includes plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species had not been used for landscaping.

Water requirement during construction phase shall be met from municipal supply.

Water requirement during construction phase -I coming from Haldia Municipality supply.

As per the proposal submitted by the proponent wastewater shall be treated in STP.



STP had already been installed at the site. STP treated water has been 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.

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

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

Minimum 50% of paved area on site had been developed by grass paver block where as site under parking, roads, paths or any other use had been develop and not exceed 25% of the site 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 had been 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 municipal drainage system and impact on receiving water body.

Collecting pit had been used for controlling surface runoff, specifically during monsoon. As runoff coefficient was not changed much due to usage of grass papered block and landscaping. Roof top collection goes to the Rainwater collection chamber.

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

Rain water collection pit, storm water collection pit, natural landscaping etc has been minimize and manage storm water runoff and increasing infiltration.

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.

Double glazing had already been provided to reduce solar heat gain and plantation reduce heat inland effect.

The proponent must follow the Rainwater Harvesting Guidelines of the State Expert Appraisal Committee (SEAC) available in the website (<http://www.wbpcb.gov.in>). However, the proponent should not attempt for recharging of aquifer in Haldia region without prior permission from the competent authority.

Rainwater harvesting scheme had been proposed as per the SEAC guide line. Rainwater from roof-top has been 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.

Rainwater harvesting scheme had been proposed as per the SEAC guide line. Roof-top rainwater has been collected in the rain water harvesting tanks.

Adequate firefighting storage should be provided as per norms.

Adequate water storage for firefighting had been developed.

Adequate provision shall be made for storage of solid waste and adequate means of access shall be provided. Space should be kept reserved for waste storage, collection etc. in site planning and architectural designs.

There is an adequate provision for storage of solid waste. Reserved space for waste storage, collection etc. as per site planning and architectural designs had already been constructed. Solid waste will be disposed through Haldia Municipality.

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.

As per traffic planning and management both internal and external traffic have an adequate place for ensure uninterrupted traffic movement in the project area during construction.

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.

Construction is going on. 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.

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

Fire clearance had already been obtained from Director of Explosives, Fire Department vide Memo nO. WBFES/DY.DFS – WZ/FP/2094/14/HOW/MCB./635/13 dt. 20.2.2014

Provision of Effective Controls and Building Management Systems such as Automatic Fire Alarm and Fire Detection and Suppression System etc. must be ensured.

Automatic Fire Alarm and Fire Detection and Suppression System will be installed. All mandatory system like Automatic Fire Alarm and Fire Detection and Suppression System etc had been installed for firefighting as per approvals and permission as required from Director of Explosives, Fire Department etc.

Automatic lighting control, occupancy sensors, heat exchanger, high efficiency chillers etc. should be provided for energy conservation wherever applicable.

The chillers with CFC & HCFC free had been installed.

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.

Efficient indoor air quality had been implemented as per construction schedule for health and safety of the users.

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.

Rest room facilities had already been provided by facility management

Provisions should be kept for the integration of solar water heating system especially in Hotel building.

The project is comprising of shopping mall, multiplex, and family entertainment centre etc. No hotel has been planed to developed. Solar heater has not been considered.

Adequate access to fire tenders should be provided.

Adequate access to fire tenders had been constructed as per Fire Department's norms.

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

CO monitoring facility with automatic alarm had been provided at basement car parking

Operational Phase

Water requirement during operation phase shall be met from municipal supply.

Municipal supply is already established at site. The requirement has been establish through municipal supply.

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.

Meter has been installed on operation phase of the building by occupant.

The proponent must practice rainwater harvesting on regular basis.

Rainwater harvesting scheme has been designed as per SEAC guideline and implementation is under construction.

As per the proposal submitted by the proponent wastewater shall be treated in STP. Treated wastewater shall be mostly reused and partly discharged to municipal sewer line during rainy season only. Discharge of treated sewage should conform to E(P) Rules. Sewage Treatment Plants should be monitored on a regular basis.

ST.P has been installed as per designed considering EP Rule and PHE guideline.

Reuse of treated wastewater should be carried out as proposed.

Reuse of S.T.P treated water has been developed as per design.



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.

During installation of DG sets as an emergency back up during operation of project noise pollution, stack emission has already been considered as per the relevant rules and regulation

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.

During installation of DG sets as an emergency back up during operation of project noise pollution, stack emission has already been considered as per the relevant rules and regulation.



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.

According to Energy Conservation Building Code, for the Composite / Hot & Dry / Warm & Humid Climate, maximum U factor of the overall assembly is U-0.261W/m² - °C. Minimum R value of the insulation alone should be R – 3.5 m² - °C/W. These data hold good for 24 Hours use buildings like shopping mall, commercial center offices. For day time use buildings the values are U-0.409W/m² - °C and R – 2.1 m² - °C/W respectively. For a 6 inch RCC slab R value would be between 0.6 and 1.2. Regarding the Solar Reflective Index, according to ECBC, roofs with slope less than 20 degrees shall have an initial solar reflectance of no less than 0.70 and an initial emittance of no less than 0.75.

The lightning design and the heating, ventilation and air conditioning systems should conform to the recommendations of the Energy Conservation Building Code 2007 of the Bureau of Energy Efficiency, GoI.

Lighting design has been considered as per the ECBC code. Light fixtures has been installed based on ECBC code..

Use of energy efficient electrical systems should be promoted. High efficiency lamps with electronic ballasts should be used. CFL/ LED (low energy consumed) fixture has been installed.



Energy efficient Motors and properly rated Transformers should be installed. Manufacturer's certificate to this effect shall be obtained and kept on record. Backup power supply should be based on cleaner fuel.

Energy efficient motor has been installed during operational phase.

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.

Power distribution cable has been planed as per the WBSEB guideline. Minimization of distribution loss is one of the major criteria.

The project proponent should resort to solar energy at least for street lighting and water heating, if any.

Solar light has been installed at common area. As it is a commercial mall use of solar heater is not applicable.

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.

The project is located in close vicinity of bus stop and other local public transport system. Visitor of the mall can easily come down by using these public vehicles.

Pathways should be covered or shadowed by tree canopy. Transport system should be such that traffic will be calm in neighborhoods. Traffic in residential areas should be restricted by regulation. Adequate vertical and horizontal clearances of overhead electric power and telecommunication lines should be provided.

Internal pathway has been covered by plantation. Shaded tree has been used for this purpose.



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 of in consultation with municipal authority.

Solid waste generated from the commercial mall and offices which is collected by the Haldia Municipality authority. Point Segregation of solid waste is implemented at site.



The proponent should provide different colored 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.

Solid waste has been segregated at site in different color coded bins.

The proponent should abide by the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008. Collection and storage of hazardous wastes during Preconstruction 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.

If any hazardous waste generated it has been handled as per the prescribe rule.

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 Tran boundary Movement) Rules, 2008. Spent oil from DG Sets should be disposed off through registered recyclers only.

Spent oil form DG sets has been stored in HDPE drums in an isolated covered area and it has been disposed off through authorized vender.

Various types of electrical and electronic wastes generated in the buildings, which includes PC, Xerox machine components etc. should be collected separately for transportation to the authorized recyclers approved by the State / Central Pollution Control Boards. There should also be provision for storage of these wastes in the building before transportation. The e-waste collected should be processed in authorized recycling unit. The proponent should abide by the Direction issued by the Department of Environment, Government of West Bengal, vide No. EN/2348/T-IV-3/003/2009 dated 09.09.2009.

E waste has been handled as per the E-waste management rules.

The implementation of Environmental Management Plan should be carried out, as proposed. Regular monitoring should be carried out during construction and operation phases.

Environmental Management Plan for the construction period has been implemented. Environmental Management plan for the operational phase has also been implemented.

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.

An user guideline has been provided to the customer covering all environmental, fire safety and other legal aspects.

The proponent should restrict the use of glazed surface as per National Building Code 2005.

NBC has been followed during design of the building. Natural ventilation has been emphasized.

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.

Fire clearance has already been accorded as per the guideline of WBFS.

The Corporate Social Responsibility Plan with specific financial commitment should be implemented for the proposed project. At least 5% of the project cost should be utilized for Corporate Social Responsibility programmes.

The project is covered under Corporate social responsibility plan.

General Conditions

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.

BAHDL fulfill all statutory compliance and maintain monthly basis which is illustrate in the NOC by West Bengal Pollution Control Board.

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

The detailed salient features of project with monitoring reports has been displayed in display board at the site

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

EMP is implemented as specified in the report. The project will be abide the guideline of Energy and Water conservation. They implement the Environmental Management Plan , Corporate Social Responsibility and they will organize the awareness programme as per needs of norms.

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.

Kerosene has been supplied to labourers during construction phase. Health checkup camp has been conducted by BAHDL for construction workers. Necessary safety precaution is being taken during construction activity.

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 Environmental Impact Assessment Authority, West Bengal.

Bengal Ambuja Housing Development Limited submits report to the authority in regular basis. Report for the period of April 2018 to September 2018 with relevant supported documents has already been submitted to State Environmental Impact Assessment Authority and EMI cell of West Bengal Pollution Control Board,.

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.

Not Applicable

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://enviswb.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.

Bengal Ambuja Housing Development Limited already received Environmental clearance by the SEIAA, West Bengal .After receiving clearance ARDL published public notice at two local newspaper English and Bengali

All other statutory clearances such as the approvals for storage of diesel room Chief Controller of Explosives, Civil Aviation Department (if required) etc. shall be obtained by project proponents from the competent authorities.

BAHDL have all statutory clearance like Fire clearance from West Bengal Fire Engineering Department, Lift license etc.

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.

The common facility like STP, Rainwater harvesting system, Solid waste management system, Solar street lights etc. will be constructed after construction phase and it will be goes under maintenance ensuring by Operation and Maintenance department, which is illustrate in the Sale Agreement.

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.

BAHDL have all statutory clearance like Consent-to-Establish (NOC) obtained from WBPCB. Consent to Operate of this project has also applied to WBPCB.