

CHAPTER 1: INTRODUCTION

INTRODUCTION

The “*Hotel cum commercial Project*” at Village Ulhawas, Manesar Urban Complex, sector-60, Gurgaon, Haryana by M/s Toucan Real Estate Pvt. Ltd. Toucan Real Estate is well known for their quality, commitment to construction & innovative designs. They have completed many landmark projects in construction.

Features

- STP for sewage disposal
- Fire-fighting, fire detection and alarm system.
- Adequate Parking space
- Foundation on concrete Raft/Piles, Earthquake resistant structure, RCC framed construction, design as per latest Indian Standards.
- Rain water harvesting storage tank.

PROJECT DESCRIPTION

Table 1: Project Description

Name of project	Proposed Hotel Cum Commercial Complex by M/S Toucan Real Estates Pvt. Ltd.
Address of the site	Village Ulahawas, Sector-60, Gurgaon, Haryana
Coordinates	Latitude: 28 ⁰ 24' 14"N Longitude: 77 ⁰ 5' 57"E
Project Category	Category 8 (a)
Plot Area	3.17 acres i.e. 12818.41m ²
Built-up Area	35937 m ²
Landscape Area (@ 24.5% of total open area)	3265.79 m ²
Wastewater Generated	219 KLD
Total Fresh Water Requirement	198 KLD Source: HUDA
STP Capacity	263 KLD during the operational phase
Total Parking Space proposed	487 ECS
Height of Building	44.95 mts.
Total Cost of project	120 Crore
Solid Waste generated	995.12 Kg/day
Total Power requirement	4700 kVA

	Source: Haryana Vidyut Vitran Nigam Ltd.
DG sets	2 x 750, 1 x 500 kVA

PERMISSIONS & APPROVALS

Table 2: Present Status

S. No.	Permissions/ Approvals	Phase
1.	Environment Clearance	EC Ref. No.SEIAA/HR/09/110B Date:28 October 2009
2.	Consent to Establish (CtE)	No.HSPCB/Consent/: 2808015GUNOCTE2087745

PURPOSE OF THE REPORT

As per the “Sub Para (ii)” of “Para 10” of EIA Notification 2006, it is stated that “It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year” and as per compliance of condition mentioned in Environment Clearance Letter. A half yearly compliance reports should be submitted to:

- ✚ The Additional Director (IA Division), Regional Office, MOEF & CC, GOI, CGO Complex, Lodhi Road New Delhi
- ✚ The Regional Office, Ministry of Environment & Forest & CC, GOI, Sector-31 Chandigarh.
- ✚ The Chairman, Haryana State Pollution Control Board Panchkula.

It is mandatory to submit a half yearly Compliance Report to show the status & compliance of all the Conditions mentioned in Environment clearance Letter, along with monitoring of various Environmental Parameters (as per CPCB Norms).

The regulatory authorities in this case are:

- ✚ The Additional Director (IA Division, Regional Office, MOEF & CC, GOI, CGO Complex, Lodhi Road New Delhi
- ✚ The Regional Office Ministry of Forest and Forest, GOI Sector-31, Chandigarh
- ✚ The Chairman, Haryana State Pollution Control Board Panchkula.

Various scheduled Site Visits were conducted by a team of Experts to Monitor Pollution related parameters as defined by CPCB / HSPCB. Samples for water and soil were also collected for further analysis.

Based on the Specific and General Conditions mentioned in the EC Letter, a Compliance Report was prepared by the Team on behalf of Project Proponent; details of which are present in Chapter – “Compliance Report”.

Methodology for Preparation of Report is as follows:

- ✚ Study of EC Letter & Related Documents.
- ✚ Site Visits by a Team of Experts.
- ✚ Monitoring of Environment Parameters, viz. Ambient Air, Water, Noise, Soil & DG Sets.
- ✚ Analysis of Samples collected during Monitoring.
- ✚ Interpretation of Monitoring Results.

Generic Structure of Report:

- ✚ Purpose of the Report, explaining the need of a Compliance Report and Methodology Adopted for preparation of Report.
- ✚ Environment Clearance Letter, prescribing all the conditions & guidelines to be followed during construction Phase and Operation Phase of the Project.
- ✚ Site Study Report, showing status of the project and site photographs.
- ✚ Compliance Report, explaining the entire General & specific conditions in the EC Letter and providing details w.r.t. each condition/ guideline.
- ✚ Monitoring Reports & Analysis, showing the level of emission within the project site for various Environment Parameters.
- ✚ Annexure.

LOCATION MAP

Project Site



CHAPTER 2:
ENVIRONMENTAL CLEARANCE LETTER

GOVERNMENT OF HARYANA
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HARYANA
Bay No. 55-58, Prayatan Bhawan, Sector-2, PANCHKULA.

No. SEIAA/HR/09/1108

Dated: 28.11.08

To

✓ M/S Toucan Real Estates Pvt. Ltd.
Regd. Office B6/17, Safdarjung Enclave,
New Delhi - 110029.

Subject: Environmental Clearance for Hotel cum commercial project at village Ulahwas, Manesar Urban Complex Sector-60, Gurgaon, Haryana.

Dear Sir,

This has reference to your application no. Nil Dated 06.04.09 addressed to MS SEIAA and received on 08.04.09 and subsequent letters dated 28.05.09 and 22.07.09 seeking prior environmental clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A & Conceptual Plan and the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MOEF, GOI vide their Notification 21.4.2008, in its meetings held on 24.06.09 and 03.09.09 awarded "Gold" grading to the project.

[2]. It is. interalia, noted that the project involves construction of proposed Commercial complex and Hotel Complex at Sector- 60, Village-Ulahwas, Manesar, Gurgaon. Haryana, on a plot area of 12818.41 Sq.mt. The total built-up area will be 35937 Sq.mt. The proposed building will comprise of 2 basements + GF + 5 Floors for block A, commercial complex, GF+ 12 Floors for block B Hotel complex and G+11 Floors for Block C Hotel complex. The height of the building will be 44.95 meters. The total water requirement will be 363 KLD. Out of which potable water requirement will be 198 KLD. The water

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requirement will be met from HUDA. The total waste water generation will be 219 KLD. The waste water will be treated in the STP of capacity 263 KLD. The treated water will be recycled/ reused leading to zero discharge. Total solid waste generation will be 995.12 Kg/day. The collected non bio-degradable solid waste would be segregated and transported to a Govt. designated waste disposal site and bio-degradable waste will be used for composting with in the complex. The power requirement is 4700 KVA which will be supplied by Haryana Vidyt Vitran Nigam Ltd. The total parking spaces proposed are for 487 ECS. Total cost of the project is Rs. 120 crores.

[3] The State Expert Appraisal Committee, Haryana after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations have recommended the grant of environmental clearance for the project mentioned above subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority hereby accords necessary environmental clearance for the project under Category 3(a) of EIA Notification 2006 subject to the strict compliance with the specific and general conditions mentioned below:-

PART A-

SPECIFIC CONDITIONS:-

Construction Phase:-

- [i] A first aid room as proposed in the project report will be provided in both during construction and operation of the project.
- [ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open desiccation by the laborers strictly prohibited. The safe disposal of waste water and solid wastes generated during the construction phase should be ensured.

- [iii] All the topsoil excavated during construction activities should be stored for use in horticulture/land scape development within the project site.
- [iv] Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- [v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.
- [vi] The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- [vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- [viii] Ambient noise levels should conform to commercial standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards.
- [ix] Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August 2003.
- [x] Ready mixed concrete must be used in building construction.
- [xi] Storm water control and its re-use as per CGWB and BIS standards for various applications.
- [xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- [xiii] Permission from Competent Authority for supply of water shall be obtained prior to operation of the project.

- [xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- [xv] Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- [xvi] The approval of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightning etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be taken from the competent Authority.
- [xvii] The project proponent will use the water for construction phase through tankers. However, prior permission from CGWA will be taken before using the bore well water for domestic purposes or the water supply from HUDA which ever is earlier.
- [xviii] The project proponent will take prior permission from Airport Authority regarding the height, if applicable.

Operation Phase:

- [i] The STP be installed for the treatment of the sewage generated to the prescribed standards including odour and treated effluent will be recycled to achieve zero discharge. The STP should be installed at the farthest place in the project area.
- [ii] Separation of the gray and black water should be done by the use of dual plumbing line. Treatment of 100% gray water by decentralized treatment should be done ensuring that the recirculated water should have BOD maximum 10 ppm and the recycled water will be used for flushing, gardening and HVAC makeup and DG set cooling.
- [iii] For disinfections of the treated wastewater ultra violet radiation or ozonization should be used.
- [iv] The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/ inert solid waste should be

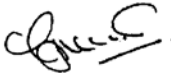
- disposed off to be approved sites for land filling after recovering recyclable material.
- [v] Diesel power generating sets proposed as source of back up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The location of the DG sets should be in the basement as promised by the project proponent with appropriate stack height i.e above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur contents (maximum 0.25%).
 - [vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Proposed Commercial Complex.
 - [vii] The project proponent should maintain at least 15% as green cover area for tree plantation especially all around the periphery of the project and on the road sides preferably with local species so as to provide protection against particulates and noise. The open spaces inside the plot should be preferably landscaped and covered with vegetation/grass.
 - [viii] Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchments area during the monsoon period.
 - [ix] Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre- treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts. Above the highest ground water table.
 - [x] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
 - [xi] There should be no traffic congestion near the entry and exist points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be utilized.
 - [xii] A report on the energy conservation measures conforming to energy conservation norms finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the IA Division of Environment Department, Haryana in three months time.

- [xiii] Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
- [xiv] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The project proponent shall carry out composting of bio-degradable waste within the project area. The dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- [xv] The provision of the solar water heating system shall be as per the norms specified by HAREDA and shall be made operational in each building block.
- [xvi] The project proponent will use the water from the already existing tube wells for domestic purposes only after getting permission from CGWA or will use water supply from HUDA which ever is earlier during operation phase.

PART-B. GENERAL CONDITIONS:

- (i) The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- (ii) Six monthly compliance reports should be submitted to the HSPCB and Regional Office, MOEF, GOI, Northern Region, Chandigarh and a copy to the Regulatory Authority of Haryana.
- [iii] The project proponent will send one set of reports to Reports to Additional Director, Regional Office, MOEF, GOI, Sector 31, Chandigarh and to the Chairman, Haryana State Pollution Control Board, Panchkula for their reference.
- [iv] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information has been given for getting approval of this project.

- [v] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, P.I.P.A. 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vi] These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991, Forest Conservation Act, 1980 and EIA Notification, 2006.
- [vii] The Project proponent will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.
- [viii] The project proponent shall obtain requisite clearance under the MOEF GOI notification dated 07.05.92 from the competent Authority before the start of construction activities.


Member Secretary,
State Level Environment Impact
Assessment Authority, Haryana, Panchkula.



Endst. No. SEIAA/HR/09

Dated:.....

A copy of the above is forwarded to the following:

1. The Additional Director (IA Division), MOEF, GOI, CGO Complex, Lodi Road, New Delhi.
2. The Regional office, Ministry of Environment & Forests, Govt. of India, Sector 31, Chandigarh.
3. The Chairman, Haryana State Pollution Control Board, Pk1.

Member Secretary,
State Level Environment Impact
Assessment Authority, Haryana, Panchkula.

CHAPTER 3: COMPLIANCE REPORT

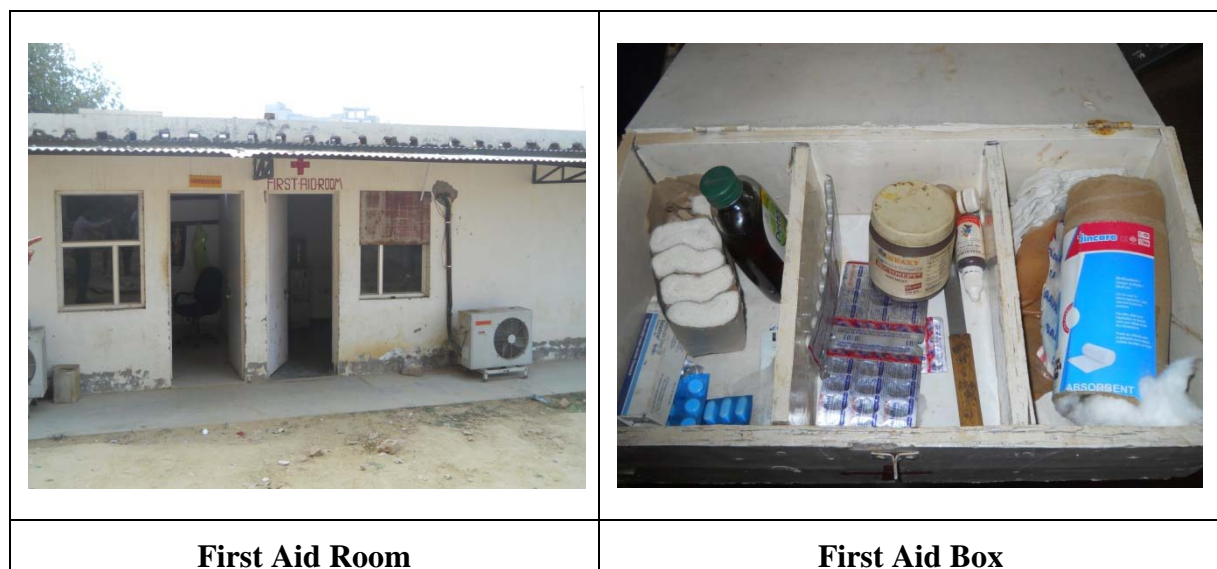
A. SPECIFIC CONDITIONS :-

Construction Phase:-

[i] First aid room as proposed in the project report will be provided in both during construction and operation of the project.

Answer: As mentioned in the EC, Medical facility has been provided at the project site during construction phase and will operated during operational phase also. The Photographs of the First aid room:

Figure No.1 : First Aid Room and First Aid Box



[ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open desiccation by the laborers strictly prohibited. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.

Answer: Adequate drinking water is being provided by private water tanker and sanitary facilities are provided through mobile toilets at the construction site for workers. Open defecation by the labors is strictly prohibited. The waste water from the mobile toilets are collected in tankers and are transported by authorized vendor for treatment. Color coded bins are provided within the site for disposal of solid waste from laborers colony and working labors. Photograph of the Mobile toilets and safe drinking water is shown below:

Figure No. 2 : Photograph of Mobile Toilets and Safe Drinking Water



[iii] All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.

Answer: Before the start of construction work, 15 cm top soil will be store at earmarked area within the proposed site. It will be covered with tarpaulin sheet and will be used in landscaping and green belt development.

[iv] Disposal of muck during construction phase should not create any adverse effect of the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people only in approved sites with the approval of competent authority.

Answer: No muck is expected to be generated during the construction phase. The muck if generated mainly comprises of slurry of water, sand and soil which will be stacked at one corner within the site for sun drying and will be used for site leveling and road filling.

[v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.

Answer: All the internal roads and main road within the site will be RCC type, therefore handling and disposal of bituminous material is not required. Other hazardous material like D.G sets used engine oil will be store in stored at earmarked location and will be supplied to authorized vendor.

[vi] The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

Answer: Affidavit for low Sulphur diesel and Environment (Protection) Rules 1986 is enclosed as Annexure-I. All the D.G set used are provided with acoustic enclosure and are fitted with noise reducing fixtures.

Figure No. 3 : Photograph of D.G. Sets



[vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.

Answer: Less quantity of D.G set will be store, far below the permissible limit allowed for storage and transport of D.G set oil.

[viii] Ambient noise level should conform to commercial standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards.

Answer: Ambient noise level will be monitored during construction and ensured to meet the prescribed standard of noise quality, CPCB. All plant equipments and vehicles will fitted with appropriate noise suppression equipments to reduce noise levels. Most working hours are during day time. Environment monitoring report is enclosed as **Annexure II**.

[ix] Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September 1999 and amended as on 27th August 2003.

Answer: The construction agency will use fly ash based bricks material/ products as per the provisions of fly ash notification of 14.09.1999 and as amended on 27.08.2003.

Figure No. 4 : Showing Fly ash Bricks at construction site



Fly Ash Bricks at Construction site

[x] Ready Mix Concrete must be used in building construction.

Answer: Concrete is purchased from the outside, purchased receipt is enclosed as **Annexure III**.

[xi] Storm water control and its re-use as per CGWB and BIS standards for various applications.

Answer: There is no drainage within the proposed site. An effective storm water drainage system will be adopted in the proposed project along with Rainwater Harvesting system with adequate number of rain water harvesting pits to avoid flooding at the site and nearby area during monsoon. RWH Plan Is enclosed as **Annexure IV**.

[xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

Answer: Pre-mixed cement will be used from RMC. Curing agents will be used on the floor so as to make is helping the floor to cure more quickly and in a controlled way, they increase the floor's hardness and durability and thirdly, they partially seal the surface to protect the floor.

[xiii] Permission from Competent Authority for supply of water shall be obtained to operation of the project.

Answer: Agreed. Water Permission (construction phase) from HUDA is enclosed as Annexure V.

[xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

Answer: Yes, Roof will comply with either maximum assembly U-factor or the minimum insulation R-value. R-value is for the insulation alone does not include building materials or air films. The roof will be covered with glazing tile, thermal insulating bricks having higher R & U values. It can also be painted with material having high reflective index.

[xv] Opaque wall should be meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is aspirational for non-air conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

Answer: Yes, Opaque wall will comply with either the maximum assembly U-factor or the minimum insulation R-value. Based on the solar path, all the opaque wall of the building that southeast, south and Southwest will be coated with light colors tiles, China Clay tiles or panted with paints having higher reflective value to prevent heating of walls.

[xvi] The approvals of the competent authority shall be obtained for structural safety of the building due to earthquake, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc. if any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be taken from the competent Authority.

Answer: The approval of competent authority has been taken for structural safety of the building due to earthquake, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc. No forest land is involved in the proposed project. The structural stability certificate is enclose as Annexure VI .

[xvii] The project proponent will use the water for constructional phase through tankers. However, prior permission from CGWA will be taken before using the bore well water for domestic purposes or the water supply from HUDA whichever is earlier.

Answer: Agreed. Water is being taken from private tanker from HUDA. The receipt is enclosed as AnnexureVII.

[xviii] The project proponent will take prior permission from Airport Authority regarding the Height, if applicable.

Answer: The NOC permission for height clearance from AAI is already granted. The NoC from AAI is attached as **Annexure VIII**.

Operation Phase:

[i] The STP is installed for the treatment of the sewage generated to the prescribed standards including odor and treated effluent will be recycled to achieve zero discharge. The STP should be installed at the farthest place in the project area.

Answer: STP is based on MBBR Technology which will be installed for treating wastewater up to tertiary level. STP feasibility report is enclosed as **Annexure IX**.

Figure No. 5 : Showing STP Installation Unit



STP Installation Unit

[ii] Separation of the gray and black water should be done by the use of dual plumbing line. Treatment of 100% gray water by decentralized treatment should be done ensuring that the re-circulated water should be have BOD maximum 10 pm. and recycled water will be used for flushing, gardening and HVAC and DG set cooling.

Answer. Agreed. Separation of the gray and black water should be done by the use of dual plumbing line. It is ensured that the re-circulated water will have BOD maximum 10ppm.

[iii] For disinfection of the treated waste water ultra Violet radiation or ozonation should be used.

Answer: STP (MBBR Technology) will be provided for the treatment of wastewater generated from the commercial project equipped with dual-media filter, activated carbon filter and U.V for further tertiary treatment.

[iv] The solid waste generated should be properly collected and segregated. Wet garbage should be composted a dry/inert solid waste should be disposed off to be approved sites for land filling after recovering recyclables material.

Answer: Detailed Solid Management plan is enclosed as **Annexure X**

[v] Diesel power generating sets proposed as source of backup power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The location of the DG sets should be in the basement as promised by the project proponent with appropriate stack height i.e. above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur contents (maximum 0.25%)

Answer: Agreed. The DG sets are being run by low sulphur diesel in construction phase as well as operational phase. DG sets are enclosed with acoustic enclosure type and are also provided with adequate stack height as per CPCB norms. The regular monitoring of ambient air quality is conducted during the construction phase and results are compared with Ambient Air Quality Standards, CPCB to assess the pollution level in ambient air quality due to the project in construction phase. It will also be taken care of that regular monitoring is carried out to check the quality of air and noise in operation phase.

[vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and the boundary of the Proposed Commercial Complex.

Answer: To ensure the Noise level within the prescribe standard all the D.G sets are provided with acoustic enclosure. Proper peripheral green belt will be carried out with large leave and thick canopy size which will act as cushion against the noise entering within the site.

[vii] The project proponent should maintain at least 15% as green cover area to tree plantation especially all around the periphery of the project and on the road sides preferably with local species so as to provide protection against particulates and noise. The open spaces inside the plot should be preferably landscaped and covered with vegetation/grass.

Answer: Agreed. Total Green area is 3265.79 m² (i.e. 24.5 % of the total plot area) being developed before construction on the land allotted for landscaping as pollution sink and to reduce dust diffusion. It will reduce soil erosion and help in sedimentation control. Plant species is being selected based on pollution potential. Indigenous variety of plant species is planted around the project periphery to absorb maximum dust and to reduce noise factor to the maximum level.

[viii] Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

Answer: Agreed. Weep holes in the compound walls will be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

[ix] Rain water harvesting for runoff and surface run off, as plan submitted should be implemented. Before recharging the surface run off, pre- treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts. above the highest ground water table.

Answer: Agreed. We have proposed 3 rain water harvesting pits to harvest rainwater from roof tops and surface run off. All the runoff water will be will pass through silt trap chamber and oil traps chamber. It will be further fed to rain water harvesting pit. Rainwater Harvesting Plan is attached as **Annexure IV**.

[x] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.

Answer: No extraction of ground water will be carried out during construction and operation phase. The source of water during operation phase will be met from HUDA supply. Water monitoring report is enclosed as Annexure XI.

[xi] There should be no Traffic congestion near entry and exit points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.

Answer: To prevent traffic congestion at the entry and exits, all the entry and exit gates are connected to main road via service road. Adequate parking facility has been proposed which

is shown in Site Plan. Total Parking Space proposed 487 ECS.

[xii] A report on the energy conservation measures conforming to energy conservation norms finalize by Bureau of energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the IA division of Environment Department, Haryana in three months time.

Answer: A report on the energy conservation measures conforming to energy conservation norms finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U factors etc. as **Annexure XII**.

[xiii] Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guild lines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.

Answer: To reduce energy load requirement, all the internal lighting within the building and in open area will have CFLs/TFLs lighting system. In the open area there will be installing of Solar Panels for lighting system. Solar Orientation Plan is attached as **Annexure XIII**.

The CFLS/TFLS which are not in usage due to failure will be stalked at one place within the site will be supplied to authorized vendor by SPCB for handling and process of these bulbs.

[xiv] Solid waste generated should be properly collected and segregated as per the requirement of MSW Rules, 2000 and as amended from time to time. The project proponent shall carry out composting of bio-degradable waste within the project area. The dry/inert solid waste should be disposed off to the approved sites for land filing after recovering recyclable material.

Answer: Detailed Solid Management plan is enclosed as **Annexure X**.

[xv] The provision of the solar water heating system shall be as per the norms specified by HAREDA and shall be made operational in each building block.

Answer: Solar water heater system will be as per norms and will be made operational in each building block.

[xvi] The project proponent will use the water from the already existing tube wells for domestic purposes only after getting permission from CGWA or will use water from HUDA whichever is earlier during operation phase.

Answer: Agreed. Water during operational phase will be obtained by HUDA supply.

B. – GENERAL CONDITIONS:-

[i] The environmental safeguards contained in the EIA/EMP Report should be implanted in letter and spirit.

Answer: All the environmental safeguard contained in the EIA/EMP reports for construction and operation phase will be implemented.

Figure No. 6 : EMP implemented during construction phase is shown below:

		
Medical & First Aid Room	First Aid Kits	Mobile Toilets
		
Sheet covering Near construction Area	Safe Drinking water supply	D.G set with Acoustic Enclosures
		
Temporary fencing near dug site	Use of Fly ash bricks for construction	Safety appliance for labors

The EMP is enclosed as **Annexure XIV**.

[ii] Six monthly compliances report should be submitted to the HSPCB and Regional Office, MOEF, GOI, Northern Region, Chandigarh, and a copy to the Regulatory Authority of Haryana.

Answer: The acknowledgement copy of last Progress Report is enclosed as **Annexure XV**.

[iii] The project proponent will sent one set of reports to Additional Director, Regional Office , MOEF, GOI, Sector 31 Chandigarh and to the Chairman, Haryana State Pollution Control Board, Panchkula for their reference.

Answer: Yes, the copy of the compliance report will be send to all the Additional Director, Regional Office , MOEF, GOI, Sector 31 Chandigarh and to the Chairman, Haryana State Pollution Control Board, Panchkula for their reference.

[iv] The SEIAA Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found false information has been given for getting approval of this project.

Answer: We accept the above said condition and will implement the additional safeguard measures imposed by SEIAA Haryana. The SEIAA has right to revoke the Environmental Clearance if it is found that the information submitted for getting EC is false.

[v] All other statutory clearances such as approvals for storage of diesel from chief Controller of Explosives, Fire Departments, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act 1972, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.

Answer: The project proponent has taken all the above mentioned statutory clearance from the concern authority, if the project attracting the above mentioned condition in construction and operation phase.

[vi] These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986 the Public Liability (Insurance) Act, 1991, Forest Conservation Act, 1980 and EIA Notification, 2006.

Answer: Yes, the stipulate will be enforced before the start of construction /operation if the project attracts the above provision.

[vii] The Project Proponent will not violate any judicial orders/ pronouncements issued by the Hon'ble Supreme Court/ High Courts.

Answer: Yes the project proponent will not violate any judicial orders/ pronouncements issued by the Hon'ble Supreme Court/ High Courts.

[viii] The Project Proponent shall obtain requisite clearance under the MOEF GOI notification 07.05.92 from the competent Authority before the start of construction activities.

Answers: Yes, agreed