EMAAR

INDIA

Date: 15.05.2021

Dr. Vimal Kumar Hatwal
Joint Director
Ministry of Environment, Forests & Climate Change
Northern Regional Office
Bays No. 24-25, Sector 31-A
Dakshin Marg, Chandigarh-160030

Subject: **Construction of proposed Commercial Complex Project "Colonnade" measuring 2.25 Acres at Village Badshahpur, Sector-66, Gurgaon, Haryana by M/s Emaar India Limited – Submission of Six-monthly Compliance Report –** June 2021.

Ref.: Environment Clearance Letter No. SEIAA/HR/2018/215 dated 04.04.2018

Dear Sir,

With regards to the above-mentioned subject, we are hereby submitting soft copy of six-monthly report for the month of **June 2021** for the proposed Commercial Complex Project.

We hope the above meets your requirement.

Thanks and Regards,

For M/S EMAAR INDIA LIMITED

(Authorized Signatory)

Encl: As stated

CC:
1. State Environmental Impact Assessment Authority, Bay No. 55-58, Paryatan Bhawan, Sector-2, Panchkula, Haryana – 134 151.
2. The Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula, Haryana – 134 109.

SIX MONTHLY REPORT

Status of Environmental Clearance

Project Name: Construction of proposed Commercial Complex at Village Badshahpur, Sector-66, Gurgaon, Haryana

Environmental Clearance No.: No. SEIAA/HR/2018/215 dated 04.04.2018

Part A: Specific Conditions

I. Construction Phase

S.No.	Specific Condition	Status
1	"Consent for Establish" shall be obtained from Haryana State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA, Haryana before the start of any construction work at site.	Consent to Establish for the project has been obtained and is valid till 03.04.2025. Copy of the same has already been submitted.
2	A First Aid Room as proposed in project report will be provided both during construction and operation of the project.	First Aid facility provided at Project site. Photograph already shared in previous compliance report.
3	Adequate drinking water & sanitary facilities shall be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by laborer is strictly prohibited. The safe disposal of wastewater & solid wastes generated during construction phase should be ensured. Efforts shall be made to provide mobile STP for treatment of wastewater during construction phase.	Potable water and sanitary facilities are maintained at project site. Drinking water quality is enclosed as **Annexure 1.**
4	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	Excavated soil is being utilized within the project site for landscape development.
5	The project proponent shall ensure that the building material required during construction phase is properly stored within the project area and disposal of construction waste should not create any adverse effect on neighboring communities & should be disposed-off taking necessary precautions for general safety & health aspects of people, only in approved sites with the approval of competent authority.	Building material required during construction is being stored at designated place. All the necessary action will be taken while disposing construction waste to prevent any adverse effect.
6	Construction spoils including bituminous material & other hazardous materials must not be allowed to contaminate watercourse & dump sites for such material must be secured so that they should not leach into groundwater, and any hazardous waste generated during construction	Waste oil from DG sets is the only hazardous waste generated during construction phase & is being stored in HDPE drums at earmarked area. Hence there is no contamination of water course and no leaching into groundwater. Soil analysis report is enclosed

S.No.	Specific Condition	Status
	phase should be disposed off as per applicable rules & norms with necessary approval of the Haryana State Pollution Control Board.	as **Annexure 2.**
7	The diesel generator sets to be used during construction phase shall be of ultra low Sulphur diesel type & should conform to Environment (Protection) Rules prescribed for air & noise emission standards.	Diesel power generating set are acoustic enclosure type and conforms to rules made under Environment (Protection) Act prescribed for air and noise emission standards. Latest DG stack emission and DG noise is enclosed as **Annexure 3** & **Annexure 4,** respectively.
8	The diesel required for operating DG Sets shall be stored in underground tanks & if required, clearance from Chief Controller of Explosives shall be taken.	Adequate provision will be made for storage of diesel, if required necessary clearance will be obtained from the Chief Controller of explosive.
9	Ambient noise levels should conform to residential standards both during day & night. Incremental pollution loads on ambient air and noise quality should be closely monitored during construction phase. Adequate measure should be taken to reduce ambient air & noise level during construction phase, to conform to stipulated residential standards of CPCB/MoEF.	Ambient air and noise level monitoring is carried out regularly at project site. Copy of reports is attached as **Annexure 5** & **Annexure 6,** respectively.
10	Fly ash should be used as building material in construction as per the provisions of Fly Ash Notification of September 1999 & amended as on 27th August 2003.	Fly ash based ready mix concrete has been used for construction.
11	Storm water control and its reuse as per CGWB and BIS standards for various applications should be ensured.	Storm water will be channelized through storm drainage system and will be reused and controlled as per CGWB norms.
12	Water demand during construction shall be reduced by use of pre-mixed concrete, curing agents & other best practices.	Best practices are being adopted to reduce water demand.
13	In view of severe constrains of water supply augmentation in the region and sustainability of water resources the developer will submit the NOC from CGWA specific water abstraction quantities and assurance from HUDA/utility provider indicating source of water supply and quantity of water details of intended use of water portable and non portable. Assurance is required for both construction and operation stage separately. It shall be submitted to the SEIAA and RO MOEF Chandigarh before the start of construction.	Will be adhered to. There is no borewell present at site.
14	Roof must meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.	Energy conservation measures have been adopted.
15	Opaque wall must meet prescriptive requirement as per Energy Conservation Building Code which	Optimum window sizes and openings have been provided on external face of the

S.No.	Specific Condition	Status
	is proposed to be mandatory for all air-conditioned spaces while it is desirable for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	building. Glass surfaces protected by overhangs.
16	The approval of competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments etc. as per National Building Code including protection measures from lightening etc.	Necessary approvals have been obtained for structural safety and adequacy of firefighting equipment as per National Building Code.
17	Overexploited ground water and impending severe shortage of water supply in the region requires the developer to redraw the water and energy conservation plan. Developer shall reduce the overall footprint of the proposed development. Project proponent shall incorporate water efficiency/saving measures as well as water reuse/recycling within 3 months and before start of construction to the SEIAA Haryana, MOEF, GOI, Chandigarh.	Will be adhered to.
18	The Project proponent as stated in the proposal shall construct 03 rainwater harvesting pits for recharging the groundwater within the project premises. Rainwater harvesting pits shall be designed to make provisions for silting chamber and removal of floating matter before entering harvesting pit. Maintenance budget and persons responsible for maintenance must be provided. Care shall also be taken that contaminated water do not enter any RWH pit.	NOC for 3 nos. of rainwater harvesting structure have been constructed at site.
19	The project proponent shall provide for adequate fire safety measures and equipments as required by Haryana Fire Service Act, 2009 and instructions issued by the local Authority/Directorate of fire from time to time. Further the project proponent shall take necessary permission regarding fire safety scheme/NOC from competent Authority as required.	Agreed and same will be complied.
20	The Project Proponent shall submit assurance from the DHBVN for supply of 3277.9 KW of power supply before the start of construction. In no case project will be operational solely on generators without any power supply from any external power utility.	Assurance from DHBVN for 2.7 MW has already been submitted with previous compliance report.
21	Detail calculation of power load and ultimate power load of the project shall be submitted to DHBVN under intimation to SEIAA Haryana before the start of construction. Provisions shall	Detailed load calculation has already been submitted to DHVBNL.

S.No.	Specific Condition	Status
	be made for electrical infrastructure in the project area.	
22	The Project Proponent shall not raise any construction in the natural land depression/ Nallah/water course and shall ensure that the natural flow from the Nallah/water course is not obstructed.	Agreed and same will be complied.
23	The Project Proponent shall keep the plinth level of the building blocks sufficiently above the level of the approach road to the Project as per prescribed by-laws. Levels of the other areas in the Projects shall also be kept suitably to avoid flooding.	This has already been considered as per the building byelaws.
24	Construction shall be carried out so that density of population does not exceed norms approved by Director General Town and Country Department Haryana.	Agreed and same has been complied.
25	The Project Proponent shall submit an affidavit with the declaration that ground water will not be used for construction and only treated water should be used for construction.	Has already been submitted. Treated water from HUDA STP's is being used for construction. HUDA slips have regularly been submitted with compliance report.
26	The project proponent shall not cut any existing tree and project landscaping plan should be modified to include those trees in green area.	Agreed and same will be complied.
27	The project proponent shall ensure that ECBC norms for composite climate zone are met. Building envelope, HVAC service, water heating, pumping, lighting and electrical infrastructure must meet ECBC norms.	Agreed and same will be complied.
28	The project proponent shall provide 3-meter-high barricade around the project area, dust screen for every floor above the ground, proper sprinkling and covering of stored material to restrict dust and air pollution during construction.	Regular water sprinkling on unpaved roads, construction vehicle with top cover and tarpaulin over construction is being practiced restricting dust & air pollution during construction.
29	The project proponent shall construct a sedimentation basin in the lower level of the project site to trap pollutant and other wastes during rains.	Agreed and same will be complied.
30	The project proponent shall provide proper Rasta of proper width and proper strength for the project before the start of construction.	Agreed and same will be complied.
31	The project proponent shall ensure that the U-value of the glass is less than 3.177 and maximum solar heat gain co-efficient is 0.25 for vertical fenestration.	Agreed.
32	The project proponent shall adequately control construction dusts like silica dust, non-silica dust, wood dust. Such dusts shall not spread outside project premises. Project Proponent shall provide	PPE's are provided to all construction workers. Water sprinkling at adequate interval is done to minimize the dust generation due to construction work.

S.No.	Specific Condition	Status
	respiratory protective equipment to all construction workers.	
33	The project proponent shall provide fire control room and fire officer for building above 30 meter as per National Building Code.	Agreed and same will be complied.
34	The project proponent shall obtain permission of Mines and Geology Department for excavation of soil before the start of construction.	Permission from Mines and Geology Department for excavation of soil has been obtained and has already been submitted.
35	The project proponent shall provide one refuse area till 24 meters, one till 39 meter and one after 15 meter each, as per National Building Code. The project proponent shall not convert any refuse area in the habitable space, and it should not be sold out/commercialized.	Agreed and same will be complied.
36	The project proponent shall seek specific prior approval from concerned local Authority/HUDA regarding provision of storm drainage and sewerage system including their integration with external services of HUDA/Local authorities beside other required services before taking up any construction activity.	Agreed and same will be complied.
37	The project proponent shall discharge excess of treated wastewater/storm water in the public drainage system and shall seek permission of HUDA before the start of construction.	Agreed and same will be complied.
38	The project proponent shall maintain the distance between STP and water supply line.	Will be adhered to.
39	The PP shall ensure that the stack height is 6 m more than the highest tower.	Will be adhered to.
40	The project proponent shall ensure that structural stability to withstand earthquake of magnitude 8.5 on Richter scale.	NBC guidelines has been followed during building plan approval.
41	Vertical fenestration shall not exceed 60% of total wall area.	Will be adhered to.
42	The PP shall submit the copy of the fire safety plan dully approved by fire department before the start of construction.	Will be adhered to.

II. Operation Phase

S. No.	Specific Condition	Status
a	"Consent to Operate" shall be obtained from Haryana State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA, Haryana.	Agreed and same will be complied during the operation phase of the project.
b	The Sewage Treatment Plant (STP) shall be installed for treatment of the sewage to the prescribed standards including odor & treated effluent will be recycled to achieve zero exit	The Sewage Treatment Plant of 130 KLD capacity will be installed at the site

	discharge. The installation of STP shall be certified by an independent expert and a report in this regard should be submitted to the SEIAA, Haryana before the project is commissioned for operation. Tertiary treatment of wastewater is mandatory. The project proponent shall remove not only Ortho-Phosphorus but total Phosphorus to the extent of less than 2mg/liter. Similarly, total Nitrogen level shall be less than 2mg/liter in tertiary treated wastewater. Discharge of treated sewage shall conform to the norms and standards of CPCB/HSPCB, whichever is environmentally better. Project Proponent shall implement such STP technology which does not require filter backwash. The project proponent shall essentially provide two number of STPs preferably equivalent to 50% of total capacity or as per initial occupancy.	
c	Separation of grey & black water should be done by use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the re-circulated water should have BOD level less than 5 mg/litre & the recycled water will be used for flushing, gardening & DG set cooling etc.	Provision of dual plumbing facility is an integral part of the project planning and has been provided.
d	For disinfections of treated wastewater ultra-violet radiation or ozonation process should be used.	Agreed and same will be complied. UV will be used for disinfection purpose.
e	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 & conform to rules made under Environment (Protection) Act 1986. The location of DG Sets shall be in the basement as promised by the project proponent with appropriate stack height above the roof level as per the CPCB norms. The diesel used for DG sets shall be ultra-low Sulphur diesel (35 ppm Sulphur), instead of low Sulphur diesel.	Agreed and same will be complied.
f	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.	Agreed and same will be complied.
g	The project proponent as stated in the proposal should maintain at least 25.50% as green cover area for tree plantation especially all-around periphery of the project and on roadsides preferably with local species which can provide protection against noise and suspended	Agreed and same will be complied.

	particulate matter. The open spaces inside the project shall be preferably landscaped and covered with vegetation/grass, herbs & shrubs. Only locally available plant species shall be used.	
h	The project proponent shall strive to minimize water in irrigation of landscape by minimizing grass area, using native variety, xeriscaping, and mulching, utilizing efficient irrigation system, scheduling irrigation only after checking evapo-transpiration data.	Agreed and same will be complied.
i	Rainwater harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging surface run-off, pre-treatment through sedimentation tanks must be done to remove suspended matter, oil & grease. The borewell for rainwater recharging shall be kept at least 5 mts. above the highest ground water table. Care shall be taken that contaminated water do not enter any RWH pit. The project proponent shall avoid rainwater harvesting of first 10 minutes of rain fall. Roof top of the building shall be without any toxic material or paint which can contaminate rainwater. Wire mess and filters should be used wherever required.	Agreed and same will be complied. Rainwater harvesting design already submitted.
j	The ground water level & its quality should be monitored regularly in consultation with Central Ground Water Authority.	Agreed and same will be complied.
k	A report on energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc. and submitted to SEIAA, Haryana in three months' time.	Building materials R & U factors have already been submitted to SEIAA during project appraisal.
l	Energy conservation measures like installation of LED only for lighting the areas outside the building and inside the building should be integral part of project design & should be in place before project commissioning. Use of solar panels must be adapted to the maximum energy conservation.	Use of LED lights in open area is an integral part of planning and same will be complied during the operation phase.
m	The project proponent shall use zero ozone depleting potential material in insulation, refrigeration, air-conditioning and adhesive. Project proponent shall also provide halon free fire suppression system.	Agreed and same will be complied.
n	The solid waste generated should be properly collected & segregated as per the requirement	Agreed and same will be complied. Organic Waste Converter will be installed at site.

	of the MSW Rules, 2000 & as amended from time to time. The bio-degradable waste should be treated by appropriate technology at the site ear-marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	
o	The provision of Solar water heating system shall be as per norms specified by HAREDA & shall be made operational in each building block.	NA as it is a commercial project.
p	The traffic plan & parking plan proposed by the PP should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry & exit points from the roads adjoining the proposed project site. Parking should be fully internalized & no public space should be used.	Agreed and same will be complied.
q	The project shall be operationalized only when HUDA/local authority will provide domestic water supply system in the area.	Agreed and same will be complied.
r	Operation and maintenance of STP, solid waste management and electrical Infrastructure, pollution control measures shall be ensured even after the completion of project.	Agreed and same will be complied.
s	Different type of wastes should be disposed off as per provisions of municipal solid waste, biomedical waste, hazardous waste, e-waste, batteries & plastic rules made under Environment Protection Act, 1986. Particularly E-waste and Battery waste shall be disposed of as per existing E-waste Management Rules 2011 and Batteries Management Rules 2001. The project proponent should maintain a collection center for E-waste, and it shall be disposed of to only registered and authorized dismantler as per e-waste management Rules, 2011	Agreed and same will be complied.
t	Standards for discharge of environmental pollutants as enshrined in various schedules of rule 3 of Environment Protection Rule 1986 shall be strictly complied with.	Agreed and same will be complied.
u	The project proponent shall make provision for guard pond and other provisions for safety against failure in the operation of wastewater treatment facilities. The project proponent shall also identify acceptable outfall for treated effluent.	Will be adhered to.
v	The project proponent shall ensure that the	Agreed and same will be complied.

	stack height of DG sets is more than the highest tower and ensure that the emission standards of noise and air are within the CPCB prescribed limits. Noise and Emission level of DG sets greater than 800 KVA shall be as per CPCB latest standards for high-capacity DG sets.	
w	All electric supply exceeding 100-amp, 3 phases shall maintain the power factor between 0.98 lag to 1 at the point of connection.	Agreed and same will be complied.
x	The project proponent shall minimize heat island effect through shading and reflective or pervious surface instead of hard surface.	Noted.
y	The project proponent shall not use fresh water for HVAC and DG cooling. Air based HVAC system should be adopted, and only treated water shall be used by project proponent for cooling, if it is at all needed. The Project Proponent shall also use evaporative cooling technology and double stage cooling system for HVAC to reduce water consumption. Further temperature, relative humidity during summer and winter seasons should be kept at optimal level. Variable speed drive, best Co-efficient of Performance (Cop), as well as optimal integrated point load value and minimum outside fresh air supply may be resorted for conservation of power and water. Coil type cooling DG Sets shall be used for saving cooling water consumption for water cooled DG Sets.	Agreed and same will be complied.
z	The project proponent shall ensure that the transformer is constructed with high quality grain oriented, low loss silicon steel and virgin electrolyte grade copper. The project proponent shall obtain manufacturer's certificate also for that.	Agreed and same will be complied.
aa	Water supply shall be metered among different users and different utilities.	Agreed and same will be complied.
ab	The project proponent shall ensure that exit velocity from stack should be sufficiently high. Stack shall be designed in such a way that there is no stack down-wash under any meteorological conditions.	Agreed and same will be complied.
ac	The project proponent shall provide water sprinkling system in the project area to suppress the dust in addition to the already suggested mitigation measures in the Air Environment Chapter of EMP.	Agreed and same will be complied.

ad	The project proponent shall provide additional green area on terrace and roof top.	Noted.
ae	The project proponent shall ensure proper Air ventilation and light system in the basements area, for comfortable living of human being and shall ensure that number of air changes per hour/(ACH) in basement never falls below 15. In case of emergency capacity for increasing ACH to the extent of 30 must be provided by the project proponent.	Agreed and same will be complied.
af	The project proponent shall install solar panel for energy conservation.	Will be adhered to.

S. No.	General Condition	Status
i	The Project Proponent shall ensure the commitment made in Form-1, Form-1A, EIA/EMP and other documents submitted to the SEIAA for the protection of environment and proposed environmental safeguards are complied with in letter & spirit. In case of contradiction between two or more documents on any point, the most environmentally friendly commitment on the point shall be taken as commitment by project proponent.	Noted
ii	The project proponent shall also submit Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the northern Regional Office of MoEF, the respective Zonal office of CPCB, HSPCB and SEIAA Haryana.	Agreed and same is being complied.
iii	STP outlet after stabilization and stack emission shall be monitored monthly. Other environmental parameters and green belt shall be monitored on quarterly basis. After every 3 (three) months, the project proponent shall conduct environmental audit and shall take corrective measure, if required, without delay.	Agreed and same will be complied.
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. SEIAA reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF.	Noted
v	The Project proponent shall not violate any judicial orders/pronouncements issued by any	Noted

S. No.	General Condition	Status
	Court/Tribunal.	
vi	All other statutory clearances such as approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, Forest Act, 1927, PLPA,1900, etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.	Aravalli NOC through DC has been obtained and has already been submitted
vii	The Project proponent should inform the public that the project has been accorded Environment Clearance by the SEIAA and copies of the clearance letter are available with the Haryana State Pollution Control Board & SEIAA. This should be advertised within 7 days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region and the copy of the same should be forwarded to SEIAA Haryana. A copy of Environment Clearance conditions shall also be put on project proponent's web site for public awareness.	Copy of public notice was published in Dainik Bhaskar and Tribune on 16.04.2018 and copy was submitted has already been submitted to SEIAA on 19.04.2018.
viii	Under the provisions of Environment (Protection) Act 1986, legal action shall be Initiated against the Project Proponent if it was found that construction of the project has been started before obtaining prior Environmental Clearance.	Environmental Clearance obtained.
ix	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Agreed.
x	Corporate Environment & Social Responsibility (CSER) shall be the project proponent shall put in place Corporate Environment Policy as mentioned laid down by the project proponent (2% shall be earmarked) as per MoEF, GOI OM No. J-11013/41/2006-IA II (I) dated 18.05.2012 and the Ministry of Corporate Affairs, GOI Notification dated 27.02.2014. A separate audit statement shall be submitted in compliance. Environment related work proposed to be executed under this responsibility shall be undertaken simultaneously. The project proponent shall	Has already been submitted to SEAC & SEIAA during appraisal.

S. No.	General Condition	Status
	select and prepare the list of work for implementation of CSER of its own choice and shall submit the same before start of construction.	
xi	The fund ear-marked for environment protection measures should be kept in separate account and should not be diverted for other purposes and year wise expenditure shall be reported to the SEIAA/RO MOEF GOI under rules prescribed for Environment Audit.	Noted
xii	The project proponent shall ensure the compliance of Forest Department, Haryana Notification no. S.O.121/PA2/1900/S.4/97 dated 28.11.1997.	Noted
xiii	The Project Proponent shall ensure that no vehicle during construction/operation phase enter the project premises without valid 'Pollution Under Control' certificate from competent Authority.	Agreed.
xiv	Besides the developer/applicant, the responsibility to ensure the compliance of Environmental Safeguards/conditions imposed in the Environmental Clearance letter shall also lie on the licensee/licensees in whose name/names the license/CLU has been granted by the Town & Country Planning Department, Haryana.	Noted
xv	The proponent shall upload the status of compliance of stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and SPCB. The criteria pollutant levels namely $PM_{2.5}$, PM_{10}, SO_2, NOx, Ozone, Lead, CO, Benzene, Ammonia, Benzopyrene, arsenic and Nickel. (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Agreed and same will be complied.
xvi	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the HSPCB Panchkula as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company	Agreed.

S. No.	General Condition	Status
	along with the status of compliance of the EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	
xvii	The project proponent shall conduct environmental audit at every three months interval and thereafter corrected measures shall be taken without any delay. Details of environmental audit and corrective measures shall be submitted in the monitoring report.	Agreed and same will be complied.
xviii	The project proponent shall seek fresh Environmental clearance in case any modification/revision is required at a later stage due to exchange of revenue Rasta existing in the project area or change in any plan due to combined zoning plan.	Noted.
xix	The validity of this environmental clearance is for 07 years from the date of issuance of EC letter. The environmental clearance conditions applicable till life space of the project in case of residential project will continue to apply. The resident's welfare associations/Housing Cooperative societies shall be responsible to comply conditions laid down in EC. In case of violations in the action would be taken as per the laid down law of land. Compliance report should be sent to this office till life of the project.	Noted
xx	If project is not completed within the validity period, then the PP shall submit the application for extension of validity within one month before the lapse of validity period of Environmental Clearance i.e., 7 years.	Noted

Vardan EnviroLab
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051, Haryana
ISO 9001|ISO 14001|ISO 45001

Test Report

Sample Number:	VEL/COL/W/01	**Report No.:**	VEL/W/2104/06/003
Name & Address of Project:	M/s Colonnade, Village - Badshahpur, Sector-66, Gurugram, (Haryana).	**Format No.:**	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	10/04/2021
		Period of Analysis:	06/04/2021 to 10/04/2021
		Receipt Date:	06/04/2021
Sample Description:	Hudd Suply Water Sample	**Sampling Date:**	05/04/2021
Sampling Location:	Project Site	**Type of Sampling:**	Grab
Sample Collected by	Vardan EnviroLab Representative	**Sampling Quantity:**	5 L+250 ml.
Sampling & Analysis Protocol:	APHA & IS	**Preservation:**	Refrigerated

S. No.	Parameter	Test-Method	Result	Unit	Requirement as per IS:10500 -2012#	
					Acceptable Limits	Permissible Limits
1.	pH (at 25 ^{0}C)	APHA ,4500-H^+ B Electrometric Method	7.53	--	6.5 to 8.5	No Relaxation
2.	Colour	APHA ,2120 B, Visual Comparison Method	*BDL (**DL 1.0 Hazen)	Hazen	5	15
3.	Turbidity	APHA, 2130 B, Nephlelometric Method	*BDL (**DL 1.0 NTU)	NTU	1	5
4.	Odour	APHA, 2150 B , Threshold Test Method	Agreeable	--	Agreeable	Agreeable
5.	Taste	APHA , 2160 B, Threshold Test Method	Agreeable	--	Agreeable	Agreeable
6.	Total Hardness as $CaCO_3$	APHA , 2340 C, EDTA Titrimetric Method	156.44	mg/l	200	600
7.	Calcium as Ca	APHA, 3500 Ca B, EDTA Titrimetric Method	42.44	mg/l	75	200
8.	Alkalinity as $CaCO_3$	APHA , 2320 B, Titrimetric Method	149.34	mg/l	200	600
9.	Chloride as Cl	APHA, 4500-Cl^- B, Argentometric Method	16.34	mg/l	250	1000
10.	Cyanide as CN	IS:3025 (P-27)	*BDL(**DL 0.02 mg/l)	mg/l	0.05	No Relaxation
11.	Magnesium as Mg	APHA , 3500 Mg B, Calculation Method	12.28	mg/l	30	100
12.	Total Dissolved Solids	APHA , 2540 C, Gravimetric Method	240.11	mg/l	500	2000
13.	Sulphate as SO_4	APHA , 4500 E, Turbidimetric Method	5.69	mg/l	200	400
14.	Fluoride as F	APHA , 4500-F^- D, SPADNS Method	0.27	mg/l	1.0	1.5
15.	Nitrate as NO_3	IS 3025 (P-34) ,Chromotropic Method	1.26	mg/l	45	No Relaxation
16.	Iron as Fe	IS 3025 (Part-65)	*BDL(**DL 0.01 mg/l)	mg/l	1.0	No relaxation
17.	Aluminum as Al	IS 3025 (Part-65)	*BDL(**DL 0.002 mg/l)	mg/l	0.03	0.2
18.	Boron	IS 3025 (Part-65)	*BDL(**DL 0.01 mg/l)	mg/l	0.5	2.4
19.	Total Chromium as Cr	IS 3025 (Part-65)	*BDL(**DL 0.002 mg/l)	mg/l	0.05	No Relaxation

KANCHAN SHARMA
(Tested By)
Jr. Lab Analyst

BIBHUTI BHUSAN NAYAK
(Checked By)
Dy. Technical Manager

(Approved By)

Note: Terms & conditions refer on backside of test report.

Vardan EnviroLab
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051, Haryana
ISO 9001|ISO 14001|ISO 45001

Test Report

Sample No.: VEL/COL/W/01 **Report No: VEL/W/2104/06/003**

S. No	Parameter	Test-Method	Result	Unit	Requirement as per IS:10500 -2012#	
					Acceptable Limits	Permissible Limits
20.	Phenolic Compounds	APHA, 5530 C Chloroform Extraction Method	*BDL(**DL 0.0004 mg/l)	mg/l	0.001	0.002
21.	Mineral Oil	Clause 6 of IS:3025(Part 39)	*BDL(**DL 0.05mg/l)	mg/l	0.5	No Relaxation
22.	Anionic Detergents as MBAS	Anex K, IS 13428/IS 3025 (P-68)	*BDL(**DL 0.05 mg/l)	mg/l	0.2	1.0
23.	Zinc as Zn	IS 3025 (Part-65)	*BDL(**DL 0.01 mg/l)	mg/l	5	15
24.	Copper as Cu	IS 3025 (Part-65)	*BDL(**DL 0.002 mg/l)	mg/l	0.05	1.5
25.	Manganese as Mn	IS 3025 (Part-65)	*BDL(**DL 0.01 mg/l)	mg/l	0.1	0.3
26.	Cadmium as Cd	IS 3025 (Part-65)	*BDL(**DL 0.002 mg/l)	mg/l	0.003	No Relaxation
27.	Lead as Pb	IS 3025 (Part-65)	*BDL(**DL 0.002 mg/l)	mg/l	0.01	No Relaxation
28.	Selenium as Se	IS 3025 (Part-65)	*BDL(**DL 0.001 mg/l)	mg/l	0.01	No Relaxation
29.	Arsenic as As	IS 3025 (Part-65)	*BDL(**DL 0.005 mg/l)	mg/l	0.01	No Relaxation
30.	Mercury as Hg	IS 3025 (Part-65)	*BDL (**DL 0.0005 mg/l)	mg/l	0.001	No Relaxation
31.	Total Coliform	IS 15185:2002(RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	
32.	E. Coli	IS 15185:2002 (RA- 2016)	Absent	/100ml	Shall not be detectable in any 100 ml sample	

Note: - This Report Complies as per IS 105000:2012 Amendment No.2 Sept 2018
*BDL-Below Detection Limit, **DL- Detection Limit

KANCHAN SHARMA
(Tested By)

BIBHUTI NAYAK
Dy. Manager
(Checked By)

Dr. Shiv Prakash
(Approved By)

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Vardan EnviroLab
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051, Haryana
ISO 9001|ISO 14001|ISO 45001

Test Report

Sample Number:	**VEL/COL/S/01**	**Report No.:**	**VEL/S/2104/06/003**
Name & Address of Party:	**M/s Colonnade, Village - Badshahpur, Sector-66, Gurugram, (Haryana).**	**Format No.:**	**7.8 F-01**
		Party Reference No.:	**NIL**
		Reporting Date:	**10/04/2021**
		Period of Analysis:	**06/04/2021 to 10/04/2021**
Sample Description:	**Soil Sample**	**Receipt Date :**	**06/04/2021**
Sampling Location:	**Project Site**	**Sampling Date:**	**05/04/2021**
Packing Status:	**Temp Sealed**	**Type of Sampling:**	**Composite**
Sampling & Analysis Protocol:	**IS 2720 & SOP**	**Sampling Quantity:**	**2.0 Kg**

S. No.	Parameter	Test-Method	Result	Unit
1.	pH (at 25 ^{0}C)	IS : 2720 (P-26) by pH Meter	7.57	--
2.	Conductivity	IS:14767 by Conductivity meter	0.319	mS/cm
3.	Soil Texture	IS : 2720 (P-22, RA2003)	Silty	--
4.	Color	*SOP , SP-78,Issue No.-01& Issue Date-14/02/2013	Yellowish Brown	--
5.	Water holding capacity	*SOP , SP-81,Issue No.-01& Issue Date-14/02/2013	36.58	%
6.	Bulk density	*SOP , SP-80,Issue No.-01& Issue Date-14/02/2013	1.27	gm/cc
7.	Chloride as Cl	*SOP , SP-85,Issue No.-01& Issue Date-14/02/2013	43.42	mg/100g
8.	Calcium as Ca	*SOP , SP-82,Issue No.-01& Issue Date-14/02/2013	36.36	mg/100g
9.	Sodium as Na	*SOP , SP-84,Issue No.-01& Issue Date-14/02/2013	45.12	mg/kg
10.	Potassium as K	*SOP , SP-84,Issue No.-01& Issue Date-14/02/2013	158.71	kg/hec.
11.	Organic Matter	IS:2720 (P-22) Titrimetric Method	0.53	%
12.	Magnesium as Mg	*SOP , SP-83,Issue No.-01& Issue Date-14/02/2013	32.79	mg/100g
13.	Available Nitrogen as N	IS:14684 Distillation Method	215.00	kg./hec.
14.	Available Phosphorus	*SOP , SP-86,Issue No.-01& Issue Date-14/02/2013	24.31	kg./hec.
15.	Zinc (as Zn)	USEPA 3050B	9.88	mg/kg
16.	Manganese (as Mn)	USEPA 3050B	6.20	mg/kg
17.	Lead (as Pb)	USEPA 3050B	1.04	mg/kg
18.	Cadmium (as Cd)	USEPA 3050B	0.96	mg/kg
19.	Chromium (as Cr)	USEPA 3050B	0.89	mg/kg
20.	Copper (as Cu)	USEPA 3050B	3.88	mg/kg

*SOP-Laboratory standard oprating procedure

KANCHAN SHARMA
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Vardan EnviroLab
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051, Haryana
ISO 9001|ISO 14001|ISO 45001

Test Report

Sample Number:	VEL/COL/ST/01	**Report No.:**	VEL/ST/2104/06/005
Name & address of the Project:	M/s Colonnade, Village - Badshahpur, Sector - 66, Gurugram, (Haryana).	**Format No.:**	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	10/04/2021
		Period of Analysis:	06/04/2021 to 10/04/2021
		Receipt Date:	06/04/2021

Sample Description : Stack Emission Monitoring

General Information		
Sampling Location	:	DG Set Area
Sample Collected by	:	Vardan EnviroLab Representative
Date of Sampling	:	05/04/2021
Sampling Duration (Minutes)	:	35.0
Stack attached to	:	DG Set (500 KVA)
Make of stack	:	Metal
Diameter of stack (m)	:	0.20 Mtr.
Height of stack (m)	:	84.0 Mtr.
Instruments calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature – Ta (°C)	:	34.0
Temperature of stack Gases – Ts (°C)	:	159.0
Velocity of stack Gases (m/sec.)	:	8.26
Flow rate of PM (LPM)	:	25.0
Flow rate of Gas (LPM)	:	2.0
Sampling condition	:	Isokinetic
Protocol used	:	IS :11255

RESULTS

S.No.	Parameters	Test Method	Results	Units	Limits as per CPCB
1.	Particulate Matter (PM)	IS 11255 (P-1) Gravimetric Method	0.126	gm/Kw-hr	≤0.2
2.	Nitrogen Dioxide (as NO_2)	IS 11255 (P-7) Colorimetric Method	0.59	gm/Kw-hr	≤4.0
3.	Total Hydrocarbon as Methane	#SOP No. VEL/SOP/01, Section No. SP 74	0.11	gm/Kw-hr	--
4.	Carbon Monoxide (as CO)	#SOP No. VEL/SOP/01, Section No. SP 74	0.29	gm/Kw-hr	≤3.5
5.	Sulphur Dioxide (as SO_2)	IS:11255 (P-2), Titrimetric Method	0.21	gm/Kw-hr	Not Specified

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Vardan EnviroLab
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ISO 9001|ISO 14001|ISO 45001

Test Report

Sample Number:	VEL/COL/PN/01	**Report No.:**	VEL/PN/2104/06/003
Name & Address of Party:	M/s Colonnade, Village - Badshahpur, Sector-66, Gurugram, (Haryana).	**Format No.:**	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	10/04/2021
		Period of Analysis:	06/04/2021 to 10/04/2021
		Receipt Date:	06/04/2021

Sample Description : DG SET NOISE MONITORING

General Information:-

Sample Collected by	: Vardan EnviroLab Representative
Sampling Location	: DG Set Area Basement - 2(500 KVA)
Instrument Used	: Sound Level Meter
Instrument Code	: VEL/SLM/06
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 05/04/2021
Sampling Duration	: 30 Minutes.
Scope of Monitoring	: Regulatory Requirement
Control measure if Any	: No any
Sampling & Analysis Protocol	: CPCB Guidelines & IS-9989
Parameter Required	: As Per Work Order

TEST RESULT

S. No.	Parameters	Protocol	Open the Canopy of D.G Set Result dB(A)	Close the Canopy of D.G Set (0.5 mtr Distance) Result dB(A)	Insertion Loss
1.	L_{eq}	CPCB Guidelines & Indian Standard:9989	89.3	63.8	25.5
2.	CPCB Limit in Leq dB(A)	-	--	75.00	25.00

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Vardan EnviroLab
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051, Haryana
ISO 9001|ISO 14001|ISO 45001

Test Report

Sample Number:	VEL/COL/A/01	**Report No.:**	VEL/A/2104/06/003
Name & Address of the Project:	M/s Colonnade, Village - Badshahpur, Sector-66, Gurugram, (Haryana).	**Format No.:**	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	10/04/2021
		Period of Analysis:	06/04/2021 to 10/04/2021
		Receipt Date:	06/04/2021

Sample Description : AMBIENT AIR QUALITY MONITORING

General Information:-

Sample collected by	:	Vardan EnviroLab Representative
Sampling Location	:	Near Main Gate
Sampling Equipment used	:	RDS & FPS
Instrument Code	:	VEL/RDS/ FPS/03
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	05/04/2021 to 06/04/2021
Time of Monitoring	:	10:20 AM to 10:20 AM
Ambient Temperature (°C)	:	Min. 22.0, Max. 39.0
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	IS : 5182 & CPCB Guidelines
Sampling Duration	:	24 Hours.
Parameter Required	:	As Per Work Order

S.No	Parameters	Test Method	Results	Units	Limit as per CPCB
1.	Particulate Matter (as PM – 10)	IS:5182 (P-23), Gravimetric Method, RA:2006	153.42	$\mu g/m^3$	100
2.	Particulate Matter (as PM – 2.5)	SOP No. VEL/SOP/01, Section No. SP 63:2013	89.53	$\mu g/m^3$	60
3.	Nitrogen Dioxide (as NO_2)	IS: 5182 (P-6), Jacob & Hochheiser, RA:2006	26.14	$\mu g/m^3$	80
4.	Sulphur Dioxide (as SO_2)	IS: 5182 (P-2), Modified West and Gaeke, RA:2012	14.74	$\mu g/m^3$	80
5.	Carbon Monoxide (as CO)	IS: 5182 (P-10), Gas Chromatography, RA:2003	0.83	mg/m^3	4.0
6.	Lead (as Pb)	IS:5182 (P-22), Air Acetylene Method, RA:2009	*BDL(**DL0.05 $\mu g/m^3$)	$\mu g/m^3$	1.0

Note :-*BDL- Below Detection Limit, **DL- Detection Limit

KANISHAN SHARMA
(Tested By) Jr. Lab Analyst

(Checked By) Dy. Technical Manager

(Approved By) Authorised Signatory

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Vardan EnviroLab
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051, Haryana
ISO 9001|ISO 14001|ISO 45001

Test Report

Sample Number:	VEL/COL/AN/01	**Report No.:**	VEL/AN/2104/06/003
Name & Address of Party:	M/s Colonnade, Village - Badshahpur, Sector-66, Gurugram, (Haryana).	**Format No.:**	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	10/04/2021
		Period of Analysis:	06/04/2021 to 10/04/2021
Sample Description :	AMBIENT NOISE LEVEL MONITORING	**Receipt Date:**	06/04/2021

General Information:-

Sample collected by	:	Vardan EnviroLab Representative
Sampling Location	:	Near Main Gate
Instrument Used	:	Sound Level Meter
Instrument Code	:	VEL/SLM/05
Instrument Calibration Status	:	Calibrated
Meteorological condition during monitoring	:	Clear Sky
Date of Monitoring	:	05/04/2021 to 06/04/2021
Time of Monitoring	:	06:00 AM to 06:00AM
Ambient Temperature (°C)	:	Min. 22.0, Max. 39.0
Surrounding Activity	:	Human & Vehicular Activities
Scope of Monitoring	:	Regulatory Requirement
Sampling & Analysis Protocol	:	CPCB Guidelines & IS-9989
Sampling Duration	:	24 Hours.
Parameter Required	:	As per Client Requirement

S. No.	Parameters	Test Method	Test Result dB (A)		Unit
			Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 06:00 am)	
1.	L_{max}	IS -9989	64.9	50.4	dB(A)
2.	L_{min}	IS- 9989	43.7	38.6	dB(A)
3.	L_{eq}	IS -9989	51.40	40.14	dB(A)
4.	CPCB Limits in dB(*A) Leq (Residential Area)	-	55.00	45.00	dB(A)

Note: *A "decibel" is a unit in which noise is measured.

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