

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 Group Housing Project “Palm Garden” at Village Kherki Daula, Sector 83, Gurgaon, Haryana by M/s Emaar India Limited – Submission of Six-monthly Compliance Report – June 2021.

Reference: Environment Clearance Letter No. SEIAA/HR/2013/603, dated 04.09.2013.

Dear Sir,

With reference to the above-mentioned subject, we are hereby submitting soft copy of six-monthly Compliance Report for the Group Housing Project “Palm Garden” for **June 2021**.
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 Group Housing Project “Palm Garden” at Village Kherki Daula, Sector 83, Gurgaon, Haryana

Environmental Clearance No. : No. SEIAA/HR/2013/603, dated 04th September 2013

Part A: Specific Conditions

I. Construction Phase : The project has obtained Occupation Certificate for the complete project on 17.10.2019, hence construction phase is not applicable

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 has been obtained and also renewed vide No. HSPCB/Consent/: 329962318GUNOCTE5707865 dated 16.10.2018 and valid till 23.12.2020 for the project from Haryana State Pollution Control Board. The same has been submitted with previous compliance report.
2	A First Aid Room as proposed in project report will be provided both during construction and operation of the project.	First Aid facility was provided at Project site and the same is being maintained in operation phase also.
3	Adequate drinking water & sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by laboures is strictly prohibited. The safe disposal of wastewater & solid wastes generated during construction phase should be ensured.	Potable water and sanitary facilities including mobile toilets were maintained at project site. Wastewater & solid wastes generated during construction phase was being disposed off safely. HUDA water through tanker is used for construction. Drinking water analysis is enclosed as Annexure 1
4	All the top soil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	Top soil excavated during construction phase has being used for landscaping purpose at site.
5	The project proponent shall ensure that the building material required during construction phase is properly stored within the project area and	Building material required during construction were

S.No	Specific Condition	Status
.	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.	stored at designated place. All the necessary action were 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 phase should be disposed off as per applicable rules & norms with necessary approval of HSPCB.	Waste oil from DG sets was only hazardous waste generated at present & was being stored in earmarked area. Soil analysis reports is enclosed as Annexure 2
7	The diesel generator sets to be used during construction phase should be of ultra low sulphur diesel type & should conform to Environment (Protection) Rules prescribed for air & noise emission standards.	Low sulphur diesel was being used to run Diesel generator sets with proper acoustic enclosure. Copy of report for DG stack emission and DG noise is attached as Annexure 3 & Annexure 4 .
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 is made for storage of diesel. Permission from Chief Controller of Explosives has already been obtained.
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, so as to conform to stipulated residential standards.	Ambient air and noise level monitoring is carried out 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 27.08.2003.	Fly ash based ready mix concrete was being utilized for construction.
11	Storm water control and its reuse as per CGWB and BIS standards for various applications should be ensured.	Storm water was channelized through storm drainage system and will be reused and controlled as per CGWB norms.
12	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents & other best practices.	Best practices adopted to reduce water demand.
13	In view of the severe constrains in water supply augmentation in the region and sustainability of water resources, the developer will submit the NOC from CGWA specifying water extraction quantities and assurance from HUDA/utility provides indicating source of water supply and quantity of water with details of intended use of water - potable and non-potable. Assurance is required for both construction and operation stages separately. It shall be submitted to the SEIAA and RO MoEF, Chandigarh before the start of construction.	Potable and non-potable water for the project is being taken from the sources specified by HUDA through STP water tankers.
14	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.	Energy conservation measures is being adopted.

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15	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 desirable for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	Optimum window sizes and openings provided on external face of the building. Window to wall ratio WWR 0.3 - 0.4. 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. If any forest land is involved in proposed site, clearance under Forest Conservation Act shall be obtained from the Competent Authority.	Necessary approvals have been obtained from Town and Country Planning Dept. for structural safety. No forest land is involved in the proposed project. Hence clearance from Forest Dept. under Forest Conservation Act is not required. Fire safety scheme approval for the project obtained and submitted. Clearance from Forest Department has also been submitted with previous compliance report.
17	Overexploited groundwater 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 project development. Project proponent shall incorporate water efficiency/savings measures as well as water reuse/recycling within 3 months and before start of construction to the SEIAA, Haryana and RO, MoEF, GOI, Chandigarh.	For construction purpose treated wastewater from designated location by HUDA was utilized. Water efficient fixtures is being used in plumbing works as saving measures during operational phase. Dual plumbing system is being adopted for reuse of recycled water, details submitted with project EIA report.
18	The Project proponent will construct 13 rainwater harvesting pits for recharging groundwater within project premises. Rain water 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.	The same is being adhered. Rain water harvesting permission has already been submitted.
19	The Project proponent shall provide for adequate fire safety measures and equipments as requirement 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.	Fire safety scheme approval for the project obtained and the same has been submitted with previous compliance report.
20	The Project Proponent shall submit assurance from the DHBVN for supply of 5843.62 KVA 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.	Electrical supply is through DHBVN. The project has sanctioned load 1 MVA and another 1 MVA load has been applied.

S.No	Specific Condition	Status
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 be made for electrical infrastructure in the project area.	Electrical substation has been proposed 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.	The same has been adhered.
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 so as to avoid flooding.	The same has been adhered.
24	Construction shall be carried out so that density of population does not exceed norms approved by Director General Town and Country Department Haryana.	The same has been adhered.
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.	Affidavit stating that no ground water will be used for the construction purpose was already submitted to SEIAA Haryana during appraisal and same has been adhered. There is no ground water source at project.
26	The project proponent shall not cut any existing tree and project landscaping plan should be modified to include those trees in green area.	The same has been adhered.
27	The project proponent shall provide helipad facility as required under NBC norms and shall seek permission of helipad from AAI accordingly.	The same is not applicable.
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.	The same has been adhered.
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.	The same has been adhered.
30	The project proponent shall provide proper Rasta of proper width and proper strength for each project before the start of construction.	The same has been adhered.
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.	The same has been adhered.
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 respiratory protective equipment to all construction workers.	PPE's were provided to all construction workers. Water sprinkling at adequate interval was done to minimize the dust generation due to construction work.
33	The project proponent shall ensure that no construction activity is undertaken on surface of revenue rasta passing through the project area.	Agreed and same has been adhered.
34	The project proponent shall indicate the width and length of revenue rasta passing through the project area on sign board and shall display the same at both the ends of revenue rasta stretch, for awareness of public. Sign	The same has been adhered. Revenue rasta is passing outside the project premise.

S.No	Specific Condition	Status
.	board shall also display the message that this is public rasta/road and any citizen can use it. There shall not be any gate with or without guards on revenue rasta and passage through the revenue rasta shall remain fully unobstructed.	
35	The project proponent shall develop complete civic infrastructure of the Group Housing colony including internal roads, green belt development, sewerage line, Rain Water recharge arrangements, Storm water drainage system, Solid waste management site and provision for composting of bio-degradable waste, STP, water supply line, dual plumbing line, electric supply lines etc. and shall offer possession of the units/flats thereafter.	The same has been adhered.
36	The project proponent shall provide one refuse area till 24 meter, one till 39 meter and one after every 15 meter as per National Building Code.	The same has been adhered.
37	The project proponent shall provide fire control room and fire officer for building above 30 meter as per National Building Code.	The same has been adhered.
38	The project proponent shall obtain permission of Mines and Geology Department for excavation of soil before the start of construction.	Permission for excavation of soil were obtained from Mines and Geology Dept. Copy submitted with previous compliance report.
39	The site for solid waste management plant be earmarked on the layout plan and the detailed project for setting up the solid waste management plant shall be submitted to the Authority within one month.	SWM location has already been installed. The photograph of organic waste converter (OWC) has been submitted with previous compliance report.

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.	Consent to Operate has been obtained and submitted earlier and the latest copy is enclosed as Annexure 7
b	The Sewage Treatment Plant (STP) shall be installed for treatment of sewage to the prescribed standards including odour & treated effluent will be recycled. The installation of STP should 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. Discharge of treated sewage shall conform to the norms and standards of HSPCB, Panchkula. Project Proponent shall implement such STP technology which does not require filter backwash.	Agreed and same is being adhered. STP analysis report is enclosed as Annexure 8
c	Separation of grey & black water should be done by use of dual plumbing line. Treatment of 100% gray water by decentralized treatment should be done ensuring that re-circulated water should have BOD level less than 10 mg/litre & the recycled water will be used for flushing, gardening & DG set cooling etc. to achieve zero exit discharge.	Provision of dual plumbing has been done in the project for the separation of grey and black water.
d	For disinfections of treated waste water ultra-violet radiation or ozonization process should be used.	Agreed and same is being adhered. Ultra-violet

S.No	Specific Condition	Status
.		radiation coupled with ultra filtration has been installed at STP.
e	The Solid waste generated should be properly collected & segregated. Bio-degradable waste shall be decomposed at site & dry/inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.	The same is being adhered.
f	Diesel power generating sets proposed as source of back-up power for lifts, common area illumination & for domestic use should be of enclosed type & conform to rules made under Environment (Protection) Act 1986. The location of 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 ultra low sulphur diesel (0.05% sulphur), instead of low sulphur diesel.	Agreed and same is being adhered.
g	Ambient noise level should be controlled to ensure that it does not exceed the prescribed standards both within & at the boundary of the proposed residential complex.	The same is being adhered
h	The project proponent should maintain at least 48.12% as green cover area for tree plantation especially all around periphery of the project & on road sides preferably with local species which can provide protection against noise & particulates. The open spaces inside the plot should be preferably landscaped & covered with vegetation/grass, herbs & shrubs. Only locally available plant species shall be used.	The same has been adhered
i	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.	The same is being adhered
j	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 Bore well for rainwater recharging should 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 rain water harvesting of first 10 minutes of rain fall. Roof top of the building shall be without any toxic material or paint which can contaminate rain water. Wire mesh and filters should be used wherever required.	The same is being adhered. The rainwater harvesting pit is as per approved design.
k	The ground water level & its quality should be monitored regularly in consultation with Central Ground Water Authority.	The project doesn't have any borewell and hence same is not applicable.
l	There should be no traffic congestion near entry & exit points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be utilized.	The same is being adhered
m	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 submit to SEIAA, Haryana in three months time.	Energy conservation norms have been incorporated and submitted to SEIAA.
n	Energy conservation measures like installation of LED for lighting the areas outside the building should be integral part of project design & should be in place before project commissioning. Use of solar panels	LED is used for lighting and Solar panels have been installed for streetlighting.

S.No	Specific Condition	Status
.	must be adapted to the maximum extent possible for energy conservation.	
o	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.	The same is being adhered
p	The solid waste generated should be properly collected & segregated as per the requirement of the MSW Rules, 2000 & as amended from time to time. The bio-degradable waste should be treated by appropriate technology at the site earmarked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	The same is being adhered
q	The provision of Solar water heating system shall be as per norms specified by HAREDA & shall be made operational in each building block.	The same is not applicable
r	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.	Will be adhered to.
s	The project shall be operationalized only when HUDA/local authority will provide domestic water supply system in the area.	There is no source of water supply in the project area. Tankers are used to supply water to the residents.
t	Operation and maintenance of STP, solid waste management and electrical Infrastructure, pollution control measures shall be ensured even after the completion of sale.	Agreed and same is being adhered.
u	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 should be disposed of to only registered and authorized dismantler / recycler.	Agreed and same is being adhered.
v	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 is being adhered.
w	Water supply shall be metered among different users of utilities.	Agreed and same is being adhered.
x	The project proponent shall ensure that the stack height of DG sets is as per the CPCB guide lines and also 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.	Agreed and same is being adhered.
y	All electric supply exceeding 100 amp, 3 phase shall maintain the power factor between 0.98 lag to 1 at the point of connection.	The same is being adhered
z	The project proponent shall use only treated water instead of fresh water for DG cooling. The Project Proponent shall also use evaporative cooling technology and double stage cooling system for HVAC in order to reduce water consumption. Further temperature, relative humidity during summer and winter seasons should be kept at optimal level. Variable	The same is being adhered

S.No	Specific Condition	Status
.	speed drive, best Co-efficient of Performance, 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.	
aa	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.	The same is being adhered
ab	The project proponent shall ensure that exit velocity from the stack should be sufficiently high. Stack shall be designed in such a way that there is no stack down-wash under any meteorological conditions.	The same is being adhered
ad	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.	The same is being adhered

Part B: General Conditions

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	Six monthly compliance reports should be submitted to HSPCB and Regional Office, MoEF, GOI Northern Region, Chandigarh and a copy to the SEIAA, Haryana.	Six monthly report is being submitted to Regional Office, MoEF, and copy to HSPCB, and SEIAA Haryana.
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.	Noted
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 Court/Tribunal.	Noted
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.	Permission from Airport Authority, NOC through DC and Consent to Establish NOC from HSPCB have been obtained. Copies submitted.

S.No.	General Condition	Status
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 published in newspaper has already submitted with previous compliance report.
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.	Noted
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.	Noted
x	The project proponent shall put in place Corporate Environment Policy as mentioned in MoEF, GOI OM No. J-11013/41/2006-IA II (I) dated 26.4.2012 within 3 months period. Latest Corporate Environment Policy should be submitted to SEIAA within 3 months of issuance of this letter.	Noted
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.	Will be adhered to.
xiv	The project proponent is responsible for compliance of all conditions in Environmental Clearance letter and project proponent can not absolve himself /herself of the responsibility by shifting it to any contractor engaged by project proponent.	Noted
xv	The project proponent shall seek fresh Environmental clearance if at any stage there is change in the planning of the proposed project.	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/PG/W/01 **Report No.:** VEL/W/2104/10/002
Name & Address of Project: M/s Palm Garden **Format No.:** 7.8 F-01
Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana). **Party Reference No.:** NIL
Reporting Date: 16/04/2021
Period of Analysis: 10/04/2021 to 16/04/2021
Receipt Date: 10/04/2021
Sampling Date: 09/04/2021
Sample Description: Drinking Water Sample **Type of Sampling:** Grab
Sampling Location: Pantry Room **Sampling Quantity:** 2.0 Ltr.
Sample Collected by: Vardan EnviroLab Representative **Preservation:** Refrigerated
Sampling & Analysis Protocol: APHA & IS

S. No.	Parameter	Test-Method	Result	Unit	Requirement as per IS:10500 -2012#	
					Acceptable Limits	Permissible Limits
1.	pH (at 25 °C)	APHA ,4500-H ⁺ B Electrometric Method	7.34	--	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, Nephelometric 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	83.14	mg/l	200	600
7.	Calcium as Ca	APHA, 3500 Ca B, EDTA Titrimetric Method	20.49	mg/l	75	200
8.	Alkalinity as CaCO ₃	APHA , 2320 B, Titrimetric Method	94.39	mg/l	200	600
9.	Chloride as Cl ⁻	APHA, 4500-Cl ⁻ B, Argentometric Method	12.48	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	7.78	mg/l	30	100
12.	Total Dissolved Solids	APHA , 2540 C, Gravimetric Method	121.00	mg/l	500	2000
13.	Sulphate as SO ₄	APHA , 4500 E, Turbidimetric Method	5.26	mg/l	200	400
14.	Fluoride as F ⁻	APHA , 4500-F ⁻ D, SPADNS Method	*BDL(**DL 0.2 mg/l)	mg/l	1.0	1.5
15.	Nitrate as NO ₃	IS 3025 (P-34) .Chromotropic Method	*BDL(**DL 1.0 mg/l)	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.	Aluminium 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
(Tested By)
Jr. Lab Analyst

Dr. Shiv
(Checked By)
Authorized Signatory

Dr. Shiv
(Approved By)
Authorized Signatory

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

www.vardan.co.in



Vardan Envirolab

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

Test Report

Sample No.: VEL/PG/W/01

Report No: VEL/W/2104/10/002

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

KANISHKA SHARMA
(Tested By)

Dr. Shweta Nayak
(Checked By)

Dr. Shiv Singh
(Approved By)

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

www.vardan.co.in

Ph: 0124-4343750/752/753, 9810355569, 9953147268 E-mail: lab@vardanenvironet.com, bd@vardanenvironet.com



Vardan EnviroLab

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

Test Report

Sample Number:	VEL/PG/S/01	Report No.:	VEL/S/2104/10/002
Name & Address of the Project:	M/s Palm Garden	Format No.:	7.8 F-01
	Village - Kherki Daula, Sector - 83,	Party Reference No.:	NIL
	Gurgaon, (Haryana).	Reporting Date:	16/04/2021
		Period of Analysis:	10/04/2021 to 16/04/2021
Sample Description:	Soil Sample	Receipt Date :	10/04/2021
Sampling Location:	Project Site	Sampling Date:	09/04/2021
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 °C)	IS : 2720 (P-26) by pH Meter	8.11	--
2.	Conductivity	IS:14767 by Conductivity meter	0.390	mS/cm
3.	Color	*SOP , SP-78, Issue No.-01 & Issue Date-14/02/2013	Yellowish Brown	--
4.	Water holding capacity	*SOP , SP-81, Issue No.-01 & Issue Date-14/02/2013	37.14	%
5.	Bulk density	*SOP , SP-80, Issue No.-01 & Issue Date-14/02/2013	1.31	gm/cc
6.	Chloride as Cl	*SOP , SP-85, Issue No.-01 & Issue Date-14/02/2013	28.15	mg/100g
7.	Calcium as Ca	*SOP , SP-82, Issue No.-01 & Issue Date-14/02/2013	33.45	mg/100g
8.	Sodium as Na	*SOP , SP-84, Issue No.-01 & Issue Date-14/02/2013	61.14	mg/kg
9.	Potassium as K	*SOP , SP-84, Issue No.-01 & Issue Date-14/02/2013	156.25	kg/hect.
10.	Organic Matter	IS:2720 (P-22) Titrimetric Method	0.57	%
11.	Magnesium as Mg	*SOP , SP-83, Issue No.-01 & Issue Date-14/02/2013	22.25	mg/100g
12.	Available Nitrogen as N	IS:14684 Distillation Method	221.71	kg./hect.
13.	Available Phosphorus	*SOP , SP-86, Issue No.-01 & Issue Date-14/02/2013	23.14	kg./hect.
14.	Zinc (as Zn)	USEPA 3050B	18.41	mg/kg
15.	Manganese (as Mn)	USEPA 3050B	9.12	mg/kg
16.	Lead (as Pb)	USEPA 3050B	1.48	mg/kg
17.	Cadmium (as Cd)	USEPA 3050B	0.96	mg/kg
18.	Chromium (as Cr)	USEPA 3050B	0.87	mg/kg
19.	Copper (as Cu)	USEPA 3050B	4.17	mg/kg
20.	Soil Texture	*SOP , SP-87, Issue No.-01 & Issue Date-14/02/2013	Silty Loam	--

*SOP-Laboratory standard operating procedure.

KANCHAN SHARMA
(Tested By)
Jr. Lab Analyst

Dr. Shiv Prakash Singh
(Checked By)
Dy. Technical Manager



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

www.vardan.co.in



Vardan EnviroLab

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

Test Report

Sample Number:	VEL/PG/ST/02	Report No.:	VEL/ST/2104/10/005
Name & Address of the Project:	M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana).	Format No.:	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	14/04/2021
		Period of Analysis:	10/04/2021 to 14/04/2021
		Receipt Date:	10/04/2021

Sample Description : Stack Emission Monitoring

General Information

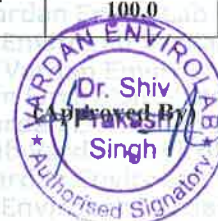
Sampling Location	:	DG Set Area
Sample Collected by	:	Vardan EnviroLab Representative
Date of Sampling	:	09/04/2021
Sampling Duration (Minutes)	:	49.0
Stack attached to	:	DG Set No.4(1250 KVA)
Make of stack	:	M S
Diameter of stack (m)	:	0.25 Mtr.
Height of stack (m)	:	49.37 Mtr.
Instruments calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature – Ta (°C)	:	33.0
Temperature of stack Gases – Ts (°C)	:	159.0
Velocity of stack Gases (m/sec.)	:	7.87
Flow rate of PM (LPM)	:	23.0
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.	PM (at 15 % O ₂ Correction)	IS: 11255 (P-1), Gravimetric Method, RA: 2003	53.25	mg/Nm ³	75.00
2.	Sulphur Dioxide (as SO ₂)	IS: 11255 (P-2), Titrimetric Method, RA: 2003	29.45	mg/Nm ³	Not Specified
3.	NOX (at 15 % O ₂ Correction)	IS: 11255 (P-7), Colorimetric Method, RA: 2012	168.45	ppmv	710.0
4.	Carbon Monoxide (as CO) (at 15 % O ₂ Correction)	SOP, SP-74, Issue No.01: 2018	63.14	mg/Nm ³	150.0
5.	NMHC (at 15 % O ₂ Correction)	SOP, SP-75, Issue No.01: 2018	22.45	mg/Nm ³	100.0

KANCHAN SHARMA
(Tested By)
Jr. Lab Analyst

BISHU TI NAYAK
Dy. Technical Manager
(Checked By)



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

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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/PG/ST/03	Report No.:	VEL/ST/2104/10/006
Name & Address of the Project:	M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana).	Format No.:	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	14/04/2021
		Period of Analysis:	10/04/2021 to 14/04/2021
		Receipt Date:	10/04/2021

Sample Description : Stack Emission Monitoring

General Information

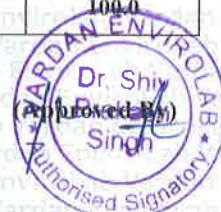
Sampling Location	:	DG Set Area
Sample Collected by	:	Vardan EnviroLab Representative
Date of Sampling	:	09/04/2021
Sampling Duration (Minutes)	:	34.0
Stack attached to	:	DG Set No.2(1250 KVA)
Make of stack	:	M.S.
Diameter of stack (m)	:	0.25 Mtr.
Height of stack (m)	:	49.37 Mtr.
Instruments calibration status	:	Calibrated
Meteorological Condition	:	Clear Sky
Ambient Temperature – Ta (°C)	:	33.0
Temperature of stack Gases – Ts (°C)	:	142.0
Velocity of stack Gases (m/sec.)	:	8.21
Flow rate of PM (LPM)	:	23.0
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.	PM (at 15 % O ₂ Correction)	IS: 11255 (P-1), Gravimetric Method, RA: 2003	56.25	mg/Nm ³	75.00
2.	Sulphur Dioxide (as SO ₂)	IS: 11255 (P-2), Titrimetric Method, RA: 2003	32.45	mg/Nm ³	Not Specified
3.	NOX (at 15 % O ₂ Correction)	IS: 11255 (P-7), Colorimetric Method, RA: 2012	178.45	ppmv	710.0
4.	Carbon Monoxide (as O ₂) (at 15 % O ₂ Correction)	SOP, SP-74, Issue No.01: 2018	68.14	mg/Nm ³	150.0
5.	NMHC (at 15 %O ₂ Correction)	SOP, SP-75, Issue No.01: 2018	24.45	mg/Nm ³	100.0

KANCHAN HARMA
(Tested By)
Lab Analyst

BIBHUTI NAYAK
(Checked By)
Lab Manager



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

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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/PG/ST/01 Report No.: VEL/ST/2104/10/004
Name & Address of the Project: M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana).
Format No.: 7.8 F-01
Party Reference No.: NIL
Reporting Date: 14/04/2021
Period of Analysis: 10/04/2021 to 14/04/2021
Receipt Date: 10/04/2021

Sample Description : Stack Emission Monitoring

General Information:-

Sample collected by : DG Set Area
Date of Sampling : Vardan EnviroLab Representative
Sampling Location : 09/04/2021
Sampling Duration (Minutes) : 38.0
Stack Attached to : DG Set No.1(500 KVA)
Diameter of stack : M S
Height of stack : 0.25 Mtr.
Metrological Condition : 49.37 Mtr.
Control Measure : Calibrated
Instrument Calibration Status : Clear Sky
Ambient Temperature-Ta (°C) : 32.0
Temperature of Stack Gases-Ts (°C) : 142.0
Velocity of Stack Gases (m/sec.) : 7.36
Flow rate of PM (LPM) : 22.0
Flow rate of Gas (LPM) : 2.0
Sampling Condition : Isokinetic
Protocol Used : IS:11255

RESULTS

S. No.	Parameter	Protocol	Result	Unit	Limits (As Per CPCB)
1.	Particulate Matter (PM)	IS 11255 (P-1) Gravimetric Method RA:2003	0.079	gm/Kw-hr	≤0.2
2.	Sulphur Dioxide (as SO ₂)	IS: 11255 (P-2), Titrimetric Method, RA: 2003	1.26	gm/Kw-hr	Not Specified
3.	Nitrogen Dioxide (as NO ₂)	IS 11255 (P-7) Colorimetric Method RA:2012	0.96	gm/Kw-hr	≤4.0
4.	Total Hydrocarbon as Methane	SOP, SP-194, Issue No.01:2018	0.24	gm/Kw-hr	
5.	Carbon Monoxide (as CO)	SOP, SP-74, Issue No.01:2018	0.59	gm/Kw-hr	≤3.5

* SOP-Laboratory Standard operating procedure.

KANCHAN SHARMA
Jr. Lab Analyst

BIBHU NAYAK
(Checked By)

Dr. Shiv
Singh
Authorised Signatory

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

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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/PG/ST/04 Report No.: VEL/ST/2104/10/007
Name & Address of the Project: M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana).
Format No.: 7.8 F-01
Party Reference No.: NIL
Reporting Date: 14/04/2021
Period of Analysis: 10/04/2021 to 14/04/2021
Receipt Date: 10/04/2021

Sample Description : Stack Emission Monitoring

General Information

Sampling Location : DG Set Area
Sample Collected by : Vardan EnviroLab Representative
Date of Sampling : 09/04/2021
Sampling Duration (Minutes) : 50.0
Stack attached to : DG Set No.3(1250 KVA)
Make of stack : M S
Diameter of stack (m) : 0.25 Mtr.
Height of stack (m) : 49.37 Mtr.
Instruments calibration status : Calibrated
Meteorological Condition : Clear Sky
Ambient Temperature – Ta (°C) : 32.0
Temperature of stack Gases – Ts (°C) : 148.0
Velocity of stack Gases (m/sec.) : 8.78
Flow rate of PM (LPM) : 24.0
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.	PM (at 15 % O ₂ Correction)	IS: 11255 (P-1), Gravimetric Method, RA: 2003	51.25	mg/Nm ³	75.00
2.	Sulphur Dioxide (as SO ₂)	IS: 11255 (P-2), Titrimetric Method, RA: 2003	30.45	mg/Nm ³	Not Specified
3.	NOX (at 15 % O ₂ Correction)	IS: 11255 (P-7), Colorimetric Method, RA: 2012	173.45	ppmv	710.0
4.	Carbon Monoxide (as CO) (at 15 % O ₂ Correction)	SOP, SP-74, Issue No.01: 2018	66.14	mg/Nm ³	150.0
5.	NMHC (at 15 % O ₂ Correction)	SOP, SP-75, Issue No.01: 2018	20.45	mg/Nm ³	100.0

KANCHAN SHARMA
Jr. Lab Analyst

BIPUL NAYAK
(Checked By) Manager



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

www.vardan.co.in

Ph: 0124-4343750/752/753, 9810355569, 9953147268 E-mail: lab@vardanenvironet.com, bd@vardanenvironet.com



Vardan EnviroLab

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

Test Report

Sample Number:	VEL/PG/PN/01	Report No.:	VEL/PN/2104/10/004
Name & Address of the Project:	M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana).	Format No.:	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	14/04/2021
		Period of Analysis:	10/04/2021 to 14/04/2021
		Receipt Date:	10/04/2021

Sample Description: DG NOISE MONITORING

General Information:-

Sample collected by	: Vardan EnviroLab Representative
Sampling Location	: DG Room (1 Nos. 500 KVA & 3 Nos. 1250 KVA)
Instrument Used	: Sound Level Meter
Instrument Code	: VEL/SLM/04
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 09/04/2021
Scope of Monitoring	: Regulatory Requirement
Control measure if Any	: No any
Sampling & Analysis Protocol	: IS 9989
Sampling Duration	: 30 Minutes.
Parameter Required	: As per Work Order

S. No.	Parameters	Test Method	Result dB(A)		
			Inside of the DG Room DG Set Result dB(A)	Outside of the DG Room (0.5Mtr.Distance)Result dB(A)	Insertion Loss
1.	L_{eq}	CPCB Guideline & Indian Standard:9989	96.8	71.2	25.6
2.	CPCB Limits in dB (A)			75.00	25.00

Note: - All DG Set are Installed in one Room.

Kanchan Sharma
KANCHAN SHARMA
Jr. Lab Analyst

Bibhuti Nayak
BIBHUTI NAYAK
(Checked By) Manager

Dr. Shiv Prakash Singh
Dr. Shiv Prakash Singh
Authorised Signatory

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

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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/PG/A/01 **Report No.:** VEL/A/2104/10/002
Name & Address of the Project: M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana). **Format No.:** 7.8 F-01
Party Reference No.: NIL
Reporting Date: 14/04/2021
Period of Analysis: 10/04/2021 to 14/04/2021
Receipt Date: 10/04/2021

Sample Description: AMBIENT AIR QUALITY MONITORING

General Information:-

Sampling Location: Near Meter Room
Sample collected by: Vardan EnviroLab Representative
Sampling Equipment used: RDS & FPS
Instrument Code: VEL/RDS/FPS/01
Instrument Calibration Status: Calibrated
Meteorological condition during monitoring: Clear Sky
Date of Monitoring: 09/04/2021 to 10/04/2021
Time of Monitoring: 01:10 PM to 01:10 PM
Ambient Temperature (°C): Min. 25.0°C, Max. 34.0°C
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	163.42	µg/m ³	100
2.	Particulate Matter (as PM – 2.5)	SOP No. VEL/SOP/01, Section No. SP 63:2013	94.01	µg/m ³	60
3.	Nitrogen Dioxide (as NO ₂)	IS: 5182 (P-6), Jacob & Hochheiser, RA:2006	23.88	µg/m ³	80
4.	Sulphur Dioxide (as SO ₂)	IS: 5182 (P-2), Modified West and Gaeke, RA:2012	13.51	µg/m ³	80
5.	Carbon Monoxide (as CO)	IS: 5182 (P-10), Gas Chromatography, RA:2003	0.79	mg/m ³	4.0
6.	Lead (as Pb)	IS:5182 (P-22), Air Acetylene Method, RA:2009	*BDL(**DL0.05 µg/m ³)	µg/m ³	1.0

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

KANISHK SHARMA
(Tested By)

(Checked By)



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

www.vardan.co.in



Vardan EnviroLab

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

Test Report

Sample Number:	VEL/PG/AN/01	Report No.:	VEL/AN/2104/10/002
Name & Address of the Project:	M/s Palm Garden Village - Kherki Daula, Sector - 83, Gurgaon, (Haryana).	Format No.:	7.8 F-01
		Party Reference No.:	NIL
		Reporting Date:	14/04/2021
		Period of Analysis:	10/04/2021 to 14/04/2021
Sample Description :	AMBIENT NOISE LEVEL MONITORING	Receipt Date:	10/04/2021

General Information:-

Sample collected by	: Vardan EnviroLab Representative
Sampling Location	: Near Meter Room
Instrument Used	: Sound Level Meter
Instrument Code	: VEL/SLM/03
Instrument Calibration Status	: Calibrated
Meteorological condition during monitoring	: Clear Sky
Date of Monitoring	: 09/04/2021 to 10/04/2021
Time of Monitoring	: 06:00 AM to 06:00 AM
Ambient Temperature (°C)	: Min. 25.0°C, Max. 34.0°C
Surrounding Activity	: Human & Vehicular Activities
Scope of Monitoring	: Regulatory Requirement
Control measure if Any	: No any
Sampling & Analysis Protocol	: CPCB Guidelines & IS-9989
Sampling Duration	: 24 Hours.
Parameter Required	: As per Work Order

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	64.8	59.6	dB(A)
2.	L _{min}	IS- 9989	45.5	38.4	dB(A)
3.	L _{eq}	IS -9989	52.14	41.11	dB(A)
4.	CPCB Limits in dB(*A) Leq (Residential Area)		55.0	45.0	dB(A)

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

Kanchan Sharma
KANCHAN SHARMA
(Tested By)
Jr. Lab Analyst

Biswajit Nayak
BISWAJIT NAYAK
(Checked By)
Lab Manager



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

www.vardan.co.in



HARYANA STATE POLLUTION CONTROL BOARD

Haryana State Pollution Control Board, 3rd Floor, HSIIDC Office Complex, IMT Manesar, Gurugram

E-mail: hspcb.pkl@sify.com



No. HSPCB/Consent/ : 329962319GUSOCTO6625634

Dated:23/07/2019

To.

M/s :Emaar MGF Land Limited
Village-Kherki Daula, Sector-83, Gurgaon

Subject: Grant of consent to operate to M/s Emaar MGF Land Limited.

Please refer to your application no. 6625634 received on dated 2019-06-27 in regional office Gurgaon South. With reference to your above application for consent to operate, M/s Emaar MGF Land Limited is hereby granted consent as per following specification/Terms and conditions.

Consent Under	BOTH
Period of consent	01/10/2019 - 30/09/2021
Industry Type	Building and construction project having waste water generation more than 100 KLD
Category	RED
Investment(In Lakh)	43000.0
Total Land Area(Sq. meter)	88626.0
Total Builtup Area(Sq. meter)	244628.5
Quantity of effluent	
1. Trade	0.0 KL/Day
2. Domestic	483.48 KL/Day
Number of outlets	1.0
Mode of discharge	
1. Domestic	Recycling/reusing in horticulture
2. Trade	0
Domestic Effluent Parameters	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l
4. Oil & Grease	10 mg/l
5. pH	5.5-9.0
Trade Effluent Parameters	
1. NA	
Number of stacks	1
Height of stack	

1. Attached to D.G.Sets above roof level	3.5 meter
Emission parameters	
1. NA	
Product Details	
1. Residential group housing colony	Numbers/ day
Capacity of boiler	
1. N.A.	Ton/hr
Type of Furnace	
1. N.A.	
Type of Fuel	
1. Diesel	2.64 KL/day
Raw Material Details	
N.A.	Metric Tonnes/Day

Regional Officer, Gurgaon South
Haryana State Pollution Control Board.

Terms and conditions

HARYANA STATE

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines valves, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time

the concentration of any characteristics should exceed these limits for discharge.

10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.

11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.

12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.

13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.

14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.

15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.

16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

HARYANA STATE

Specific Conditions :

1. Unit will apply next CTO 90 days before expiry of the present CTO.
2. Unit will not change the process without prior permission of the Board.
3. Unit will submit Water Sample testing fees/ analysis report of effluent/air emission on yearly basis and will keep the parameter within prescribed norms.

Shakti Singh

Digitally signed by Shakti Singh
Date: 2019.07.23 18:12:35
+05'30'

Regional Officer, Gurgaon South

Haryana State Pollution Control Board.



Vardan EnviroLab

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

Test Report

Sample Number:	VEL/PG/WW/01	Report No.:	VEL/WW/2104/10/003
Name & Address of the Project:	M/s Palm Garden	Format No.:	7.8 F-01
	Village - Kherki Daula, Sector - 83,	Party Reference No.:	NIL
	Gurgaon, (Haryana).	Reporting Date:	16/04/2021
		Period of Analysis:	10/04/2021 to 16/04/2021
		Receipt Date	10/04/2021
Sample Description:	Waste Water Sample	Sampling Date:	09/04/2021
Sampling Location:	STP Plant (STP Inlet)	Preservation:	Refrigerated
Sample Collected by:	Vardan Enviro Lab Representative	Sampling Quantity:	2.0 Ltr
Sampling & Analysis Protocol:	APHA & IS		

S. No.	Parameter	Test-Method	Result	Unit
1.	pH (at 25 °C)	APHA 4500-H+ B Electrometric Method:2017	6.93	--
2.	Total Suspended Solid	APHA 2540 D Gravimetric Method	293.47	mg/l
3.	Oil & Grease	APHA 5520 B Partitition Gravimetric Method:2017	12.36	mg/l
4.	BOD (3 Days at 27 °C)	APHA, 5210 C Ultimate BOD Test:2017	131.00	mg/l
5.	COD	APHA 5220 B Open Reflux Method:2017	518.44	mg/l
6.	Electrical Conductivity	APHA 2510 B Conductivity Meter Method:2017	950	µS/cm
7.	Total Coliform	IS 1622:1981- (RA 2009)	1420	MPN/100ml
8.	E-coli	IS 1622:1981- (RA 2009)	200	MPN/100ml

KANISHKA SHARMA
(Tested By)
Jr. Lab Analyst

Dr. Shiv Prakash
(Checked By)
Dr. Technical Manager



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

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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/PG/WW/02 Report No.: VEL/WW/2104/10/004
Name & Address of the: M/s Palm Garden Format No.: 7.8 F-01
Project: Village - Kherki Daula, Sector - 83, Party Reference No.: NIL
Gurgaon, (Haryana). Reporting Date: 16/04/2021
Period of Analysis: 10/04/2021 to 16/04/2021
Receipt Date: 10/04/2021
Sample Description: Waste Water Sample Sampling Date: 09/04/2021
Sampling Location: STP Plant (STP Outlet) Preservation: Refrigerated
Sample Collected by: Vardan Envirolab Representative Sampling Quantity: 2.0 Ltr

S. No.	Parameter	Test - Method	Result	Unit	Standards for Discharge as per CPCB		
					In-Land Surface Water	Public Sewers	Land for Irrigation
1.	pH (at 25 °C)	APHA 4500-H+ B Electrometric Method:2017	7.36	--	5.5-9.0	5.5-9.0	5.5-9.0
2.	Total Suspended Solid	APHA 2540 D Gravimetric Method	53.44	mg/l	100	600	200
3.	Oil & Grease	APHA 5520 B Partition Gravimetric Method:2017	1.48	mg/l	10.0	20.0	10.0
4.	BOD (3 Days at 27 °C)	APHA, 5210 C Ultimate BOD Test:2017	27.00	mg/l	30.0	350.0	100.0
5.	COD	APHA 5220 B Open Reflux Method:2017	93.14	mg/l	250.0	--	--
6.	Conductivity	APHA 2510 B Conductivity Meter Method:2017	786	μS/cm	--	--	--
7.	Total Coliform	IS 1622:1981- (RA 2009)	1054	MPN/100ml	--	--	--
8.	E-coli	IS 1622:1981- (RA 2009)	27	MPN/100ml	--	--	--

KANCHAN SHARMA
(Tested By)
Jr. Lab Analyst

BIBHUTI NAYAK
(Checked By)
Lab Manager



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

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Ph: 0124-4343750/752/753, 9810355569, 9953147268 E-mail: lab@vardanenvirolab.com, bd@vardanenvirolab.com