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

No. SEIAA/HR/2016/234

Dated: ....28/193/122016

To

M/s DLF Homes Developers Ltd. 3rd Floor, DLF Shopping Mall. Arjun Marg. DLF Phase-I, Gurgaon 122002

Subject:

Revised EC Proposed Group Housing Project "The Ultima" (22.231 acres) at Sector-81, Village-Lakhnola, Gurgaon.

Dear Sir,

This letter is in reference to your application no. nil dated 10.03.2014 addressed to M.S. SEIAA, Haryana received on 11.03.2014 and subsequent letter dated 16.11.2015 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal was transferred to MoEF&CC, Gol on 27.03.2015, No action was taken and the case was returned to SEIAA on 31.08.2015 after its constitution. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A, Conceptual Plan, EIA/EMP on the basis of approved TOR and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MOEF, GOI vide their Notification 21.08.2015, in its meetings held on 12.05.2014, 10.12.2015 and 23.12.2015 awarded "Gold" grading to the project.

It is inter-alia, noted that the project involves the Revised EC Proposed Group Housing Project "The Ultima" (22.231 acres) at Sector-81, Village-Lakhnola, Gurgaon with the proposal as given under:

Particulars	Existing as per EC	Total Revised Proposal
Plot area	89965.665 sqm (22.231 acres)	
Proposed Ground coverage	13251.481 sqm	12987,057 sgm
Total Built up Area	311818.7 sqm	295651.63 sqm
Basement Ares (Non-FAR)	103403.568 sam	91643.724 sam
Total Tower & Floors	24 Towers, 2B + Stilt +29 Floors	20 Towers, 2 B + Stilt +29 Floors
Total No. of Units	MDU: 864, EWS Units: 153, DSU: 86	MDU: 922, EWS Units: 163, DSU: 92
Building Height	97.10 meter	96.85 meter
Green Area (34.30%)	37268 sqm	3081 <b>6.68 s</b> qm
Parking	3011ECS	2481 HOS
Total Water Requirement	999 KLD	1132 KLD
Fresh Water	511 KLD	609 KLD
Waste Water	827 KLD	
STP	875 KLD	1000 KLD
Power (DHBVN)	67203CW	9920 KW
RWH,	11 RWH pits with two wells in each i.e. 22	
Solid Waste	2967 kg/day	

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[3] The State Expert Appraisal Committee, Haryana after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations, have recommended the grant of environmental clearance for the project mentioned above, subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority in its meeting held on 29.02.2016 decided to agree with the recommendations of SEAC to accord necessary environmental clearance for the project under Category 8(b) of EIA Notification 2006 subject to the strict compliance with the specific and general conditions mentioned below:-

## PART A-

## SPECIFIC CONDITIONS:-

Construction Phase:-

- "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.
- [2] A first aid room as proposed in the project report shall be provided both during construction and operational phase of the project.
- [3] Adequate drinking water and sanitary facilities shall be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laboures is strictly prohibited. The waste water generated shall be treated in STP as per the commitment.
- [4] All the topsoil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site.
- [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 the neighboring communities and should be disposed of after taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.
- [7] The diesel generator sets to be used during construction phase shall be of ultra low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

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- [8] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- Ambient noise levels shall conform to the residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air pollution and noise level during construction phase, so as to conform to the stipulated residential standards of CPCB/MoEF.
- [10] Fly ash shalf be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and as amended on 27th August 2003.
- [11] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.
- [12] Water demand during construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices.
- [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 provider 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.
- [14] Roof must meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.
- [15] Opaque wall must 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.
- [16] The approval of the 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 the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.
- 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 proposed 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.
- [18] The Project Proponent as stated in the proposal shall construct total 11 rain water harvesting pits for recharging the ground water within the project premises. Rain

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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.

- 119) 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.
- [20] The Project Proponent shall obtain assurance from the DHBVN for supply of 9920 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.
- [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.
- [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.
- [23] The Project Proponent shall keep the plinth level of the building blocks sufficiently above the level of the approach road to the Project. Levels of the other areas in the Projects shall also be kept suitably so as to avoid flooding.
- [24] Construction shall be carried out so that density of population does not exceed norms approved by Director General Town and Country Department Haryana.
- [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.
- [26] The project proponent shall not cut any existing tree and project landscaping plan should be modified to include those trees in green area.
- [27] 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.
- [28] The project proponent shall construct a sedimentation basin in the lower level of the project site to trap pollutant and other wastes during rains.
- [29] The project proponent shall provide proper rasta of proper width and proper strength for the project before the start of construction.

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- [30] The project proponent shall ensure that the U-value of the glass is less than 3.177 and maximum solar bent gain co-efficient is 0.25 for vertical fenestration.
- [31] The project proponent shall adequately control construction dusts like silica dust, non-silica dust and wood dust. Such dusts shall not spread outside project premises. Project Proponent shall provide respiratory protective equipment to all construction workers.
- [32] 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 treatment of bio-degradable waste, STP, water supply line, dual plumbing line, electric supply lines etc. and shall offer possession of the units/flats thereafter.
- [33] The project proponent shall provide one refuge area till 24 meter, one till 39 meter and one each 15 meter 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.
- [34] The project proponent shall provide fire control room and fire officer for building above 30 meter as per National Building Code.
- [35] The project proponent shall obtain permission of Mines and Geology Department for excavation of soil before the start of construction.
- [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.
- [37] The project proponent shall submit the copy of fire safety plan duly approved by Fire Department before the start of construction.
- [38] The project proponent shall discharge excess of treated waste water/storm water in the public drainage system and shall seek permission of ITUDA before the start of construction.
- [39] The project proponent shall maintain the distance between STP and water supply line.
- [40] The project proponent shall ensure that the stack height is 6 meter more than the highest tower.
- [41] The project proponent shall ensure that structural stability to withstand earthquake of magnitude 8.5 on Richter scale.

## Operational Phase:

[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.

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- The Sewage Treatment Plant (STP) shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The installation of STP shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA. Haryana before the project is commissioned for operation. Tertiary treatment of waste water 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 waste water. 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 numbers of STPs preferably equivalent to 50% of total capacity or as per the initial occupancy as the case may be.
- [c] Separation of the grey and black water should be done by the 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 and the recycled water will be used for flushing, gardening and DG set cooling etc. to achieve zero exit discharge.
- [d] For disinfection of the treated wastewater ultra-violet radiation or ozonization process should be used.
- [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 and conform to rules made under the Environment (Protection) Act. 1986. The location of the DG sets shall be in the open as promised by the project proponent with appropriate stack height above the highest roof level of the project 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.
- 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 Group Housing
- Igl The project proponent as stated in the proposal should maintain at least 34.30% as green cover area for tree plantation especially all around the periphery of the project and on the road sides preferably with local species which can provide protection against noise and suspended 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.
- [b] The project proponent shall strive to minimize water in irrigation of landscape by minimizing grass area, using native variety, xeriscaping and mulching, utilizing

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officient jurgation system, scheduling irrigation only after checking evapotranspiration data

- Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre- treatment through sedimentation tanks must be done to remove suspended matter, oil and grease. The hore well for rainwater recharging shall be kept at least 5 mts. above the highest ground water table. Care shall be taken that comminated 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 mess and filters should be used wherever required.
- II The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- [k] A report on the 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 Pactors etc and submitted to the SEIAA, Haryana in three months time.
- [I] Energy conservation measures like installation of LED only for lighting the areas outside the building and inside the building should be integral part of the project design and should be in place before project commissioning. Use of solar panels must be adapted to the maximum energy conservation.
- [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.
- [n] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The biodegradable waste should be treated by appropriate technology (proposed OWC) 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.
- [0] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.
- [p] The traffic plan and the parking plan proposed by the Project Proponent should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.
- [q] The Project shall be operationalized only when HUDA/local authority will provide domestic water supply system in the area.

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- [r] Operation and maintenance of STP, solid waste management and electrical infrastructure, pollution control measures shall be ensured even after the completion of project.
- [8] Different type of wastes should be disposed off as per provisions of municipal solid waste, biomedical waste, hazardous waste, c-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 / recycler.
- [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.
- [u] Water supply shall be metered among different users and different utilities.
- [v] The project proponent shall ensure that the of DG sets is more than the highest tower and also ensure that the emission standards of noise and air are within the CPCB latest 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 phase shall maintain the power factor between 0.98 lag to 1 at the point of connection.
- 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 in order 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.
- 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.
- [Z] 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.
- [aa] 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.

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- [ab] 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.
- [ac] The project proponent shall ensure drinking/ domestic water supply as perprescribed standards till treated water supply is made available by 1(UDA.
- [ad] The project proponent shall ensure the availability of light and air in each residential unit of group housing project.
- [ae] The project proponent shall install solar panel for energy conservation.

## PART-B, GENERAL CONDITIONS:

- The Project Proponent shall ensure the commitments 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 compiled with in letter and 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.
- 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 MoEP, 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.
- [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.
- [V] The Project proponent shall not violate any judicial orders/pronouncements issued by any Court/Tribunal.
- [vi] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, Forest Act, 1927, PLPA 1900, etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [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

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available with the Haryana State Pollution Control Board & SEIAA. This should be udvertised within 7 days from the date of issue of the clearance letter at karst 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 fravironment Clearance conditions shall also be put on project proportent's web site for public awareness.

- [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.
- [ix] Any appeal against the 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.
- Corporate Environment and Social Responsibility (CSER) shall be laid down by the project proponent (2% shall be earmarked) as per guidelines of MoEF. Gol Office Memorandum No. J-11013/41/2006-IA.II(I) dated 18.05.2012 and Ministry of Corporate Affairs, Gol Notification Dated 27.02.2014. A separate audit statement shall be submitted in the compliance. Environment related work proposed to be executed under this responsibility shall be undertaken simultaneously. The project proponent shall select and prepare the list of the work for implementation of CSER of its own choice and shall submit the same before the start of construction.
- [xi] The fund car-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 GOL under rules prescribed for Environment Audit.
- [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.
- [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.
- [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.
- [xv] The project proponent shall seek fresh Environmental clearance if at any stage there is change in the planning of the proposed project.
- [xvi] 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.

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- [xvii] The proponent shall upload the states of compliance of the single of 15°C conditions, including results of monitored data on their website and shall—apdate the same periodically. It shall simultaneously be sent to the Regional Cuffee of MoFF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: PM25. PM16. SO<sub>X</sub> NO<sub>8</sub>. Ozone, Lead, CO. Benzene. Ammonia, Benzopyrine, 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.
- [xviii] 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 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.
- [xix] The project proponent shall conduct environment 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.

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

Endst. No. SEIAA/HR/2016/

Dated:....

A copy of the above is forwarded to the following:

 The Additional Director (IA Division), MoEF&CC, Gol, Indra Paryavaran Bhavan, Zor bagli Road-New Delhi.

 The Regional office, Ministry of Environment, Forests & Climate Change, Govt. of India, Bay's no. 24-25, Sector 31-A, Dakshin Marg, Chandigarh.

The Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Pkl.

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

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