State Environment Impact Assessment Authority, M.P. (Government of India, Ministry of Environment & Forests)

Research and Development Wing

Madhya Pradesh Pollution Control Board Paryavaran Parisar, E-5. Arera Colony Bhopal-4620 16

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No: 2402 / SEIAA /13 Date: 08/02/2013

To, Mr. P. C. Chaudhary, Executive Engineer, Bhopal Development Authority, Bhopal (BDA), Pragati Bhawan, Press Complex, MP Nagar, Bhopal, MP.

Sub: -Case No. 804/2012, Prior Environmental Clearance for Affordable Housing at Maharshi Patanjali Vinayak Nagar at Khasra No. 490, 491 village Gondarmau, Tehsil Huzur, District Bhopal, MP by Mr. P. C. Chaudhary, Executive Engineer, Bhopal Development Authority, Bhopal (BDA), Pragati Bhawan, Press Complex, MP Nagar, Bhopal.

This has reference to your application No. 313, dated 08.05.2012 received in SEIAA office on 08.05.2012 for seeking Prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 and on the basis of the mandatory documents enclosed with the application viz., form I, form IA, Conceptual Plan, drawings & the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

ii. It has been noted that Bhopal Development Authority, MP in partnership under JNNURM Scheme (Phase-1) has proposed for Affordable Housing (LIG & EWS- " आवास युक्त झुग्गी मुक्त योजना") in an area of 5.55 ha government land. The total built up area is 49,783.76 sqmt. and is between 2000 sqmt. and 1,50,000 sqmt. hence the project comes under 8 (a) category of schedule of EIA Notification 2006. The project site is located at Maharshi Patanjali Vinayak Nagar Khasra No. 490, 491 village Gondarmau, Tehsil Huzur, District Bhopal, MP. The Proponent is Mr. P. C. Chaudhary, Executive Engineer, Bhopal Development Authority, Bhopal (BDA), Pragati Bhawan, Press Complex, MP Nagar, Bhopal. The height of residential blocks proposed in the project is 12 m and project envisages construction of LIG and EWS units (1088 numbers), shops, community center, Aganwadi etc. The proposed total water requirement is 495.67 KLD out of which 339.542 KLD is fresh

 Correspondence Address: Member Secretary, SEIAA, Environmental Planning and Coordination Organisation (EPCO), Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462016

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water and 156.128 KLD is recycled water. A treatment plant of capacity 500 KLD will be provide by the Project Proponent at the site to treat the waste water generated. An area of 5610.73 sqmt. shall be covered under plantation.

- iii. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated 14th September 2006 and its amendment.
- iv. Based on the information submitted at Para ii & iii above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 117th meeting held on 22.01.2013 and decided to accept the recommendations of 111th SEAC meeting held on 05.12.2012 with 06 special conditions.

Hence, Prior Environmental Clearance is accorded under the provisions of EIA notification dtd. 14th September 2006 subject to Para iii, v & viii of 117th SEIAA meeting dtd 22.01.13 to the proposed Affordable Housing at Maharshi Patanjali Vinayak Nagar at Khasra No. 490, 491 village Gondarmau, Tehsil Huzur, District Bhopal, MP by Bhopal Development Authority, Bhopal (BDA), through Mr. P. C. Chaudhary, Executive Engineer, Pragati Bhawan, Press Complex, MP Nagar, Bhopal subject to the compliance of the Standard Conditions enclosed at Annex-I and the following additional Specific Conditions as recommended by SEIAA & SEAC:

- The PP shall start work once the land is transferred to it and possession is handed over by Revenue Department.
- 2. The fresh water demand should not exceed 339.542 KLD. In Form-1 pp proposed water supply will be from ground water however later PP has opted to meet the water demand from Municipal supply (104th SEAC minutes dtd 30.09.2012) so it is decided that PP should use water from Municipal corporation of Bhopal and should not use ground water. PP should also submit permission from Nagar Nigam, Bhopal for supply of 339.542 KLD of water as soon as he gets it.
- The generation of 0.633 TPD of MSW is reported and it was decided that PP should ensure safe storage, transport and disposal of Municipal Solid Waste generation. PP shall provide storage area sufficient to store the 48 hours generation.
- Requisite water supply should be acquired from the concerned authority before commencement of any construction activity on the proposed site.
- Suitable and cost effective STP to treat the 388 KLD of domestic waste water shall be commissioned along with the other construction activities.
- Total nos. 29 rainwater harvesting pits have been proposed in the project these shall be maintained by the proponent till the township is handed over to the society.

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7. A corpus fund of Rs 326 Lac for O & M of STP and other environmental issues has been proposed by the PP; separate bank account shall be opened by the PP under this head and copy of Bank account in this context shall be furnished by the PP while seeking consents from the MPPCB.

Encl: Annex-I (General Conditions)

(Manohar Dubey) Member Secretary

Endt No. 403 / SEIAA/ 13

Dated 8/02/2013

Copy to:-

- Principal Secretary, Housing and Environment Department, Government of Madhya Pradesh, Mantralaya, Bhopal.
- Member Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5. Arera Colony Bhopal-462016.
- Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016.
- 4. The Collector, Distt- Bhopal -M.P.
- The Commissioner, Municipal Corporation, Bhopal.
- 6. The Jt. Director, Town & Country Planning, Bhopal.
- I.A. Division, Monitoring Cell, MoEF, Gol, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi- 110 003.
- Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.
- 9. Guard file.

Encl: Annex-I (General Conditions)

(Dr. Vinita Vipat)
Officer-in-Charge

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Correspondence Address: Member Secretary, SEIAA, Environmental Planning and Coordination Organisation (EPCO), Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462016

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Annex-I

Standard Conditions related to under item 8 (a) & 8 (b) of the schedule of EIA notification, 2006 (Building/ construction projects / area development projects & township)

A. Construction Phase

- The construction site shall be provided with adequately barricades of at least 3 m height on its periphery with adequate signage.
- All required sanitary and hygienic measures should be in place before starting any construction work and are to be maintained throughout the project phase.
 - Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
 - 4. Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to dust etc. shall be carried out. Periodic monitoring for exposure to respirable dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of dust on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically.
 - A First Aid Room will be provided in the project both during construction and operation of the project.
 - 6. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate water courses and the dump sites for such material must be secured so that they should not leach into the ground water.

 Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the M.P. Pollution Control -Board.

(Dr R P Singh) Officer-in-Charge

(Dr Vinita Vipat) Officer-in-Charge (Dr Sadhna Tiwari) Officer-in-Charge 1 of 6

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- 11. The diesel generator sets (if any) to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- 12. The diesel required (if any) for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- Wastewater generated from temporary leabour tents will be diverted to the sewer network in the area.
- No water logging should take place at any point during construction phase.
- 15. If the project site is located within the 100 km of Thermal Power Stations, then fly ash should be used as building material in the construction as per the provisions of Fly ash Notification of September, 1999 and amended as on 27th August, 2003.
- As far as possible ready mixed concrete should be used in construction work.
- 17. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 18. Ambient noise levels should conform to 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 made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ MPPCB.
- Storm water control and its use should be as per CGWB and BIS standards for various applications.
- Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- Care shall be taken during the wet drilling activities.
- Spread of contaminated water should be prevented by installing temporary barriers of G.I. Sheets.
- 23. To prevent surface and ground water contamination by oil/grease, leak proof containers shall be used for storage and transportation of oil/grease. The floors of oil/grease handling area will be kept effectively impervious.
- 24. On-site burning of waste material will not be permitted.
- Ground water should not be used during construction phase. Private tanker water suppliers may be asked to supply water during construction phase.
- Commitment towards CSR have to be followed strictly.

27. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

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(Dr Vinita Vipat) Officer-in-Charge (Dr Sadhna Tiwari) Officer-in-Charge 2 of 6

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- 28. Wherever possible, the area around the STP / ETP should be surrounded with dense green belt.
- 29. To reduce the electricity consumption and load on air conditioning, high quality double glass with special reflective coating in windows should be promoted.
- 30. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- 31. Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- 32. Approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.

B. Operation Phase

- 1. The installation of the Sewage Treatment Plant (STP) as submitted by PP in the office of SEIAA should be certified by an independent expert and a report in this regard should be submitted to the Regional office of the Ministry of Environment & Forest, Gol before the project is commissioned for operation. Treated effluent discharge from STP shall be recycled/reused to the maximum extent possible. Treated effluent shall conform to the norms and standards of the M.P. Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.
- Treated waste water should not be used for air conditioning.
- Treatment of 100% grey water by decentralized treatment should be done.
- The bio-medical waste (if applicable) generated should be disposed off as per the provisions of Bio-medical waste (Management and Handling) Rules 1988 as amended till date.
- 5. Provision of separate entrance / exit gate should be made for collection of segregated bio-medical waste (if applicable) from the storage area.
- 6. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material as per CPCB norms.
- 7. Diesel power generating sets if proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and confirm to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Low sulphur diesel must be used. The location of the DG sets may be decided with in consultation with Madhya Pradesh Pollution Control Board. 13.4.12

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- No water logging should take place at any point during operation phase.
- 9. The Project Proponent shall explore the possibility of using solar energy wherever possible.
- 10. Provision for plantation has to be made as per Madhya Pradesh Bhumi Vikas Niyam, 1984.
- 11. Any hazardous waste generated during operation phase, should be disposed off as per applicable rules and norms with necessary approvals of the M.P. Pollution Control Board.
- 12. Noise should be controlled to ensure that it does not exceed the prescribed standards of CPCB.
- 13. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- 14. Rain water harvesting for roof run- off and surface run- off, should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
- 15. The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- 16. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- 17. A Report on the energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Regional office of Ministry of Environment & Forest, Gol in three months time.
- 18. Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
- 19. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- 20. The area earmarked for the parking shall be used for parking only. No other activity shall be permitted in this area.

21. Ozone Depleting Substances (Regulation & Control) Rules shall be followed while designing the air conditioning system (if any) of the project.

(Dr R P'Singh) Officer-in-Charge

(Dr Vinita Vipat)

Officer-in-Charge

(Dr Sadhna Tiwari) Officer-in-Charge

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Dated Vide No. 2 4 02-03 A. EPCO

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C. Others

- All activities / mitigative measures proposed by PP in Environmental Impact Assessment (if applicable) and approved by SEAC must be ensured.
- All activities / mitigative measures proposed by PP in Environmental Management Plan and approved by SEAC must be ensured.
- All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
- Project Proponent has to strictly follow the direction/guidelines issued by MoEF, CPCB and other Govt. agencies from time to time.
- The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the MoEF, GoI, and its Regional Office located at Bhopal.
- The Ministry or any other competent authority may alter/modify the conditions or stipulate any further condition in the interest of environment protection.
- The Environmental Clearance shall be valid for a period of five years from the date of issue of this letter.
- The project proponent shall also submit six monthly reports on 1st June and 1st December
 of each calendar year on the status of compliance of the stipulated EC conditions
 including results of monitored data to the regulatory Authority in hard and soft copies.
- The Regional Office, MoEF, Gol, Bhopal and MPPCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report. Environmental Management Plan and other documents information should be given to Regional Office of the MoEF, Gol at Bhopal and MPPCB.
- 10. The Project Proponent shall inform to the Regional Office, MoEF, Gol, Bhopal and MP PCB regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- In the case of expansion or any change(s) in the scope of the project, the project shall again require prior Environmental Clearance as per EIA notification, 2006.
- 12. The SEIAA of M.P. reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

13. 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 etc. shall be obtained (as and when applicable), by the project proponent from the respective competent authorities.

Officer-in-Charge

(Dr Vinità Vipat) Officer-in-Charge Dr Sadhna Tiwari) Officer-in-Charge 5 of 6

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- 14. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- 15. The proponent shall upload the status of compliance of the 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 the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NOx (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 and in the public domain.
- 16. 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 concerned State Pollution Control Board 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 EC conditions and shall also be sent to the Regional Office of MoEF.
- 17. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 18. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat and municipal bodies as applicable in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt.
- 19. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of the State Level Environment Impact Assessment Authority (SEIAA) at www.mpseiaa.nic.in and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol, Bhopal.

 Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Dr R P Singh)

Officer-in-Charge

(Dr Vinita Vipat) Officer-in-Charge (Dr Sadhna Tiwari) Officer-in-Charge 6 of 6

Dated Note of 2 402-034 4/EPC