STATE EXPERT APPRAISAL COMMITTEE (SEAC), BIHAR

Ref. No- 53. **Patna- 23, Date-** 18/02/19.

To,

1. Shri Murarijee Mishra
   Vijay Nagar, Near Temple,
   Rukunpura, Patna - 800014.

2. Shri Vijay Kumar Sinha, IFS (Retd.),
   Prasad Bhawan, R. K. Path,
   Pirmohani, Kadamkuan, Patna - 800 003

3. Dr. Samir Kumar Sinha,
   Wildlife Trust of India,
   F-13, Sector - 8, Noida,
   Uttar Pradesh - 201301.

4. Dr. Amar Nath Verma,
   10192 ATS Advantage, Ahinsha Khand - 1,
   Near Habitat Centre, Indirapuram,
   Ghaziabad - 201014.

5. Dr. Shardendu,
   Professor,
   Department of Botany,
   Patna Science College, Patna.

6. Dr. Birendra Prasad.
   Professor,
   Department of Botany,
   Patna University,
   Patna - 800 005

7. Dr. Rakesh Kumar Singh
   G - 600, 12th Street, GAMA - II,
   Greater Noida (UP) - 201 310

8. Dr. Dilip Kumar Paul,
Associate Professor and Course Coordinator, M.Sc.
Environment Science and Management, Post-Graduation Department of Zoology,
Patna University, Patna, Bihar - 800 005

Sub :- Proceedings of meeting of State level Expert Appraisal Committee held on 09.02.2019.

Sir,

Please find enclosed herewith proceedings of the State Expert Appraisal Committee (SEAC) meeting held on 09th February, 2019.

18/2/19

(Alok Kumar)
Member Secretary
SEAC, Bihar

Proceedings of the State Expert Appraisal Committee (SEAC) meeting dated 09th February, 2019 -

A meeting of SEAC was held in the meeting hall of SEIAA, Bihar, Patna on - 09th February, 2019 presided over by the Chairman, SEAC. The following members of the Committee were present in the meeting:

1. Shri Vijay Kumar Sinha,
2. Dr. Samir Kumar Sinha,
3. Dr. Amar NathVerma,
4. Dr. Shardendu,
5. Dr. Birendra Prasad,
6. Dr. Rakesh Kumar Singh,
7. Dr. Dilip Kumar Paul,
8. Shri Alok Kumar, Member Secretary

The records of project proposals included in the agenda were put up before the Committee by supporting staff/officials for necessary appraisal. The Project Proponents / Consultants of the respective project proposals made presentation before the Committee.

The Committee discussed project proposals and made the following observations/recommendations for various projects and/or sought compliance on the points raised in relation thereto-

A.1. Government Medical College and Hospital at JP University Site, in Chapra, District - Saran, Bihar by Department of Health, Government of Bihar, Total Plot Area:- 1,01,171.41 m^2. (25 Acres) Total Built-up Area:- 1,19,581.72 m^2 (Proposal No. - SIA/8(a)/568/18, Online Proposal No.:- SIA/BR/NCP/75202/2018).

Proponent :- Department of Health, Government of Bihar.

Consultant :- Amaltas Enviro Consultants Ltd., New Delhi.

An application along with filled up 'Form - I', Form-IA and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 4th October, 2018 for obtaining Environmental Clearance (EC).

Earlier, in the meeting dated-28th December 2018 the Committee had directed the project proponent to submit revised plan and documents as mentioned in the proceeding of that meeting. It was observed during appraisal that a detailed storm water drainage system will be required in the proposal to manage water logging in the premises. The Project Proponent was directed to submit the drainage management plan dully approved by the component authority.

The Committee considered the other compliances submitted by project proponent. The project proponent has proposed to develop 35% of plot area as greenbelt which is accepted. The proposal is recommended for grant of necessary Environmental Clearance (as Annexure - I.) after they submit the above said storm water drainage plan.

A.2. Proposed Construction of Govt. Medical College and Hospital Block at Govt. Sadar Hospital Complex, Line Bazar, Purnia town, Tehsil - Purnia East, District - Purnia, State:- Bihar, Total Plot Area:- 93,364.29 m^2 (9.34 ha.) Total Built-up Area:- 1,21,727.97 m^2. (Proposal No. - SIA/8(a)/600/18, Online Proposal No.:- SIA/BR/NCP/78262/2018).

Proponent :- Department of Health, Govt. of Bihar.

Consultant :- Bhagavathi Ana Labs Pvt. Ltd., Hyderabad.

An application along with filled up 'Form - I', Form-IA and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 14th December, 2018 for obtaining Environmental Clearance (EC).

Earlier, in the meeting dated-28th December 2018 the Committee had directed the project proponent to submit revised plan and documents as mentioned in the proceeding of that meeting. The Project Proponent has complied.

The Committee considered the compliance submitted by project proponent. The project proponent has proposed to develop 45% of plot area as greenbelt which is accepted. The Project Proponent will ensure that the vacant spaces in proposed premises shall not be used for any construction purpose in future. The Project Proponent had been directed to submit an affidavit to this effect, but they have submitted an affidavit which requires some amendment for which they have been issued instruction and they have

promised to do so the same soon. The Project/Proposal is recommended for grant of Environmental Clearance as annexure-I only after they submit the revised affidavit as above.

A.3. EC for proposed Govt. Dental College and Hospital, Village - Paithna, Taluka - Rahui, District - Nalanda, State:- Bihar, Total Plot Area:- 77,804.58 m^2 (9.34 Acres) Total Built-up Area:- 1,09,806.51 m^2. (Proposal No. - SIA/8(a)/601/18, Online Proposal No.:- SIA/BR/NCP/79747/2018).

Proponent :- Department of Health, Govt. of Bihar.

Consultant :- Bhagavathi Ana Labs Pvt. Ltd., Hyderabad.

An application along with filled up 'Form - I', Form-IA and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 14th December, 2018 for obtaining Environmental Clearance (EC).

Earlier, in the meeting dated-28th December 2018 the Committee had directed the project proponent to submit revised plan and documents as mentioned in the proceeding of that meeting. The Project Proponent has complied.

The Committee considered the compliance submitted by project proponent. The project proponent has proposed to develop 44% of plot area as greenbelt which is accepted. The proposal is recommended for necessary Environmental Clearance as Annexure - I.

B.4. JAYPRABHA MEDANTA SUPER SPECIALITY HOSPITAL (A Project by Global Health Patliputra Pvt. Ltd.) (Amendment in EC) (Proposal No. - SIA/8(a)/538/18) Online Proposal No.:- SIA/BR/MIS/27949/2016).

Proponent :- Ujwal Kumar Managing Director, Global Health Patliptura Pvt. Ltd.

An application for amendment in Environmental Clearance in the prescribed format was submitted to SEIAA, Bihar on 1st August, 2018 for obtaining Environmental Clearance (EC).

The SEAC has considered and recommended the proposal on 7th/8th December 2018. SEIAA return the proposal to SEAC for concurrence to issue revised

condition as per GoI, MoEF&CC office memorandum F. No. 22-34/2018-IA.III Dated. 4th January 2019 The SEAC has considered the matter and decided to accord its concern as sought by SEIAA. Annexure - II.

C.5. INDIRA PAPER MILL PVT. LTD., Village - Dhawalpura, Tehsil - Patna Rural, District - Patna, State - Bihar, Total Capacity Writing Paper:- 50 Ton/day. (Proposal No. - SIA/5(i)/605/19) Online Proposal No.:- SIA/BR/IND/29688/2017).

Proponent :- Shri Abhinandan Kumar.

An application along with filled up 'Form - I', and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 16th January, 2019 for obtaining Term of Reference (ToR).

Earlier, in the meeting dated 25th January 2018 the Committee had decided to undertake a site visit of the area. A SEAC team visited the area on 7th Feburary 2018 and submitted its report which was discussed. It is decided to grant ToR as Annexure-III.

D.6. Proposed Officer Quarters in Officers Enclave on Plot No. C of Gardanibagh Housing Development at Patna, Total Plot Area:- 53,272 m^2. Total Built-up Area:- 1,39,634.68 m^2. (Proposal No. - SIA/8(a)/606/19) Online Proposal No.:- SIA/BR/NCP/87130/2018).

Proponent :- Building Construction Department, Govt. of Bihar.

Consultant :- Ind Tech House Consultant, New Delhi.

An application along with filled up 'Form - I', Form-IA and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 18th January, 2018 for obtaining Environmental Clearance (EC).

The Proponent and Consultant presented the proposal before the Committee, which after discussion and due consideration directed the project proponent to submit a revised report including the following:-

(i) Submit revised Form-1 ,Form-1A.

(ii) Justification for splitting the proposal from integrated/ prospective redevelopment plan/proposal as mentioned by Project Proponent.

(iii) Study regarding habitat destruction of avifauna on removal/cutting of trees on the site.

(iv) Inventory of proposed cutting of trees, and explanation as to why this cannot be avoided.

(v) Submit current reports on air ,noise, water and soil pollution in the proposed area during the current season.

E.7. Proposed installation of 20 MW Captive Thermal Power Plant at Plot No. NS - 16 (P), Aurangabad Industrial Growth Center (BIADA), District- Aurangabad, Bihar by M/s Shree Cement Ltd (Unit - New Bihar Cement Plant - CPP), Total Capacity - 20 MW, (Proposal No. - SIA/1(d)/607/19, Online Proposal No.:- SIA/BR/THE/29999/2018).

Proponent :- M/s Shree Cement Ltd.,

Consultant :-J. M. Environet Private Limited.

An application along with filled up 'Form - I', Form-IA and Conceptual Plan in the prescribed format was submitted to MoEF&CC on 06th February, 2018 for obtaining approved Term of Reference (ToR). The MoEF&CC issued ToR Vide No. J-13012/05/2018-IA.I (T), dated 07.05.2018. Final EIA report submitted by Project Proponent in the prescribed format to SEIAA, Bihar dated – 22.01.2019 for obtaining Environmental Clarence (EC).

The Proponent and Consultant presented the proposal before the Committee, which after discussion and due consideration directed the project proponent to submit a revised report including the following:-

(i) Submit latest copy of inspection report(s) with regard to inspections conducted earlier by Regional office, Ranchi of MoEF&CC in respect both units of cement production.

(ii) Primary data of flora and fauna;

(iii) Present status of plantation done in the campus of both cement units with survival rate.

(iv) Explore Alternative water supply to avoided ground water tapping.

(v) Report on power supply regime and justification for the present project proposal.

(vi) Details of coal composition in terms of calorific value, ash, SOx & NOx and disposal and storage of debris / residu if any after combustion of coal including plan for storage and disposal.

(vii) Methods for coal treatment regarding reduction of SPM, SOx & NOx.

Sd/-
(Dr. Shardendu)
(Member, SEAC)

Sd/-
(Dr. Rakesh Kumar Singh)
(Member, SEAC)

Sd/-
(Dr. Amar Nath Verma)
(Member, SEAC)

Sd/-
(Dilip Kumar Paul)
(Member, SEAC)

Sd/-
(Dr. Birendra Prasad)
(Member, SEAC)

Sd/-
(Dr. Samir Kumar Sinha)
(Member, SEAC)

Sd/-
(Vijay Kumar Sinha)
(Member, SEAC)

18/2/19
(Alok Kumar)
Member Secretary, SEAC

18/2/19
(Murarijee Mishra)
Chairman, SEAC

ANNEXURE - I

EC Conditions for Medical College and Hospital

I. Statutory compliance:

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

3. All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied with.

4. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.

5. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.

6. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

8. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

9. The project proponent shall follow the ECBC / ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

10. The facilities provided for collection, segregation, handling, on site storage & processing of solid waste such as chute system for multi-storey buildings, wet & dry bins, collection centre & mechanical composter etc. shall be properly maintained. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers.

11. Bio-Medical waste to be generated in the hospital shall be handled and managed as per the provisions of Bio-Medical waste (Management & Handling) Rules, 2016. Radioactive waste management program shall be adopted and implemented at the site in order to mitigate the effects coming out due to use of atomic radiation in different equipment's.

12. Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Bihar State Pollution Control Board.

13. Solar power plant or other solar energy related equipment's shall be operated and maintained properly.

14. Provisions shall be made for the integration of solar water heating system.

15. EC conditions must be displayed at prominent place which can be easily visible to public mentioning the address and contact number of authority to whom violation of EC conditions can be reported.

16. Fencing of the project boundary by erecting 10 meter façade before start of construction activities.

17. Free Parking facility for patient and visitors shall be provided.

II. Air quality monitoring and preservation

1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.

4. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform 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. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust / wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

6. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

7. Wet jet shall be provided for grinding and stone cutting.

8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

9. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

10. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

11. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

12. For indoor air quality the ventilation provisions as per National Building Code of India.

13. Real time Ambient Air Quality shall be measured on continuous basis and and the data shall be displayed in public domain as per National Ambient Air Quality parameters and on the portal of hospital. The measured data shall be linked to the server of the State Pollution Control Board.

III. Water quality monitoring and preservation:

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

4. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the, SEIAA/ Regional Office, MoEF&CC along with six monthly Monitoring reports.

5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the

balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

9. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

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

11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

12. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

13. All recharge should be limited to shallow aquifer.

14. No ground water shall be used during construction phase of the project.

15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

16. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

18. No sewage or untreated effluent water would be discharged through storm water drains.

19. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

22. Separate drainage system shall be developed for storm water so that end point discharge to nearest nallah /river is ensured to avoid water logging without any increase in the pollution load in receiving system.

IV. Noise monitoring and prevention:

1. Ambient noise levels shall conform to residential area/commercial area/industrial area / silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

2. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

4. Real time Ambient Noise level shall be measured on continuous basis and and the data shall be displayed in public domain and on the portal of hospital. The measured data shall be linked to the server of the State Pollution Control Board

V. Energy Conservation measures:

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

2. Outdoor and common area lighting shall be LED.

3. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

4. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

5. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.

6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management:

1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.

2. Proper composting / vermi-composting of municipal and biodegradable solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000 (As amended).

3. All the top soil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site.

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

5. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

6. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

7. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

8. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

9. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.

10. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016, Ready mixed concrete must be used in building construction.

11. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

12. 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.

VII. Green Cover:

1. No tree can be felled unless exigencies demand. Wherever absolutely necessary, tree felling shall be done with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured in the ratio of species cut to species planted.

2. Prepare a 10 years Green Belt Management Plan and submit to SEIAA before commencing the project work.

3. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured in the ratio of species cut to species planted. Area for green belt development shall be provided as per the details provided in the project document.

4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport:

1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

    a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    b. Traffic calming measures.
    c. Proper design of entry and exit points.
    d. Parking norms as per local regulation.

2. 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 be operated only during non-peak hours.

3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of

the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D. / competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. 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, mobile STP, 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.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility:

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA/ Ministry, Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous:

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC / SEIAA website where it is displayed.

2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

3. All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.

4. Rest room facilities shall be provided for service population.

5. Food waste management facility Bio-composting unit preferably in the campus.

6. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

7. The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during their presentation to the State Expert Appraisal Committee.

8. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

9. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

10. The project proponent shall inform the SEIAA, Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

11. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

12. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA.

13. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

14. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

15. The SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

16. The Regional Office of this Ministry/ SEIAA shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

17. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

18. Environmental clearance shall remain valid for a maximum period of 7 years or completion of project whichever is earlier.

19. Any appeal against this EC 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.

ANNEXURE - II

EC Conditions for Jayprabha Medanta Super Speciality Hospital

I. Statutory compliance:

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

3. All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied with.

4. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

5. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

6. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.

7. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.

8. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

9. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

10. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

11. The project proponent shall follow the ECBC / ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

12. The facilities provided for collection, segregation, handling, on site storage & processing of solid waste such as chute system for multi-storey buildings, wet & dry bins, collection centre & mechanical composter etc. shall be properly maintained. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers.

13. Bio-Medical waste to be generated in the hospital shall be handled and managed as per the provisions of Bio-Medical waste (Management & Handling) Rules, 2016. Radioactive waste management program shall be adopted and implemented at the site in order to mitigate the effects coming out due to use of atomic radiation in different equipment's.

14. Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Bihar State Pollution Control Board.

15. Solar power plant or other solar energy related equipment's shall be operated and maintained properly.

16. Provisions shall be made for the integration of solar water heating system.

17. EC conditions must be displayed at prominent place which can be easily visible to public mentioning the address and contact number of authority to whom violation of EC conditions can be reported.

18. Fencing of the project boundary by erecting 10 meter façade before start of construction activities.

19. Free Parking facility for patient and visitors shall be provided.

II. Air quality monitoring and preservation

1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.

4. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform 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. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

5. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust / wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

6. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

7. Wet jet shall be provided for grinding and stone cutting.

8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

9. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and

construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

10. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

11. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

12. For indoor air quality the ventilation provisions as per National Building Code of India.

13. Real time Ambient Air Quality shall be measured on continuous basis and and the data shall be displayed in public domain as per National Ambient Air Quality parameters and on the portal of hospital. The measured data shall be linked to the server of the State Pollution Control Board.

III. Water quality monitoring and preservation:

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

4. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project

proponent. The record shall be submitted to the ,SEIAA/ Regional Office, MoEF&CC along with six monthly Monitoring reports.

5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

9. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

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

11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

12. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where

ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

13. All recharge should be limited to shallow aquifer.

14. No ground water shall be used during construction phase of the project.

15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

16. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

18. No sewage or untreated effluent water would be discharged through storm water drains.

19. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health

and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

22. Separate drainage system shall be developed for storm water so that end point discharge to nearest nallah /river is ensured to avoid water logging without any increase in the pollution load in receiving system.

IV. Noise monitoring and prevention:

1. Ambient noise levels shall conform to residential area/commercial area/industrial area / silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

2. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

4. Real time Ambient Noise level shall be measured on continuous basis and and the data shall be displayed in public domain and on the portal of hospital. The measured data shall be linked to the server of the State Pollution Control Board.

V. Energy Conservation measures:

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.

2. Outdoor and common area lighting shall be LED.

3. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

4. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

5. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.

6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management:

1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.

2. Proper composting / vermi-composting of municipal and biodegradable solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000 (As amended).

3. All the top soil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site.

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

5. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.

6. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

7. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

8. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

9. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.

10. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016, Ready mixed concrete must be used in building construction.

11. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

12. 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.

VII. Green Cover:

1. No tree can be felled unless exigencies demand. Wherever absolutely necessary, tree felling shall be done with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured in the ratio of species cut to species planted.
2. The Project Proponent shall create green cover equivalent to one third of the total built up area in some nearby place(s) or alternatively adopt some nearby park(s) for development and maintenance.
3. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured in the ratio of species cut to species planted. Area for green belt development shall be provided as per the details provided in the project document.
4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport:

1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
    a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
    b. Traffic calming measures.
    c. Proper design of entry and exit points.

d. Parking norms as per local regulation.

2. 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 be operated only during non-peak hours.

3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D. / competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human health issues:

1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

2. For indoor air quality the ventilation provisions as per National Building Code of India.

3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

4. 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, mobile STP, 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.

5. Occupational health surveillance of the workers shall be done on a regular basis.

6. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility:

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA/ Ministry, Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous:

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days

indicating that the project has been accorded environment clearance and the details of MoEF&CC / SEIAA website where it is displayed.

2. All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.

3. Entire existing parking space shall be developed as multi-level parking facilities to meet future demand.

4. Rest room facilities shall be provided for service population.

5. Free parking shall be provided for OPD patient and two visitors for each IPD patient.

6. Food waste management facility Bio-composting unit preferably in the campus.

7. The Project Proponent shall create green cover equivalent to one third of the total built up area in some nearby space or alternatively adopt some nearby park for development and maintenance.

8. The construction phase and operational phase EC conditions must be displayed at prominent place which can be easily visible to public.

9. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

10. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

11. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

12. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the

Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

13. The project proponent shall inform the SEIAA, Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

14. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

15. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during their presentation to the State Expert Appraisal Committee.

16. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA.

17. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

18. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

19. The SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

20. The Regional Office of this Ministry/ SEIAA shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

21. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public

Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

22. Environmental clearance shall remain valid for a maximum period of 7 years or completion of project whichever is earlier.

23. Any appeal against this EC 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.

ANNEXURE - III

Terms of Reference for environment impact assessment study for pulp & paper industry by addition of bleaching process for producing 50 TPD writing paper. The paper mill will generate pulp from recycling of waste paper.

A. STANDARD TERMS OF REFERENCE:

1) Executive Summary.

2) **Introduction.**

   a. Details of the EIA Consultant including NABET accreditation.

   b. Information about the project proponent.

   Importance and benefits of the project.

3) **Project Description.**

   a. Cost of project and time of completion.

   b. Products with capacities for the proposed project.

   c. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.

   d. List of raw materials required and their source along with mode of transportation.

   e. Other chemicals and materials required with quantities and storage capacities.

   f. Details of Emission, effluents, hazardous waste generation and their management.

   g. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).

   h. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.

i. Hazard identification and details of proposed safety systems.

j. Certificate from the Industry department and Inspector of Factories certifying that that the existing and proposed layout of plant is in conformity with all the rules stipulated for the applicable industry

k. Expansion/modernization proposals:

   i. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing existing operation of the project from SPCB shall be attached with the EIA-EMP report.

   ii. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details.

a. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

b. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).

c. Details w.r.t. option analysis for selection of site.

d. Co-ordinates (lat-long) of all four corners of the site.

e. Google map-Earth downloaded of the project site.

f. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area / Estate / Complex, layout of Industrial Area indicating location of unit within the Industrial area / Estate.

g. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular. All photographs must be geotagged with imprint of date and time of photographs taken.

h. Landuse break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area).

i. A list of major industries with name and type within study area (10 km radius) shall be incorporated. Land use details of the study area.

j. Geological features and Geo-hydrological status of the study area shall be included.

k. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects).

l. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

m. R&R details in respect of land in line with state Government policy.\

5) **Environmental Status:**

i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests (if applicable). Soft copy of Geotagged photographs with imprint of date and time of photographs taken of all the monitoring stations/locations while monitoring is ongoing shall be submitted.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report. A soft copy of all the raw data shall also be submitted.

iv. Surface water quality of nearby River (100 m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB / MoEF&CC guidelines. Soft copy of Geotagged photographs with imprint of date and time of photographs taken of all the sampling stations/locations while taking samples shall be submitted.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included. Soft copy of Geotagged photographs with imprint of date and time of photographs taken of all the sampling stations/locations while taking samples shall be submitted.

vii. Noise levels monitoring at 8 locations within the study area. Soft copy of Geotagged photographs with imprint of date and time of photographs taken of all the monitoring stations/locations while monitoring is ongoing shall be submitted.

viii. Soil Characteristic as per CPCB guidelines.

ix Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc. Soft copy of Geotagged photographs with imprint of date and time of photographs taken of all the monitoring stations/locations while monitoring is ongoing shall be submitted.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species through primary and secondary data. If any fauna listed in the Schedule I-IV of Wild Life (Protection) Act, 1972 are found within the core zone of study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

6) Impact and Environment Management Plan.

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modeling - in case of discharge in water body.

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control.

vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

7) Occupational health.

i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.

iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

8) Corporate Environment Policy.

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.

9) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

10) Enterprise Social Commitment (ESC).

i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

11) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

12) A tabular chart with index for point wise compliance of above ToR.

B. Specific Terms of Reference for environment impact assessment study for pulp & paper industry by addition of bleaching process for producing 50 TPD writing paper. The paper mill will generate pulp from recycling of waste paper.

1. There is lack of proper ventilation in the unit. Adequate ventilation and Exhaust system in the unit needs to be installed immediately.
2. MRL details of project site and RL of nearby sources of water shall be indicated.
3. A note on pulp washing system capable of handling wood pulp shall be included.
4. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln.
5. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 6 Months of issue of environment clearance.
6. A commitment that no extra bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills.
7. Plan for reduction of water consumption.