Minutes of the 126th Meeting of the State Expert Appraisal Committee, constituted for considering Environmental Clearance of Projects (B category) under Government of India Notification dated 14.09.2006, held on 27th and 28th January, 2016 under the Chairmanship of Sh. G.R. Goyat, Chairman, SEAC at Panchkula.

List of participants is annexed as **Annexure-A**.

At the outset, the Chairman SEAC welcomed the Members and Secretary of the SEAC and advised the Secretary to give brief background of this meeting. The minutes of the 125th Meeting were discussed and approved without any further modification.

It was further informed that in this meeting 28 number projects are to be taken up

for scoping, appraisal and grading as per the agenda circulated and 02 cases are taken up as additional agenda item.

After preliminary discussion, the following projects were taken up on case-tocase basis:-

126.01 Environmental Clearance for Industrial Shed at Plot No. 1, Sector-3A, Manaser, Gurgaon by M/s Maruti Suzuki India Limited:

Project Proponent:Sh. Deepak Jain, Deputy General ManagerConsultant:SENES Consultants India Pvt. Ltd.

This project was received by the SEIAA, Haryana on 27.02.2013. The papers submitted were examined by the Secretary, SEAC and certain shortcomings were noticed and conveyed to PP, vide letter No. 1303 dated 06.03.2013. The PP submitted the reply of the shortcomings vide letter dated 05.04.2013.

Thereafter this case was taken up for appraisal in the 82nd Meeting held on 28.05.2013.

The area consists of one ownership for a large piece of land and is being developed and constructed in many stages for industry development. In order to have a clear picture of the whole development area relating to the project, the PP was asked to clarify the following:

- 1. The PP should submit the layout plan indicting the whole area and showing therein the area constructed before 2006, area constructed between 2006-2013 and the remaining vacant area. The layout and the extent of the present project should be indicated in different colors.
- 2. The PP should submit the copy of approved building plans of the present project from Competent Authority.
- 3. The PP should submit the copy of Environmental Clearance if any for the projects in which construction was started or completed during the period 2006-2013.
- 4. The PP should submit an affidavit about the status of the construction of proposed builtup area under question for which the Environmental Clearance is sought.

The observations of 82nd Meeting of SEAC were conveyed to the project proponent vide letter No. 342 dated 10.06.2013. Final notice was also issued to the PP for non submission of reply vide letter No. 1481 dated 16.7.2014. The project proponent submitted the reply of the observations vide letter dated 19.08.2014.

Thereafter this case was taken up for appraisal in the 113th Meeting of SEAC held on 10.10.2014.

The project was discussed with the PP and Consultant. The PP accepted that it is an expansion project as they have already built 368611 Sq. Meters till date in various phases without obtaining prior Environmental Clearance. The PP represented that the Hon'ble High Court of Delhi has allowed them relief for obtaining ex-post-facto Environmental Clearance for the area already built. PP was directed to provide the copy of their appeal, replies of Respondent and the Copy of Judgment of Hon'ble High Court and present status of litigation if any in Hon'ble Apex Court. The project will be considered only after complete submission of documents.

The details for expansion project will be prepared accordingly and the proposed expansion for constructing 94810 Sq. Metes will be reflected in the same. The details submitted by the PP are quite sketchy and totally incomplete. Details of built-up area prior to Notification dated 14.09.2006; between 14.09.2006 till the date of present application have not been quantified with supporting details of Occupation Certificate sequence-wise.

The observations of 113th Meeting of SEAC were conveyed to the project proponent vide letter No. 1731 dated 17.10.2014. The project proponent submitted the reply of the observations vide letter dated 20.10.2014. The Hon'ble Delhi High Court judgment dated 26th May, 2014 and 22nd September, 2014 have been placed on record by the PP. As per the Court orders, PP would get Post EC for the area already built till date without attracting any prosecution for the alleged violation of Notification dated 14.09.2006. The Terms of Reference were approved in the 114th Meeting of the SEAC held on 27.10.2014 and conveyed to the PP vide letter No. 1807 dated 07.11.2015. The PP submitted the reply vide letter dated 19.11.2016.

Thereafter, the case was taken up in the 126th meeting of the SEAC held on

27.01.2016.

During discussions the PP was asked to submit the following documents:

- 1. Event wise detail i.e. sequence of dates alongwith documents i.e. layout plan indicting the whole area and showing therein the area constructed before 2006, area constructed between 2006-2013 and the remaining vacant area. The layout and the extent of the present project should be indicated in different colors.
- 2. Present status alongwith the details of court case if any.

The PP is advised to submit the required information as detailed above within 30 days and it was made clear to the PP that his project will be considered as received only after the receipt of complete information. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.02 Environmental Clearance for the proposed expansion of Panipat Insitute of Engineering and Technology, Village Pattikalayana, Smalkha, District Panipat, Haryana by M/s Panipat Institute of Engineering & Technology

The project was submitted to the SEIAA, Haryana on 30.09.2014 as per check list approved by the SEIAA/SEAC. The case was appraised in the 115th Meeting of the SEAC held on 10.11.2014 and recommended to SEIAA for grant of Environmental Clearance.

The case was referred back by the SEIAA on 19.10.2015 with the advise that SEAC should decide the case as per MoEF, GOI Notification dated 22.12.2014.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 27.01.2016.

The Project Proponent neither attended the meeting nor circulated the documents to the Members. The Committee decided to issue 30 days notice to the PP. Accordingly the

notice will be issued by the Secretary, SEAC to the Project Proponent. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.03 Environmental Clearance for expansion of Dairy Project at Plot no 1, 2 & 3 Sector-30-A in Industrial Estate, at IMT Rohtak, Haryana by M/s Sabarkantha District Co- operative Milk Producers' Union Ltd..

The project was submitted to the SEIAA, Haryana on 29.01.2015 as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015. This case could not taken up by the MoEF and was again transferred to SEIAA on 31.08.2015 after the reconstitution of SEIAA/SEAC on 21.08.2015.

The case was taken up for appraisal in the 121st meeting of the SEAC held on 18.11.2015. The Project Proponent neither attended the meeting nor requested for adjournment. The Committee decided to issue 30 days notice to the PP. The observations of 121st meeting were conveyed to the PP vide letter No. 299 dated 01.12.2015. PP submitted the reply vide letter dated 01.01.2016.

Thereafter, the case was taken up for appraisal in the 126th meeting of the SEAC held on 27.01.2016.

The Project Proponent neither attended the meeting nor circulated the documents to the Members. The Committee decided to issue 30 days notice to the PP. Accordingly the notice will be issued by the Secretary, SEAC to the Project Proponent. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.04 Environmental Clearance for Construction of Punjab National Bank Institutional Building at Plot No. 84, Sector-18, Gurgaon, Haryana by M/s Punjab National Bank

Project Proponent : Sh. B.S. Mann, Deputy General Manager

Consultant : Grass Roots Research and Creation India Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 18.03.2015 as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015. This case could not taken up by the MoEF and was again transferred to SEIAA on 31.08.2015 after the reconstitution of SEIAA/SEAC on 21.08.2015.

Thereafter, the case was taken up in the 122nd meeting of the SEAC held on 27.11.2015.

- 1. The PP should submit the assurance of the supply of the water during construction phase from safe area through tankers and permission from CGWA for using the ground water of the existing borewells including permission from HUDA for supply of required quantity of water during operation Phase with detailed clarification regarding availability of water in the area.
- 2. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air pollution in view of exceeding baseline data.

- 3. The PP should submit detailed design calculations of STP alongwith dimension of each component and also submit unit wise reduction of BOD for STP.
- 4. The PP should submit disposal plan of MSW Biodegradable waste.
- 5. The PP should the detail Rain Water Harvesting proposal along with design as per CGWA norms and as approved by Central Ground Water Authority (CGWA) for zero runoff discharge alongwith Rain Water Harvesting Pit maintenance plan as per site condition.
- 6. The PP should submit revised water balance diagram.
- 7. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 122nd meeting were conveyed to the project proponent vide letter No. 318 dated 09.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 01.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 27.01.2016.

During presentation, the Committee was informed that it is a proposed Construction of Punjab National Bank Institutional Building at Plot No. 84, Sector-18, District Gurgaon, Haryana. The estimated cost of the project is Rs. 235 Crores. Total Plot area is 3.69 Acres (14947.83 Sq. Meters). Basement area of 10005.38 Sq. Meters has been proposed. Total built up area will be approximately 27312.34 Sq. Meters. The project will comprise of Two basements, Central Staff Training College, IT Office, Hostel & Staff residence. The maximum height of the building is approx. 38.70 meters. It was also informed that the green area development has been kept as 37.04% (i.e. 5537.79 Sq. Meter approximately) of the net plot area. 10% (1494.78 Sq. Meters of the net plot area would be earmarked for Shelter belt in the project area. 10% (1494.78 Sq. Meters of the net plot area would be earmarked for avenue plantation in the project area. 17.04% (2548.03 Sq. Meters of the net plot area would be earmarked for avenue plantation in the project area. 13 KLD of recycled treated water). The waste water generation will be 41 KLD which will be treated upto tertiary level in STP having total capacity of 50 KLD. The STP treated water will be used for flushing and horticulture purposes

The PP has submitted special mitigative measures for controlling air pollution for construction phase and operation phase which includes 5 meters high barricade wall at the periphery, broad leafy trees would be planted as green belt, trees with heavy foliage would be planted on both side of carriage way, ultra low Sulpher Diesel (0.005%) would be used as fuel in DG Sets, Stack height of DG set would be as per CPCB norms. These measures would minimize the impact on air environment.

It was informed by the project proponent that the power requirement for the project will be 3578.38 Kw and for power back up they will install 05 Nos. of DG Sets of 6430 KVA capacity. Parking requirement for the project as per Haryana Bye Laws is 251 ECS but the parking proposed to be provided in the project is 316 ECS. There will be total solid waste generation of 216 Kg/day. Out of this the bio-degradable waste will be composted in the project

premises and the manure produced will be used for horticulture and green development. The calculations of the same are in accordance with the prescribed norms. It was pointed out that the required water for the project will be provided through HUDA Municipal supply.

Detailed discussions were held about Solid Waste Management, rain water harvesting, fire fighting plan, noise and vibration plan, health and welfare of the laborers, electrical hazard plan, environment monitoring plan, energy conservation measures and environment management plan. There will be 04 numbers of rain water harvesting structures as approved by the Central Ground Water Authority (CGWA). The mitigation measures were found in order by the Committee.

After deliberations the Committee rated this project with **"Gold Rating"** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following stipulations:

PART A-SPECIFIC CONDITIONS:-Construction Phase:-

- [i] A first aid room as proposed in the project report will be provided both during construction and operational phase of the project.
- [ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- [iii] All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- [iv] Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed off taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- [v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.
- (vi) The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- [vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- [viii] Ambient noise levels should conform to the residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated residential standards.
- [ix] Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and as amended on 27th August 2003.
- [x] Ready mixed concrete must be used in building construction.
- [xi] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.
- [xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices as referred.
- [xiii] Permission from Competent Authority for supply of water shall be obtained prior to operation of the project.
- [xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.

- [xv] 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.
- [xvi] The approval of the competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.
- [xvii] The PP will provide minimum one hydraulic ladder for escape of people in case of fire.
- [xviii] The PP will submit an affidavit that underground water will not be used in construction activity and they will also indicate the source of water.
- [xix] The PP shall ensure that the green area development shall be as per NGT decision.

Operational Phase:

- [i] The STP shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The STP should be installed at the remotest place in the project area.
- [ii] Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the treated water should have BOD maximum upto 10 ppm and the treated water will be used for flushing, gardening, DG set cooling and running of fountain in the water body to achieve zero exit discharge.
- [iii] For disinfection of the treated water ultra violate radiation or ozonization process should be used.
- [iv] The solid waste generated should be properly collected and segregated. Bio-degradable waste will be composed at site and dry/ inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.
- [v] Diesel power generating sets proposed as source of back up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986 and with appropriate stack height i.e. above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur content (maximum upto 0.25%).
- [vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Proposed Residential Complex.
- [vii] Weep holes in the compound retaining walls shall be provided to ensure natural drainage of accumulated water.
- [viii] Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment through sedimentation tanks must be done to remove suspended matter, oil and grease. The bore well pipe for rainwater recharging should be kept at least 5 mts. above the ground water table.
- [ix] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- [x] A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Haryana in three months time.
- [xi] Energy conservation measures like installation of LEDs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used LEDs 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 must be adopted to the maximum extent possible for energy conservation.
- [xii] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The biodegradable waste should be composted by vermi-composting at the site ear marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- [xiii] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.
- [xiv] The PP will use water from the already existing tube wells for domestic purposes only after getting permission from CGWA during operational phase.

- [xv] The traffic plan and the parking plan proposed by the PP should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points of the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.
- [xvi] The power back up will not be more than 100% of the total load.
- [xvii] Project proponent will use excess treated water in water bodies and for construction work at other sites. Treated water will not be allowed to go waste and enter into sewer.

PART-B. GENERAL CONDITIONS:

- [i] The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- [ii] Six monthly compliance reports should be submitted to the HSPCB and Regional Office, MoEF, Gol, Northern Region, Chandigarh and a copy to the SEIAA Haryana, Panchkula.
- [iii] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information had been given for getting approval of this project.
- [iv] The PP will start construction only after getting NOC from the Forest Department that the area under consideration does not fall under Section 4 and 5 of PLPA-1900.
- [v] 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, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vi] The PP will use LEDs in Godowns also to further improve the electricity saving for which PP agrees.
- [vii] The PP will provide tall trees with broad leaves.
- [viii] The PP will provide Helipad facility in all the towers/ buildings where the height is more than 200 meters.
- [ix] The PP will provide at least one hydraulic lift.
- [x] The PP should ensure that natural drainage line is not disturbed and is maintained properly.
- [xi] The PP will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.

126.05 Environmental Clearance for construction of Group Housing Project "MICASA" at Sector 68 (HD), Sohna Road, Gurgaon, Haryana by M/s Pareena Infrastructures Pvt. Ltd

Project Proponent:Sh. Parveen Kumar, Authorized SignatoryConsultant:KADAM Enviro Solutions

The project proponent submitted the case for obtaining Environmental Clearance

to the Ministry of Environment and Forest & Climate Change, Government of India on 04.06.2015.

This case could not taken up by the MoEF and was transferred to SEIAA on 10.11.2015 after the reconstitution of SEIAA/SEAC.

Thereafter the case was taken up for appraisal in the 123rd meeting of the SEAC

held on 11.12.2015.

- 1. The PP should submit the assurance of the supply of the water during construction phase from safe area through tankers and permission from CGWA for using the ground water of the existing bore-wells including permission from HUDA for supply of required quantity of water during operation Phase with detailed clarification regarding availability of water in the area.
- 2. The PP should submit permission from Competent Authority for using Revenue Rasta for laying of services.
- 3. The PP should submit an undertaking that they will use ultra low sulpher fuel in DG Sets.

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- 4. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air pollution in view of exceeding baseline data.
- 5. The PP should submit detailed design calculations of STP alongwith dimension of each component and also submit unit wise reduction of BOD for STP.
- 6. The PP should submit solar energy conservation plan as per HAREDA.
- 7. The PP should submit MSW Bio composting plan in open area.
- 8. The PP should submit ground water site specific hydrogeological details alongwith recharge capacity of recharge pit based on field test and also submit revised Rain water harvesting pit with maintenance plan.
- 9. PP should submit surface/stilt parking plan along with details of parking space provided & traffic movement pattern along with width of internal roads.
- 10. PP should submit revised site plan showing, electric panel room & other constructions within zoned area only.
- 11. The PP should submit revised built-up area statement to include balconies in the Non F.A.R. areas which has not been taken into account.
- 12. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.
 - The observations of 123^{rd} meeting were conveyed to the project proponent vide

letter No. 346 dated 22.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on

27.01.2016.

After detailed discussions, the following shortcomings were concluded:

- 1. The PP should submit ground water site specific hydrogeological details alongwith recharge capacity of recharge pit based on field test and also submit revised Rain water harvesting pit with maintenance plan.
- 2. The PP should submit permission from Competent Authority for using Revenue Rasta for laying of services.
- 3. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The PP is advised to submit the required information as detailed above within 30

days and it was made clear to the PP that his project will be considered as received only after the receipt of complete information. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.06 Environmental Clearance for construction of Affordable Group Housing Project "Laxmi Apartments" at Sector-99 A, Dwarka Expressway, Gurgaon, Haryana by M/s Pareena Infrastructures Pvt. Ltd

Project Proponent:Sh.Parveen Kumar, Authorized SignatoryConsultant:KADAM Environmental Consultants

The project proponent submitted the case for obtaining Environmental Clearance

to the Ministry of Environment and Forest & Climate Change, Government of India on 21.05.2015.

This case could not taken up by the MoEF and was transferred to SEIAA on 10.11.2015 after the reconstitution of SEIAA/SEAC.

Thereafter the case was taken up for appraisal in the 123rd meeting of the SEAC held on 11.12.2015.

After detailed discussions, the following shortcomings were concluded:

- 1. The PP should submit the assurance of the supply of the water during construction phase from safe area through tankers and permission from CGWA for using the ground water of the existing bore-wells including permission from HUDA for supply of required quantity of water during operation Phase with detailed clarification regarding availability of water in the area.
- 2. The PP should submit an undertaking that they will use ultra low sulpher fuel in DG Sets.
- 3. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air pollution in view of exceeding baseline data.
- 4. The PP should submit detailed design calculations of STP alongwith dimension of each component and also submit unit wise reduction of BOD for STP.
- 5. The PP should submit solar energy conservation plan as per HAREDA.
- 6. The PP should submit MSW Bio composting plan in open area.
- 7. The PP should submit ground water site specific hydro-geological details along with recharge capacity of recharge pit based on field test and also submit Rain water harvesting pit maintenance plan.
- 8. PP should submit surface/stilt parking plan along with details of parking space provided & traffic movement pattern along with width of internal roads.
- 9. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 123rd meeting were conveyed to the project proponent vide letter No. 347 dated 22.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 27.01.2016.

During presentation, the Committee was informed that it is a proposed construction of Affordable Group Housing Project "Laxmi Apartments" at Sector-99 A, Dwarka Expressway, Gurgaon, Haryana. The estimated cost of the project is Rs. 33.70 Crores. Total Plot area is 4.913 Acres (19882.17 Sq. Meters). Total built up area will be approximately 46440.332 Sq. Meters. Basement area of 1217.849 Sq. Meters has been proposed. The project will comprise of Nine Towers consisting of Stilt plus twelve floors and 804 numbers of dwelling units. The maximum height of the building is approx. 44.65 meters. It was also informed that the green area development has been kept as 20.13% (i.e. 4003.58 Sq. Meter approximately) of the net plot area. 1592.874 Sq. Meters of the net plot area would be earmarked for avenue plantation in the project area. 1348.82 Sq. Meters of the net plot area would be earmarked for organized green i.e. Herbs/Shurbs/Lawns etc. in the project area. The total water requirement for the project will be 591 KLD (i.e. 374 KLD of fresh water & 217 KLD of recycled treated water). The waste water

generation will be 446 KLD which will be treated upto tertiary level in STP having total capacity of 630 KLD. The STP treated water will be used for flushing and horticulture purposes

The Air quality data shows exceeding baseline in respect of PM₁₀ which is approximately 93 ug/m³. Incremental air pollution in respect of PM is 0.0017g/s. PP has submitted special mitigative measures for controlling air pollution for construction phase and operation phase which includes 5 meters high barricade wall at the periphery, broad leafy trees would be planted as green belt, trees with heavy foliage would be planted on both side of carriage way, ultra lowsulpher Diesel (0.005%) would be used as fuel in DG Sets, Stack height of DG set would be as per CPCB norms. These measures would minimize the impact on air environment.

It was informed by the project proponent that the power requirement for the project will be 6810 Kw and for power back up they will install 2 Nos. of DG Sets of 180*2=360 KVA capacity. Parking requirement for the project as per Haryana Bye Laws is 402 ECS but the parking proposed to be provided in the project is 513 ECS. There will be total solid waste generation of 1660.685 Kg/day. Out of this the bio-degradable waste will be composted in the project premises and the manure produced will be used for horticulture and green development. The calculations of the same are in accordance with the prescribed norms. It was pointed out that the required water for the project will be provided through HUDA Municipal supply.

Detailed discussions were held about Solid Waste Management, rain water harvesting, fire fighting plan, noise and vibration plan, health and welfare of the laborers, electrical hazard plan, environment monitoring plan, energy conservation measures and environment management plan. There will be 05 numbers of rain water harvesting structures as approved by the Central Ground Water Authority (CGWA). The mitigation measures were found in order by the Committee.

After deliberations the Committee rated this project with **"Gold Rating"** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following stipulations:

PART A-SPECIFIC CONDITIONS:-Construction Phase:-

- [i] A first aid room as proposed in the project report will be provided both during construction and operational phase of the project.
- [ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- [iii] All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- [iv] Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed off taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- [v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste

generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.

- (vi) The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- [vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- [viii] Ambient noise levels should conform to the residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated residential standards.
- [ix] Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and as amended on 27th August 2003.
- [x] Ready mixed concrete must be used in building construction.
- [xi] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.
- [xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices as referred.
- [xiii] Permission from Competent Authority for supply of water shall be obtained prior to operation of the project.
- [xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- [xv] 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.
- [xvi] The approval of the competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.
- [xvii] The PP will provide minimum one hydraulic ladder for escape of people in case of fire.
- [xviii] The PP will submit an affidavit that underground water will not be used in construction activity and they will also indicate the source of water.
- [xix] The PP shall ensure that the green area development shall be as per NGT decision.

Operational Phase:

- [i] The STP shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The STP should be installed at the remotest place in the project area.
- [ii] Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the treated water should have BOD maximum upto 10 ppm and the treated water will be used for flushing, gardening, DG set cooling and running of fountain in the water body to achieve zero exit discharge.
- [iii] For disinfection of the treated water ultra violate radiation or ozonization process should be used.
- [iv] The solid waste generated should be properly collected and segregated. Bio-degradable waste will be composed at site and dry/ inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.
- [v] Diesel power generating sets proposed as source of back up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986 and with appropriate stack height i.e. above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur content (maximum upto 0.25%).
- [vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Proposed Residential Complex.

- [vii] Weep holes in the compound retaining walls shall be provided to ensure natural drainage of accumulated water.
- [viii] Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment through sedimentation tanks must be done to remove suspended matter, oil and grease. The bore well pipe for rainwater recharging should be kept at least 5 mts. above the ground water table.
- [ix] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- [x] A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Haryana in three months time.
- [xi] Energy conservation measures like installation of LEDs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used LEDs 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 must be adopted to the maximum extent possible for energy conservation.
- [xii] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The biodegradable waste should be composted by vermi-composting at the site ear marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- [xiii] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.
- [xiv] The PP will use water from the already existing tube wells for domestic purposes only after getting permission from CGWA during operational phase.
- [xv] The traffic plan and the parking plan proposed by the PP should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points of the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.
- [xvi] The power back up will not be more than 100% of the total load.
- [xvii] Project proponent will use excess treated water in water bodies and for construction work at other sites. Treated water will not be allowed to go waste and enter into sewer.

PART-B. GENERAL CONDITIONS:

- [i] The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- [ii] Six monthly compliance reports should be submitted to the HSPCB and Regional Office, MoEF, Gol, Northern Region, Chandigarh and a copy to the SEIAA Haryana, Panchkula.
- [iii] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information had been given for getting approval of this project.
- [iv] The PP will start construction only after getting NOC from the Forest Department that the area under consideration does not fall under Section 4 and 5 of PLPA-1900.
- [v] 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, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vi] The PP will use LEDs in Godowns also to further improve the electricity saving for which PP agrees.
- [vii] The PP will provide tall trees with broad leaves.
- [viii] The PP will provide Helipad facility in all the towers/ buildings where the height is more than 200 meters.
- [ix] The PP will provide at least one hydraulic lift.

- [x] The PP should ensure that natural drainage line is not disturbed and is maintained properly.
- [xi] The PP will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.

126.07 Environmental Clearance for proposed Residential Plotted Colony alongwith Group Housing Project, Village Mohmmadpur Gujjar & Sohna, Sector-2, Gurgaon by M/s Supertech Limited

Project Proponent:Sh. Ashok Kumar, Authorized SignatoryConsultant:Vardan EnviroNet Solutions

The project proponent submitted the case for obtaining Environmental Clearance to the SEIAA, Haryana on 20.01.2015 as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was

elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015.

This case was taken up by the Ministry of Environment and Forest & Climate Change, Government of India for approval of Terms of Reference in its 148th held on 20.05.2015. The terms of reference were approved by the Ministry of Environment and Forest & Climate Change, Government of India and conveyed to the project proponent vide letter No. 21-97/2015-IA.III dated 22.06.2015. The case was again transferred to SEIAA after the reconstitution of SEIAA/SEAC on 21.08.2015.

The project proponent vide their letter dated 28.08.2015 submitted the EIA/EMP on the bases of ToR approved by the Ministry of Environment and Forest & Climate Change, Government of India.

Thereafter the case was taken up for appraisal in the 123rd meeting of the SEAC held on 11.12.2015.

- 1. The PP should submit surface drainage map.
- 2. The PP should submit an undertaking that they will use ultra low sulpher fuel in DG Sets.
- 3. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air pollution in view of exceeding baseline data.
- 4. The PP should submit detailed design calculations of STP alongwith dimension of each component and also submit unit wise reduction of BOD for STP.
- 5. The PP should submit solar energy conservation plan as per HAREDA.
- 6. The PP should submit MSW Bio composting plan in open area.
- 7. The PP should submit ground water site specific hydro-geological details along with recharge capacity of recharge pit based on field test and also submit revised Rain water harvesting pit and its maintenance plan.
- 8. The PP should submit detail design with dimensions of recharge pit and de-silting chamber.
- 9. PP should submit surface/stilt parking plan along with details of parking space provided & traffic movement pattern along with width of internal roads.
- 10. PP should submit revised site plan showing, electric panel room & other constructions within zoned area only.

- 11. The PP should submit revised built-up area statement to include balconies in the Non F.A.R. areas which has not been taken into account.
- 12. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 123rd meeting were conveyed to the project proponent vide letter No. 345 dated 22.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 27.01.2016.

During presentation, the Committee was informed that it is a proposed construction of proposed Residential Plotted Colony alongwith Group Housing Project, Village Mohmmadpur Gujjar & Sohna, Sector-2, District Gurgaon, Haryana. The estimated cost of the project is Rs. 748 Crores. Total Plot area is 100.36875 Acres (4, 06,177.92 Sq. Meters) (Group Housing=20.16 Acres) and (Plotted Colony=80.20875 Acres). Total built up area will be approximately 5,14,990.913 Sq. Meters (Group Housing=234976.843 Sq. Meters) and (Plotted Colony=287112.01 Sq. Meters). Basement area of 72586.70 Sq. Meters (Group Housing=44863.73 Sq. Meters) and (Plotted Colony=27722.97 Sq. Meters) has been proposed. The project will comprise of 691 units in plotted colony and Residential Apartments, EWS Apartments, Nursing Home, Nursery and Primary Schools in Group Housing. The maximum height of the building is approx. 80.85 meters. It was also informed that the green area development has been kept as 39% (i.e. 1, 58,450.00 Sq. Meter approximately) of the net plot area. 15,957.23 Sq. Meters of the net plot area would be earmarked for green belt in the project area. 2,565.58 Sq. Meters of the net plot area would be earmarked for avenue plantation in the project area. 32,678.57 Sq. Meters of the net plot area would be earmarked for organized green in the project area and 1, 07,248.60 sq. meters shall be earmarked for parks and small green areas. The total water requirement for the project will be 3295 KLD (i.e. 1688 KLD of fresh water & 1607 KLD of recycled treated water). The waste water generation will be 2346 KLD which will be treated upto tertiary level in 2 STPs having total capacity of 2820 KLD.(1600 KLD & 1220 KLD respectively). The STP treated water will be used for flushing and horticulture purposes.

The Air quality data shows exceeding baseline in respect of PM_{10} parameter which ranges approximately from 85.30 µg/ cubic meter -114.5 µg/ cubic meter .Incremental air pollution in respect of PM_{10} is 0.070 µg/ cubic meter. PP has submitted special mitigative measures for controlling air pollution for construction phase and operation phase which includes 5 meters high barricade wall at the periphery, broad leafy trees would be planted as green belt, trees with heavy foliage would be planted on both side of carriage way, ultra low sulphur Diesel (0.025 ppm) would be used as fuel in DG Sets, Stack height of DG set would be as per CPCB norms. These measures would minimize the impact on air environment.

It was informed by the project proponent that the power requirement for the project will be 11784.09 KW and for power back up they will install 9 Nos. of DG sets of total capacity of 8900 KVA. Parking requirement for the project as per Haryana Bye Laws is 2396 ECS but the parking proposed to be provided in the project is 2859 ECS. They have fire and safety plan as per the National Building Code for which the PP has submitted the duly approved fire fighting plans. There will be total solid waste generation of 8690 Kg/day during operational phase. Out of this the bio-degradable waste will be composted in the project premises and the manure produced will be used for horticulture and green development. The calculations of the same are in accordance with the prescribed norms. It was pointed out that the required water for the project will be provided through HUDA Municipal supply.

Detailed discussions were held about Solid Waste Management, rain water harvesting, fire fighting plan, noise and vibration plan, health and welfare of the laborers, electrical hazard plan, environment monitoring plan, energy conservation measures and environment management plan. There will be 56 numbers of rain water harvesting structures as approved by the Central Ground Water Authority (CGWA). The mitigation measures were found in order by the Committee.

After deliberations the Committee rated this project with **"Gold Rating"** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following stipulations:

PART A-SPECIFIC CONDITIONS:-Construction Phase:-

- [i] A first aid room as proposed in the project report will be provided both during construction and operational phase of the project.
- [ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- [iii] All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- [iv] Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed off taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- [v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.
- (vi) The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- [vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- [viii] Ambient noise levels should conform to the residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated residential standards.

- [ix] Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and as amended on 27th August 2003.
- [x] Ready mixed concrete must be used in building construction.
- [xi] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.
- [xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices as referred.
- [xiii] Permission from Competent Authority for supply of water shall be obtained prior to operation of the project.
- [xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- [xv] 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.
- [xvi] The approval of the competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.
- [xvii] The PP will provide minimum one hydraulic ladder for escape of people in case of fire.
- [xviii] The PP will submit an affidavit that underground water will not be used in construction activity and they will also indicate the source of water.
- [xix] The PP shall ensure that the green area development shall be as per NGT decision.

Operational Phase:

- [i] The STP shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The STP should be installed at the remotest place in the project area.
- [ii] Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the treated water should have BOD maximum upto 10 ppm and the treated water will be used for flushing, gardening, DG set cooling and running of fountain in the water body to achieve zero exit discharge.
- [iii] For disinfection of the treated water ultra violate radiation or ozonization process should be used.
- [iv] The solid waste generated should be properly collected and segregated. Bio-degradable waste will be composed at site and dry/ inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.
- [v] Diesel power generating sets proposed as source of back up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986 and with appropriate stack height i.e. above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur content (maximum upto 0.25%).
- [vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Proposed Residential Complex.
- [vii] Weep holes in the compound retaining walls shall be provided to ensure natural drainage of accumulated water.
- [viii] Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment through sedimentation tanks must be done to remove suspended matter, oil and grease. The bore well pipe for rainwater recharging should be kept at least 5 mts. above the ground water table.
- [ix] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- [x] A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Haryana in three months time.
- [xi] Energy conservation measures like installation of LEDs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used LEDs 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 must be adopted to the maximum extent possible for energy conservation.

- [xii] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The biodegradable waste should be composted by vermi-composting at the site ear marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- [xiii] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.
- [xiv] The PP will use water from the already existing tube wells for domestic purposes only after getting permission from CGWA during operational phase.
- [xv] The traffic plan and the parking plan proposed by the PP should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points of the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.
- [xvi] The power back up will not be more than 100% of the total load.
- [xvii] Project proponent will use excess treated water in water bodies and for construction work at other sites. Treated water will not be allowed to go waste and enter into sewer.

PART-B. GENERAL CONDITIONS:

- [i] The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- [ii] Six monthly compliance reports should be submitted to the HSPCB and Regional Office, MoEF, Gol, Northern Region, Chandigarh and a copy to the SEIAA Haryana, Panchkula.
- [iii] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information had been given for getting approval of this project.
- [iv] The PP will start construction only after getting NOC from the Forest Department that the area under consideration does not fall under Section 4 and 5 of PLPA-1900.
- [v] 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, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vi] The PP will use LEDs in Godowns also to further improve the electricity saving for which PP agrees.
- [vii] The PP will provide tall trees with broad leaves.
- [viii] The PP will provide Helipad facility in all the towers/ buildings where the height is more than 200 meters.
- [ix] The PP will provide at least one hydraulic lift.
- [x] The PP should ensure that natural drainage line is not disturbed and is maintained properly.
- [xi] The PP will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.

126.08	Environmental Clearance for proposed Residential Plotted Colony, Village				
	Naurai	ngpur, S	Sector-78-79, District Gurgaon by M/s Revital Reality Pvt. Ltd		
Project Propor	nent	:	Sh. Ashok Kumar, Authorized Signatory		
Consultant		:	Vardan EnviroNet Solutions		

The project proponent submitted the case for obtaining Environmental Clearance to the SEIAA, Haryana on 20.01.2015 as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015.

This case was taken up by the Ministry of Environment and Forest & Climate Change, Government of India for approval of Terms of Reference in its 148th held on 20.05.2015. The terms of reference were approved by the Ministry of Environment and Forest & Climate

Change, Government of India and conveyed to the project proponent vide letter No. 21-96/2015-IA.III dated 22.06.2015. The case was again transferred to SEIAA after the reconstitution of SEIAA/SEAC on 21.08.2015.

The project proponent vide their letter dated 28.08.2015 submitted the EIA/EMP on the bases of ToR approved by the Ministry of Environment and Forest & Climate Change, Government of India.

Thereafter the case was taken up for appraisal in the 123rd meeting of the SEAC held on 11.12.2015.

After detailed discussions, the following shortcomings were concluded:

- 1. Aravali NOC issued by the Deputy Commissioner, Gurgaon is incomplete as it does not cover all the Khasra Numbers. PP should submit the correct copy of Aravali NOC from Deputy Commissioner, Gurgaon.
- 2. The PP should submit an undertaking that they will use ultra low sulpher fuel in DG Sets.
- 3. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air pollution in view of exceeding baseline data.
- 4. The PP should submit detailed design calculations of STP alongwith dimension of each component and also submit unit wise reduction of BOD for STP.
- 5. The PP should submit solar energy conservation plan as per HAREDA.
- 6. The PP should submit MSW Bio composting plan in open area.
- 7. The PP should submit ground water quality data from NABL approved lab.
- 8. The PP should submit ground water site specific hydro-geological details along with recharge capacity of recharge pit based on field test and also submit revised Rain water harvesting pit and its maintenance plan.
- 9. The PP should submit detail design with dimensions of recharge pit and de-silting chamber.
- 10. PP should submit surface/stilt parking plan along with details of parking space provided & traffic movement pattern along with width of internal roads.
- 11. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 123rd meeting were conveyed to the project proponent vide

letter No. 344 dated 22.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on

27.01.2016.

- 1. Aravali NOC issued by the Deputy Commissioner, Gurgaon is incomplete as it does not cover all the Khasra Numbers. PP should submit the correct copy of Aravali NOC from Deputy Commissioner, Gurgaon.
- 2. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air pollution in view of exceeding baseline data.
- 3. The PP should submit MSW Bio composting plan in open area.

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The PP is advised to submit the required information as detailed above within 30 days and it was made clear to the PP that his project will be considered as received only after the receipt of complete information. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.09 Environmental Clearance for the proposed IT/ITES Special Economic Zone at Village Behrampur, Balola & Bandhwari, Gurgaon by M/s G.P. Realtors Pvt. Ltd. Project Proponent : Dr. Asha Sharma, Advisor Consultant : Green C India

The project proponent submitted the case for obtaining Environmental Clearance to the SEIAA, Haryana on 10.12.2014 as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015.

This case was taken up by the Ministry of Environment and Forest & Climate Change, Government of India for approval of Terms of Reference in its 148th held on 20.05.2015. The terms of reference were approved by the Ministry of Environment and Forest & Climate Change, Government of India and conveyed to the project proponent vide letter No. 21-110/2015-IA.III dated 27.07.2015. The case was again transferred to SEIAA after the reconstitution of SEIAA/SEAC on 21.08.2015.

The project proponent vide their letter dated 31.08.2015 submitted the EIA/EMP on the bases of ToR approved by the Ministry of Environment and Forest & Climate Change, Government of India.

Thereafter the case was taken up for appraisal in the 123rd meeting of the SEAC held on 11.12.2015.

- 1. Aravali NOC issued by the Deputy Commissioner, Gurgaon is incomplete as it does not cover all the Khasra Numbers. PP should submit the correct copy of Aravali NOC from Deputy Commissioner, Gurgaon.
- 2. The PP should submit an undertaking that they will use ultra low sulpher fuel in DG Sets.
- 3. The PP should submit an undertaking that they will install low NOX burners in DG Sets.
- 4. The PP should submit details of incremental pollution load from DG Sets alongwith mitigation measures for controlling air and noise pollution in view of exceeding baseline data.
- 5. The PP should submit latest analysis report of Ambient Air Quality as the reports submitted by the PP shows values on lower side.
- 6. The PP should submit an undertaking for Zero Liquid Discharge.
- 7. The PP should submit solar energy generation plan as per HAREDA.
- 8. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 123rd meeting were conveyed to the project proponent vide letter No. 343 dated 22.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 27.01.2016.

After detailed discussions, the following shortcomings were concluded:

1. Aravali NOC issued by the Deputy Commissioner, Gurgaon is incomplete as it does not cover all the Khasra Numbers. PP should submit the correct copy of Aravali NOC from Deputy Commissioner, Gurgaon.

The PP is advised to submit the required information as detailed above within 30 days and it was made clear to the PP that his project will be considered as received only after the receipt of complete information. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.10 Environmental Clearance for the proposed Commercial Colony, Village Naurangpur, Sector-80, District Gurgaon, Haryana by M/s R.P. Estates Pvt. Ltd.

Project Proponent:Sh. Amit Parmar, Vice PresidentConsultant:Vardan EnviroNet Solutions

The project proponent submitted the case for obtaining Environmental Clearance to the SEIAA, Haryana on 16.12.2014 as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015. This case could not taken up by the MoEF and was again transferred to SEIAA on 31.08.2015 after the reconstitution of SEIAA/SEAC on 21.08.2015.

Thereafter the case was taken up for appraisal in the 119th meeting of the SEAC held on 21.10.2015.

- 1. The PP should submit a detailed clarification from HUDA regarding availability of water in the area and corresponding summation of commitments made so far to be obtained by the PP from HUDA in the concerned area.
- 2. PP should submit surface parking plan along with details of parking space provided & traffic movement pattern.
- 3. PP should submit ground excavation plan showing quantity of soil excavated & its disposal.
- 4. PP should submit layout plan of buildings with respect to sun path & optimized solar access & wind pattern.
- 5. PP should provide detail of total paved area of site under parking, roads, paths or any other use.
- 6. The PP should submit ground water site specific hydrological details alongwith infiltration rate of recharge pit along with detailed Rain water harvesting plan along with number of pits on the basis of infiltration rate.
- 7. The PP will resubmit the location of recharge pits by locating it away from STP plant.
- 8. The PP should submit detailed design calculations of STP alongwith dimension of each component.
- 9. The PP should submit an affidavit by a Director of the Company giving latest status of project.
- 10. The PP should submit 500 meter radius google image.
- 11. The PP should submit detailed green belt plan viz:

- (a) Width, length and area to be covered under the green belt;
- (b) Number of rows of trees to be planted; and
- (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 119th meeting were conveyed to the project proponent vide

letter No. 146 dated 02.11.2015. The project proponent submitted the reply of the shortcomings vide letter dated 13.11.2015.

Thereafter the case was taken up in the 123rd meeting of the SEAC held on 2015.

10.12.2015.

After detailed discussions, the following shortcomings were concluded:

- 1. The PP should submit an undertaking regarding disposal of excavated soil in their adjacent land.
- 2. The PP should submit detailed Rain water harvesting plan along with number of pits on the basis of infiltration rate.
- 3. The PP will resubmit the location of recharge pits by locating it away from STP plant.
- 4. The PP should submit detailed design calculations of STP alongwith dimension of each component.
- 5. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 123rd meeting were conveyed to the project proponent vide

letter No. 352 dated 22.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 27.01.2016.

During presentation, the Committee was informed that it is a proposed construction of Commercial Colony, Village Naurangpur, Sector-80, District Gurgaon, Haryana. The estimated cost of the project is Rs. 123.60 Crores. Total built up area will be approximately 35983.116 Sq. Meters. Basement area of 16004.14 Sq. Meters has been proposed. The project will comprise of 3 basements & commercially building (G+ 24 floors). The maximum height of the building is approx. 93.45 meters. It was also informed that the green area development has been kept as 31.56% (i.e. 3552.44 Sq. Meter approximately) of the net plot area. 12.70% (1429.53 Sq. Meters) of the net plot area would be earmarked for avenue plantation in the project area. 12.63% (1421.65 Sq. Meters) of the net plot area would be earmarked for organized green in the project area and 6.23% (701.26 Sq. Meters) of total area under lawn area. The total water requirement for the project will be 236 KLD (i.e. 146 KLD of fresh water & 90 KLD of recycled treated water). The waste water generation will be 100 KLD which will be treated up to tertiary level in STP having total capacity of 120 KLD. The STP treated water will be used for flushing and horticulture purposes

The Air quality data shows within range baseline in respect of PM₁₀ and PM_{2.5} parameters which ranges approximately from 79.38-82.50 and 42.10-49.50 respectively. Incremental air pollution in respect of PM is 0.52ug/m³. PP has submitted special mitigation measures for controlling air pollution for construction phase and operation phase which

includes 5 meters high barricade wall at the periphery, broad leafy trees would be planted as green belt, trees with heavy foliage would be planted on both side of carriage way, ultra low sulphur Diesel (0.025 ppm) would be used as fuel in DG Sets, Stack height of DG set would be as per CPCB norms. These measures would minimize the impact on air environment.

It was informed by the project proponent that the power requirement for the project will be 4000 KVA and for power back up they will install 7 Nos. of DG Sets of 500 KVA each (7x500KVA). Parking requirement for the project as per Haryana Bye Laws is 473 ECS but the parking proposed to be provided in the project is 478 ECS. They have fire and safety plan as per the National Building Code for which the PP has submitted the duly approved fire fighting plans. There will be total solid waste generation of 545 Kg/day during operational phase. Out of this the bio-degradable waste will be composted in the project premises and the manure produced will be used for horticulture and green development. The calculations of the same are in accordance with the prescribed norms. It was pointed out that the required water for the project will be provided through HUDA Municipal supply.

Detailed discussions were held about Solid Waste Management, rain water harvesting, fire fighting plan, noise and vibration plan, health and welfare of the laborers, electrical hazard plan, environment monitoring plan, energy conservation measures and environment management plan. There will be 03 numbers of rain water harvesting structures as approved by the Central Ground Water Authority (CGWA). The mitigation measures were found in order by the Committee.

After deliberations the Committee rated this project with **"Gold Rating"** and was of the unanimous view that this case for granting Environmental Clearance under EIA Notification dated 14.9.2006 issued by the Ministry of Environment and Forest, Government of India should be recommended to the SEIAA with the following stipulations:

PART A-SPECIFIC CONDITIONS:-Construction Phase:-

- [i] A first aid room as proposed in the project report will be provided both during construction and operational phase of the project.
- [ii] Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- [iii] All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- [iv] Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed off taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- [v] Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.
- (vi) The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- [vii] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.

- [viii] Ambient noise levels should conform to the residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated residential standards.
- [ix] Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and as amended on 27th August 2003.
- [x] Ready mixed concrete must be used in building construction.
- [xi] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.
- [xii] Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices as referred.
- [xiii] Permission from Competent Authority for supply of water shall be obtained prior to operation of the project.
- [xiv] Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
- [xv] 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.
- [xvi] The approval of the competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.
- [xvii] The PP will provide minimum one hydraulic ladder for escape of people in case of fire.
- [xviii] The PP will submit an affidavit that underground water will not be used in construction activity and they will also indicate the source of water.
- [xix] The PP shall ensure that the green area development shall be as per NGT decision.

Operational Phase:

- [i] The STP shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The STP should be installed at the remotest place in the project area.
- [ii] Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the treated water should have BOD maximum upto 10 ppm and the treated water will be used for flushing, gardening, DG set cooling and running of fountain in the water body to achieve zero exit discharge.
- [iii] For disinfection of the treated water ultra violate radiation or ozonization process should be used.
- [iv] The solid waste generated should be properly collected and segregated. Bio-degradable waste will be composed at site and dry/ inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.
- [v] Diesel power generating sets proposed as source of back up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986 and with appropriate stack height i.e. above the roof level as per the CPCB norms. The diesel used for DG sets should be of low sulphur content (maximum upto 0.25%).
- [vi] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Proposed Residential Complex.
- [vii] Weep holes in the compound retaining walls shall be provided to ensure natural drainage of accumulated water.
- [viii] Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pre-treatment through sedimentation tanks must be done to remove suspended matter, oil and grease. The bore well pipe for rainwater recharging should be kept at least 5 mts. above the ground water table.
- [ix] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- [x] A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about

building materials & technology, R & U Factors etc and submitted to the SEIAA, Haryana in three months time.

- [xi] Energy conservation measures like installation of LEDs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used LEDs 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 must be adopted to the maximum extent possible for energy conservation.
- [xii] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The biodegradable waste should be composted by vermi-composting at the site ear marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- [xiii] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.
- [xiv] The PP will use water from the already existing tube wells for domestic purposes only after getting permission from CGWA during operational phase.
- [xv] The traffic plan and the parking plan proposed by the PP should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points of the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.
- [xvi] The power back up will not be more than 100% of the total load.
- [xvii] Project proponent will use excess treated water in water bodies and for construction work at other sites. Treated water will not be allowed to go waste and enter into sewer.

PART-B. GENERAL CONDITIONS:

- [i] The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- [ii] Six monthly compliance reports should be submitted to the HSPCB and Regional Office, MoEF, Gol, Northern Region, Chandigarh and a copy to the SEIAA Haryana, Panchkula.
- [iii] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information had been given for getting approval of this project.
- [iv] The PP will start construction only after getting NOC from the Forest Department that the area under consideration does not fall under Section 4 and 5 of PLPA-1900.
- [v] 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, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vi] The PP will use LEDs in Godowns also to further improve the electricity saving for which PP agrees.
- [vii] The PP will provide tall trees with broad leaves.
- [viii] The PP will provide Helipad facility in all the towers/ buildings where the height is more than 200 meters.
- [ix] The PP will provide at least one hydraulic lift.
- [x] The PP should ensure that natural drainage line is not disturbed and is maintained properly.
- [xi] The PP will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.

126.11 Environmental Clearance for proposed Affordable Group Housing Colony project at Village Dhamlaka, Sector-26 & 27, Rewari, Haryana by M/s B.M Gupta Developers Pvt. Ltd

Project Proponent : Sh. Naveen Singhal, Authorized Signatory

Consultant : Vardan EnviroNet Solutions

The project was submitted to the SEIAA, Haryana on 06.02.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

The case could not be taken up in the SEAC as the term of SEIAA/SEAC was elapsed on 21.03.2015. Therefore, the case was transferred to Ministry of Environment and Forest, Government of India in the month of March, 2015. This case could not taken up by the MoEF and was again transferred to SEIAA on 31.08.2015 after the reconstitution of SEIAA/SEAC on 21.08.2015.

Thereafter, the case was taken up for appraisal in the 121st meeting of the SEAC held on 19.11.2015.

After detailed discussions, the following shortcomings were concluded:

- 1. The PP should submit the assurance of the supply of the water during construction phase from safe area through tankers and permission from CGWA for using the ground water of the existing borewell including permission from HUDA for supply of water during operation Phase with detailed clarification from HUDA regarding availability of water in the area.
- 2. The PP should submit assurance from Electricity Department.
- 3. The PP should submit contour map of surrounding area.
- 4. The PP should submit incremental pollution load alongwith mitigation measures and also submit original analysis reports.
- 5. The PP should submit detailed design calculations of STP alongwith dimension of each component and submit unit wise reduction of BOD for STP including hydraulic design.
- 6. The PP should submit site specific plan of Rain Water Harvesting pits alongwith detail design and recharge capacity of recharge pit and should submit Rain water harvesting maintenance plan.
- 7. The PP should revised water balance diagram.
- 8. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and
 - (c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The observations of 121st meeting were conveyed to the project proponent vide

letter No. 293 dated 01.12.2015. The project proponent submitted the reply of the shortcomings vide letter dated 04.01.2016.

Thereafter the case was taken up in the 126th meeting of the SEAC held on

27.01.2016.

- The PP should submit the assurance of the supply of the water during construction phase from safe area through tankers and permission from CGWA for using the ground water of the existing borewell including permission from HUDA for supply of water during operation Phase with detailed clarification from HUDA regarding availability of water in the area.
- 2. The PP should submit contour map of surrounding area.
- 3. The PP should submit site specific plan of Rain Water Harvesting pits alongwith detail design and recharge capacity of recharge pit and should submit Rain water harvesting maintenance plan.
- 4. The PP should submit detailed green belt plan viz:
 - (a) Width, length and area to be covered under the green belt;
 - (b) Number of rows of trees to be planted; and

(c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.

The PP is advised to submit the required information as detailed above within 30

days and it was made clear to the PP that his project will be considered as received only after the receipt of complete information. In case of non-receipt of information in time, the case shall be recommended for rejection/ filing.

126.12 Environmental Clearance for the proposed 5 MLD Common Effluent Treatment Plant (CETP) at HSIIDC, Village Saha, District Ambala, Haryana by M/s HSIIDC

Project Proponent : Sh. R.K. Mehta, Senior Manager Consultant : Shivalik Consultants

The project was submitted to the SEIAA, Haryana on 01.10.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 27.01.2016.

The project proponent presented the case for proposed ToRs. The PP is directed to prepare the EIA by incorporating the following ToR:

1. Executive summary of the project – giving a prima facie idea of the objectives of the proposal, use of resources, justification, *etc.* In addition, it should provide a compilation of EIA report, EMP and the post project monitoring plan in brief.

Project description

- 2. Details of the industries for which CETP facility is proposed including raw materials used and products manufactured.
- 3. Expected quantity of wastewater from each industry and justification for selecting the proposed capacity of the treatment plant/modules.
- 4. Characteristics of effluent and proposed segregation of streams, if any, from individual member industries.
- 5. Details of mode of effluent collection system either by tankers and/or pipeline, *etc.*, and proposed trouble-shooting mechanism.
- 6. Monitoring protocol in case of collection of effluent through pipeline and/or tankers.
- 7. Details on physical, chemical and biological characteristics of the combined effluent and its concentrations and the basis for the same.
- 8. Details of equalization tank at least for 24 hrs; and guard ponds for holding treated wastewater or continuous monitoring facilities, if any.
- 9. Details of the proposed treatment schemes supported by the treatability studies including source separation of streams for specific mode of collection and treatment either at individual industry or at CETP (based on economic and operational ease considerations).
- 10. Built-in flexibility provisions to deal with quantitative and qualitative fluctuations.
- 11. Organizational setup for collection of pretreated effluents, treatment and disposal of the treated effluents, *etc.* and deployment of qualified/skilled man power.
- 12. Details of O&M for maximum utilization of the designed capacity of the plant.
- 13. Proposed monitoring protocol for stage-wise quality control w.r.t. various characteristics and maintenance schedules followed for all rotating equipment including lubricating/oil fill, operational chemicals and laboratory chemicals.
- 14. For any sensitive environmental parameters such as heavy metals, fluorides, *etc.*, details on improved material of construction of tanks and other equipments such as corrosion resistance, allowance, *etc.*

- 15. Details of power consumption and stand-by arrangements like the diesel generator (DG) sets, dual fuel (gas and oil) for uninterrupted operation of treatment plant.
- 16. Protocol and mechanism to accept the effluent by tankers only during day time, including the adequacy of the receiving/holding tanks, etc.
- 17. Impact of the project on local infrastructure of the study area such as road network, etc. If the study area requires any additional infrastructure, details of the agency responsible for the same should be included along with the time frame. Details of the permission from the competent Authority for conveyor belt crossing the village road.
- 18. If the ultimate disposal is through a marine outfall then preliminary design of the outfall with estimated initial dilution.
- 19. Details of laboratory, workshop, database, library, waste exchange centers, etc. in CETP.
- 20. Details on equity by the member industries/non refundable membership fee to ensure continuity of membership and financial model, etc.
- 21. Any litigation pending against the project and /or any direction /order passed by any Court of Law against the project, if so, details thereof.

Description of the environment

- 22. The study area shall be up to a distance of 5 km from the boundary of the proposed site and all along the collection network/route map of tanker movement, treated wastewater carrying pipe-line and the receiving environment at the point of disposal.
- 23. All the coordinates of the project site may be demarcated on the toposheet (1:50000 scale).
- 24. Land use of study area should include data about the residential/ institutional/nearest village/ township/ locality/ housing society, etc., based on the satellite imagery.
- 25. Baseline data of the study area w.r.t. different components of environment viz. air, noise, water, land, and biology and socio-economic collected as per the guidance given in the manual.
- 26. Site-specific meteorological data of one season.
- 27. Ambient Air Quality (AAQ) data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall include suspended particulate matter (SPM), respirable suspended particulate matter (RSPM), SO2, NOx, and VOCs. The location of the monitoring stations should be decided in such way that the factors like pre-dominant downwind direction, population zone and sensitive receptors including reserved forests, if any are considered. There should be at least one monitoring station in the upwind direction and one in downwind direction at about 500 m.
- 28. Assessment of receiving water bodies/land and groundwater for all the relevant environmental parameters
- 29. Noise monitoring on all the four sides of the project site
- 30. Monitoring of odour emissions from the project site
- 31. Details of flora and fauna. In case of any scheduled fauna, conservation plan should be provided.
- 32. If any incompatible land-use attributes fall within a 5 km radius of the project boundary, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the SEAC. Incompatible land use attributes include:
 - Public water supply areas from rivers/surface water bodies, from groundwater
 - Scenic areas/tourism areas/hill resorts
 - Religious places, pilgrim centers that attract over 10 lakh pilgrims a year
 - Protected tribal settlements (notified tribal areas where industrial activity is not permitted); CRZ
 - Monuments of national significance, World Heritage Sites
 - Cyclone, Tsunami prone areas (based on last 25 years);
 - Airport areas

- Any other feature as specified by the State or local government and other features as locally applicable, including prime agricultural lands, pastures, migratory corridors, etc.
- 33. If ecologically sensitive attributes fall within a 5 km radius of the project boundary, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC/SEAC. Ecological sensitive attributes include:
 - National parks
 - Wild life sanctuaries Game reserve
 - Tiger reserve/elephant reserve/turtle nesting ground
 - Breeding grounds
 - Core zone of biosphere reserve
 - Habitat for migratory birds
 - Mangrove area
 - Areas with threatened (rare, vulnerable, endangered) flora/fauna
 - Protected corals
 - Wetlands
 - Zoological gardens
 - Gene Banks
 - Reserved forests
 - Protected forests
 - Any other closed/protected area under the Wild Life (Protection) Act, 1972,
 - any other area locally applicable

Anticipated environmental impacts and mitigation measures

- 34. Details in case, if the effluent conveyance system uses pipe lines, details regarding minimum (one day) storage tank with mixing facility to keep it in aerobic conditions at source industry and mechanism to ensure compliance with prescribed standards at this storage tank.
- **35.** Anticipated environmental impacts that require specific studies for significance as given in impact matrix (Manual may be referred). Tools as given in the manual may be used for the assessment of environmental impacts.
- **36.** Details regarding soil and groundwater impacts and regular monitoring protocols suggested for ensuring no significant impacts, besides preventive measures.
- 37. Impact on the disposal mode-specific receiving environment.
- **38.** Impacts due to laying of pipe lines for effluent collection and for the disposal of the treated wastewaters.
- **39.** Availability of the land for proposed treatment for ultimate capacity and to accommodate required greenbelt development.
- 40. Details of stormwater collection network and utilization plan, etc.
- 41. Detailed plan of treated waste water disposal/ reuse/ utilization / management.
- 42. Proposed measures for occupational safety and health of the workers.
- 43. Details of green cover giving details of species, width of plantation, planning schedule, etc.
- 44. 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 the operational phase.

Analysis of alternative resources and technologies

- 45. Comparison of alternate sites considered and the reasons for selecting the proposed site. Conformity of the site with the prescribed guidelines in terms of river, highways, railways, etc.
- 46. Drainage area and alterations, if any due to the project.
- 47. Details on improved technologies.

Environmental monitoring program

- 48. The name of the laboratory recognized by the MoEF/ CPCB / NBA, etc. through which the monitoring / analysis shall be carried out.
- 49. Appropriate monitoring network has to be designed and proposed for regulatory compliance and to assess the residual impacts, if any.

Additional studies

- 50. The project proponent should undertake risk assessment, covering plant operations and collection network and disposal network and tankers movement.
- 51. Details of the proposed safeguard measures including measures for fire hazards.
- 52. Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.
- 53. Points identified in public hearing and commitment of the project proponent to the same. Detailed action plan addressing the issues raised, and the details of necessary allocation of funds shall be provided.

Environmental management plan

- 54. EMP devised to mitigate the adverse impacts of the project should be provided along with item-wise cost of its implementation.
- 55. Proposed post-project monitoring programme to ensure compliance to the approved management plan including administrative and technical organizational structure.

The PP will submit Environment Impact Assessment Report by incorporating the

Terms of References (ToR) as approved by the Committee within a time schedule in compliance

of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as

received only after receipt of complete information.

126.13 Environmental Clearance for Revision of Group Housing Colony located at Sector-112-113, Bajghera Road, Distt-Gurgaon, Haryana by M/s Lemon Land and Developers Pvt. Ltd.

Project Proponent:Sh. Anil Gupta, Authorised SignatoryConsultant:Grass Roots Research and Creation India Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 01.09.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th

meeting of the SEAC held on 27.01.2016.

The project proponent is directed to prepare the EIA by incorporating the ToR as

per Annexure-'B'.

Further, the project proponent will submit the following at the time of appraisal:

- 1. The PP to submit the certified copy of report from Regional Director, MoEF regarding status of compliance of the conditions stipulated in the Environmental Clearance as contained in the MoEF circular dated 30.05.2012.
- 2. The PP to submit Status of compliance of the conditions and environmental safeguards stipulated in the earlier clearance letters.
- 3. The PP to submit Details of the court cases, if any, pending in any court of law against the project as well as any directions passed by the court relating to the project directly or indirectly.

4. The PP to submit Details of the notices, if any, given to the project under section 5 of the Environment (Protection) Act, 1986 and section 18 of the Air (Prevention and Control of Pollution) Act, 1981.

The project proponent further stated that they are already generating data from October, 2015 and requested to utilize the baseline data. The Committee after detailed deliberations accepted the request of the PP.

The Committee after detailed deliberations accepted the request of the PP and it was decided that the PP will collect one month more baseline data and submit EIA report by incorporating the fresh data accordingly.

The PP will submit Environment Impact Assessment Report by incorporating the above mentioned Terms of References (ToR) as approved by the committee within a time schedule incompliance of EIA Notification dated 14.09.2006 alongwith the reply of other observations issued for taking up their case for appraisal. It was also decided that their project will be considered as received only after receipt of complete information.

126.14 Environmental Clearance for Expansion of Group Housing Project in located at Shikhopur, Sector-77, Gurgaon, Haryana by M/s Emaar MGF Land Ltd.

Project Proponent:Sh. Shishir Lal, General ManagerConsultant:Grass Roots Research and Creation India Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 01.09.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 27.01.2016.

The project proponent is directed to prepare the EIA by incorporating the ToR as

per Annexure-'B'.

Further, the project proponent will submit the following at the time of appraisal:

- 1. The PP to submit the certified copy of report from Regional Director, MoEF regarding status of compliance of the conditions stipulated in the Environmental Clearance as contained in the MoEF circular dated 30.05.2012.
- 2. The PP to submit Status of compliance of the conditions and environmental safeguards stipulated in the earlier clearance letters.
- 3. The PP to submit Details of the court cases, if any, pending in any court of law against the project as well as any directions passed by the court relating to the project directly or indirectly.
- 4. The PP to submit Details of the notices, if any, given to the project under section 5 of the Environment (Protection) Act, 1986 and section 18 of the Air (Prevention and Control of Pollution) Act, 1981.

The project proponent requested that they may be allowed to use the previously generated data which was in accordance with the standard Terms of Reference.

PP further stated that they are already generating data from October, 2015 and requested to utilize the baseline data. The Committee after detailed deliberations directed to project proponent to incorporate the baseline data in the EIA Reported generated from November, 2015 onwards.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.15 Environmental Clearance for proposed Terms of Reference of "Mounded Storage Vessels at Bharat Petroleum Corporation Ltd" at Village Dhansu, District Hisar, Haryana by M/s Bharat Petroleum Corporation Ltd.

Project Proponent:Sh. Y.C. Pandey, Authorised SignatoryConsultant:SGS Consultants

The project was submitted to the SEIAA, Haryana on 22.09.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th

meeting of the SEAC held on 27.01.2016.

The project proponent presented the case for proposed ToRs. The PP is directed

to prepare the EIA by incorporating the following ToR:

- 1. Executive summary of the project
- 2. Land used details of the site based on satellite imagery.
- 3. Project Description and Project Benefits
- 4. Proposal for safety buffer zone around the proposed site with map.
- 5. Detailed layout plan with provision of trucks parking area.
- 6. Details of the storage and technical specifications with safety aspects & standards.
- 7. Site details including satellite imagery from 5 km around the site by delineating land use pattern.
- 8. Land use along with maps (By using latest satellite imagery data) & cropping pattern, vegetation, Flora & Fauna.
- 9. Details within 500m with respect to all establishments/railway line/habitation etc.
- 10. Demography & Socio-economics of the area.
- 11. Baseline one month (Post-monsoon) data collection for air, water and soil for:
 - i. Ambient Air Quality monitoring for PM 2.5, PM 10, SO2, NOx
 - ii. Background levels of hydrocarbons (methane & non methane HC) and VOCs
 - iii. Soil sample analysis
 - iv. Base line underground and surface water quality in the vicinity of project.
 - v. Climatology & Meteorology including wind speed, wind direction, temperature, rainfall etc.
 - vi. Measurement of Noise levels.
- 12. Details of water consumption and source of water supply, waste water generation, treatment and utilization of treated water generated from the facilities and effluent disposal
- 13. Detailed solid waste generation, collection, segregation, its recycling and reuse, treatment and disposal
- 14. Assessment of impact on air, water, soil, solid/hazardous waste and noise levels.
- 15. Details of proposed preventive measures for leakages and accident.
- 16. Adequate width of approach road to avoid congestion and to have safe exit in emergencies.
- 17. Environmental Management Plan.
- 18. Risk Assessment & Disaster Management Plan
 - i. Identification of hazards
 - ii. Consequence Analysis
 - iii. Risk Assessment & proposed measures for Risk Reduction
 - iv. Action plan for firefighting facility as per OSID 117 norms.
- 19. Mitigating measures for transporting LPG.

- 20. The PP should submit ground water site specific hydrogeological details alongwith detail design and recharge capacity of recharge pit and should submit Rain water harvesting maintenance plan.
- 21. Details of proposed occupational Health Surveillance program for the employees and other labour.
- 22. Environmental Monitoring Programme.
- 23. Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.
- 24. Any litigation pending against the project and/ or any direction/order passed by any Court of Law against the project, if so, details thereof.
- 25. A tabular chart indicating point-wise compliance of the TOR.

The project proponent requested that they may be allowed to use the previously generated data which was in accordance with the standard Terms of Reference.

PP further stated that they are already generating data from October, 2015 and requested to utilize the baseline data. The Committee after detailed deliberations directed to project proponent to incorporate the baseline data in the EIA Reported generated from November, 2015 onwards.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.16 Environmental Clearance for the expansion of Group Housing Project located at Sector-87, Village Baselwa, Faridabad, Haryana by M/s SRS Real Estate Ltd

The project was submitted to the SEIAA, Haryana on 22.09.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 22.01.2016.

The Project Proponent requested for adjournment and the same was discussed in the meeting. The Committee acceded to the request and decided to issue 30 days notice to the PP. Accordingly the notice will be issued by the Secretary, SEAC to the Project Proponent.

126.17 Environmental Clearance for the Residential Plotted project, located at Village Dodhwa & Shamgarh, Sector-1, Nilokheri-Taraori, District Karnal, Haryana by M/s MG Estate Pvt. Ltd..

The project was submitted to the SEIAA, Haryana on 01.10.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The Project Proponent requested for adjournment and the same was discussed in the meeting. The Committee acceded to the request and decided to issue 30 days notice to the PP. Accordingly the notice will be issued by the Secretary, SEAC to the Project Proponent.

126.18 Environmental Clearance for the proposed expansion of Clinker Grinding Unit (1.5 to 2.5 Million TPA) along with installation of Captive Power Plant (10 MW) near village Khukhrana, P.O. Assan Kalan, District- Panipat (Haryana) by M/s Shree Cement Ltd

Project Proponent : Sh. Rakesh Bhargav, Authorized Signatory

Consultant : J.M. EnviroNet Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 01.10.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th

meeting of the SEAC held on 28.01.2016.

The project proponent presented the case for proposed ToRs. The PP is directed

to prepare the EIA by incorporating the following ToR:

Introduction

1. Executive summary of the project - giving a prima facie idea of the objectives of the proposal, use of resources, justification, etc. In addition, it should provide a compilation of EIA report, EMP and the post-project monitoring plan in brief.

Project Description

- 2. Justification for selecting the proposed unit size.
- 3. Land requirement for the project including its optimization, break up of land requirement and its availability. Norms prescribed by CEA should be kept in view.
- 4. Complete process flow diagram describing each of the unit processes and operations, along with material and energy inputs and outputs (material and energy balance).
- 5. Fuel analysis report (sulphur, ash content and mercury) including details of auxiliary fuel, if any. Details like quantity, quality, storage etc.
- 6. Quantity of fuel required its source and transportation, a confirmed fuel linkage/ copy of the MoU.
- 7. Source of water and its availability. Proof regarding availability of requisite quantity of water from the competent authority.
- 8. Details of water balance (water intake, use, wastewater generation) taking into account reuse and re-circulation of effluents. Additional water conservation measures, if any, proposed for the project.
- 9. Location of intake and outfall points (with coordinates) based on modeling studies. Details of modeling and the results obtained. It may be kept in view that the intake and outfall points are away from the mangroves.
- 10. Examine the feasibility of zero discharge. In case of any proposed discharge, its quantity, quality and point of discharge, users downstream, etc.
- 11. Explore the possibility of cooling towers installation. Details regarding the same.
- 12. Details regarding fly ash utilization as per new notification
- 13. Detailed plan of ash utilization / management.
- 14. Details of evacuation of ash.
- 15. Details regarding ash pond impermeability and whether it would be lined, if so details of the lining etc.
- 16. Details of desalination plant and disposal of sludge.
- 17. Explore the possibility of expansion of Port facilities instead of Copy of the Moll for Port facilities.

Description of the Environment

- 18. Toposheet with all the coordinates of the plant site demarcated (1:50000 scale).
- 19. The study area shall be up to a distance of 10 km from the boundary of project area for air quality considerations in view of impacts occurring at distant locations once emitted from a tall stack particularly in view of absence of source control for S02 in tail gases whereas for impacts on other components (such as water, soil quality and noise monitoring, etc.) the study area may be up to a distance of 5 Km.

- 20. Land use of study area should include data about the residential/ institutional/nearest village/ township/ locality/ housing society, etc., based on the satellite imagery.
- 21. Topography of the area clearly indicating the presence of pits deeper than one metre, if any. If these pits require to be filled in, details of filling material to be used, quantity required, its source, mode of transport, etc.
- 22. Baseline data of the study area with respect to different components of environment viz. air, noise, water, land, and biology and socio-economic as per the guidance given in the manual.
- 23. Information regarding surface hydrology and water regime and impact due to the project, if any, on the same.
- 24. Site-specific meteorological data of one season.
- 25. AAQ data (except monsoon) of one complete season along with the monitoring dates. The parameters to be covered shall include SPM, RSPM, S02, NOx (ground level). The location of the monitoring stations should be decided in such a way that the pre-dominant downwind direction, population zone and sensitive receptors including reserved forests are considered. There should be at least one monitoring station in the upwind direction and one in down-wind direction where maximum GLC falls.
- 26. Noise level monitoring data collected from locations from all the four sides surrounding the project area and also at sensitive receptors. If any incompatible land-use attributes fall within a 10 km radius of the project boundary, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC/SEAC. Incompatible land-use attributes include:
 - > Public water supply areas from rivers/surface water bodies, from groundwater
 - Scenic areas/tourism areas/hill resorts
 - > Religious places, pilgrim centers that attract over 10 lakh pilgrims a year
 - Protected tribal settlements (notified tribal areas where industrial activity is not permitted); CRZ
 - > Monuments of national significance, World Heritage Sites
 - > Cyclone, Tsunami prone areas (based on last 25 years);
 - Airport areas
 - Any other feature as specified by the State or local government and other features as locally applicable, including prime agricultural lands, pastures, migratory corridors, etc.
- 27. If ecologically sensitive attributes fall with in a 10 km radius of the project boundary, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC/SEAC. A map marking the location of such areas (existing or proposed) duly authenticated by the Chief Wildlife Warden. Ecological sensitive attributes include:
 - > National parks
 - > Wild life sanctuaries Game reserve
 - > Tiger reserve/elephant reserve/turtle nesting ground
 - Breeding grounds
 - > Core zone of biosphere reserve
 - Habitat for migratory birds
 - Mangrove area
 - > Areas with threatened (rare, vulnerable, endangered) flora/fauna
 - Protected corals
 - > Wetlands
 - Zoological gardens
 - ➢ Gene Banks
 - Reserved forests
 - Protected forests
 - Any other closed/protected area under the Wild Life (Protection) Act, 1972, any other area locally applicable

- 28. If the location falls in a valley, studies on specific issues connected to the management of natural resources.
- 29. If the location is on Seashore:
 - Identification of CRZ area: A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the project and associate facilities w.r.t. CRZ, coastal features such as mangroves, if any. The route of the pipeline, conveyor system etc. passing through CRZ, if any, should also be demarcated. The recommendations of the State Coastal Management Authority for the activities to be taken up in the CRZ.
 - Provide the CRZ map in 1:10000 scale in general cases and in 1:5000 scale for specific observations.
 - Environmental parameters Temperature, sea level pressure, wind speed, mean relative humidity, visibility, salinity, density, rainfall, fog, frequency and intensity of cyclones, sediment transport, seismic characteristics, fresh water influx
 - Details on marine biological parameters microbiological population, pathogenic bacteria, plankton distribution, fish spawning grounds in the adjoining waters, commercial fisheries potential, vegetation including inter tidal, flora and fauna in the marine, benthal quality assessment for biological species and heavy metals and estuarine environment.

Anticipated Environmental Impacts and Mitigation Measures

- 30. Anticipated generic environmental impacts that require specific studies for significance are given in impact matrix (Manual may be referred). Tools as given in the manual may be used for the assessment of environmental impacts.
- 31. Impact on drainage of the area and the surroundings.
- 32. Impact of the project on the AAQ of the area. Details of the model used and the input data used for modeling. The air quality contours may be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The wind roses should also be shown on this map.
- 33. Impact of the project on local infrastructure of the study area such as road network, etc. In case if the study area requires any additional infrastructure, details of the agency responsible for the same should be included along with the time frame. Details of the permission from Competent Authority for conveyor belt crossing the village road.
- 34. Impact of the activities to be taken up in the CRZ area including jetty and desalination plant etc. should be integrated into the EIA report; however, action should be taken to obtain separate clearance from the competent authority as may be applicable to such activities.
- 35. Details of rainwater harvesting and its proposed usage in the plant.
- 36. Details regarding infrastructure facilities such as sanitation, fuel, restroom, etc. to be provided to the workers during construction as well as to the casual workers including truck drivers during the operational phase.
- 37. Details of greenbelt giving details of species, width of plantation, planning schedule, etc.
- 38. Details of flora and fauna. Conservation plan in case of any scheduled fauna.
- 39. Proposed measures for occupational safety and health of the workers.
- 40. Oil spill control planning.
- 41. Off-shore coastal air dispersion models shall be applied.
- 42. Capital quantity of dredging material, disposal and its impact on aquatic life.
- 43. Fisheries study should be done with respect to Benthos and Marine organic material and coastal fisheries.

Analysis of alternative resources and technologies

- 44. Comparison of alternate sites considered and the reasons for selecting the proposed site. Conformity of the site with the prescribed guidelines in terms of Coastal Regulatory Zone (CRZ), river, highways, railways etc.
- 45. Details of alternative sources of energy such as photovoltaic cells use in the plant for various applications.
- 46. Details on improved technologies.

Environmental Monitoring Program

47. Appropriate monitoring network has to be designed and proposed for regulatory compliance and to assess the residual impacts, if any.

Additional Studies

- 48. Detailed compensation package for the people affected by the project shall be prepared, considering the socio-economic status of the area, homestead oustees, land oustees, and landless labourers.
- 49. Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.
- 50. Points identified in public hearing and commitment of the project Proponent to the same. Detailed action plan addressing the issues raised, and the details of necessary allocation of funds.
- 51. Proposed plan to handle the socio-economic influence on the local community. The plan should include quantitative dimension as far as possible.
- 52. Details of risk assessment and proposed safeguard measures.

Environmental Management Plan

- 53. EMP devised to mitigate the adverse impacts of the project along with item-wise cost of its implementation.
- 54. Proposed post-project monitoring programme to ensure compliance to the approved Management Plan including administrative and technical organizational structure.

Additional ToR

- 1. PP should identify the operations/processes to be carried out and specify the list in detail of the plant and machinery, safety equipments like NRV, SRV, smoke detectors and alarms, gas vapour alarms, PG,TG,LG, pipeline and pipe fittings, explosive relief valves of the captive of the captive power plant. Also submit the line diagram of the complete power plant in detail with explanations.
- 2. The PP should submit risk assessment quantitatively by identifying the detailed hazards involved during operations and control measures in the power plant.
- 3. The mitigation measures to control the green house effects, radiation effects, ozone depletion effects and acid rain effect should be discussed in the said report.
- 4. The proponent required to submit the energy (power) balance plan qualitatively and quantitatively taking into account the various aspects like total energy required, sources of energy inputs and outputs. Account for total energy, savings incorporated to solar passive techniques in building design, enhanced building material specifications, use of designing energy efficient lighting techniques to minimize the load on conventional systems (heating, cooling ventilation and lighting) use of renewal energy sources like solar water heaters and photovoltaic system, by adopting various lighting/power control systems and by using advance electrical system like power transformers, energy efficient motors and diesel generators efficient effluent water treatment system referred in NBC 2005 & MOEF GI guidelines.
- 5. To achieve the minimum heat load (thermal stresses) in the building occupancy, specify the list of enhanced building materials and building design features proposed to be adopted in the project with reference to thermal conductivity (K-value) density (dvalue) specific heat(), surface resistance(R),transmittance (I) value) solar heat gain factor (SHGF), projection factors (PF), M-factors(orientation factor), minimum visible transmission of glazing for vertical projection (VT) as per MOEF GI guidelines.
- 6. As per your project report your project falls in the category of zone 4, specify the standards and codes used in building construction to minimize the risk of natural calamities like wind load, seismic load (earthquake), thunder storm/lightning.
- 7. Prepare the complete ventilation plan of the factory building taking into account by building design features ventilation techniques, Wind Rose, Solar Orientation and atmospheric stability factors (lapse rate and inversion i.e. rate of change of wind speed and temperature with height of the building), green house effect. Assessment should be done qualitatively and quantitatively i.e. in terms of Air changes per hour in the different parts of the buildings like occupancies (captive power plant) toilets, kitchen, passages, ways and stair cases.

- 8. Prepare detailed lighting Illuminance) plan, qualitatively and quantitatively (range in terms of lux i.e. lumen per mt. sq. and internal and external lighting power applications as a function of Lighting Power Density,(wall per sq mt.) taking into consideration building solar design and orientation, using energy, efficient lighting equipment design, lighting control systems (manual and automatic) maintenance, provision of surface brightness, glare reduction and light distribution system etc. In the building occupancies (power captive plant) toilets, kitchens, passages, ways, stairs, roads, landscape area.
- 9. Prepare noise and vibration reduction plan at the building construction phase and operation phase. Name the noise and vibration operating machines.
- 10. Prepare complete risk assessment plan of the fire fighting systems (water sprinkling system, fire water hydrant/monitor distribution piping network system, chemical fire extinguishers systems, capacity and storage system of water for fire fighting, man power for fire fighting and protective clothing for fire fighters and liaison with the district fire fighting teams and other district authorities for use) in case of fire fighting and fire rescue systems taking into account all the building design features with line diagrams of the fire fighting system and rescue systems indicating the codes, and standards and specifications used.
- 11. Specify the fire water & foam system i.e. rate designed to meet water and foam requirement during fire in the power captive installation(HSD storage area HSP pipe network and DG area) with ref to OISD=STD(Oil industry safety Directorate, Ministry of petroleum and natural gas, Govt. Of India)
- 12. Frame detailed health, safety and welfare plan for the factory workers engaged with reference to factories Act and rules make there under.
- 13. Frame electric and atmospheric lightning safety plan with line diagrams indicating the electric sources distribution, earthling line diagrams and design of earth pits and lightning arrestors indicating the codes and standards used.
- 14. Explain with line diagrams of sewer, drainage system(septic tank/effluent treatment plant) and ducting system like natural or forced draft to be provided to avoid the accumulation of the hazardous sewer gases and underground explosion in the building factory.
- 15. Explain with line diagram the earthling of the HSD pipe distribution network plant and machinery of the power plant carrying natural gas HSD to avoid fire and explosion.
- 16. PP should submit the safety data sheet of the HSD.
- 17. PP should submit on site disaster management plan in detail.
- 18. PP should submit licences from explosive department for storage of HSD.
- 19. PP should submit safety audit report, safety policy of the management of the existing captive power plant.
- 20. PP should submit plan for online monitoring system for SPM and their connectivity with CPCB/HSPCB website.
- 21. PP should submit special mitigative measures for Air Pollution.
- 22. PP should submit special mitigative measures for fugitive emissions.
- 23. PP should submit Green Area Development Plan.
- 24. PP should submit CSR proposal.

The project proponent requested that they may be allowed to use the previously generated data which was in accordance with the standard Terms of Reference.

PP further stated that they are already generating data from November, 2015 and requested to utilize the baseline data. The Committee after detailed deliberations directed to project proponent to incorporate the baseline data in the EIA Reported generated from December, 2015 onwards.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.19 Environmental Clearance for the Common Bio-Medical Waste Treatment Facility at Dhor, Tehsil-Beri, Distt-Jhajjar, Haryana by M/s Tokas Waste Management

Project Proponent:Sh. Rohtash Singh, DirectorConsultant:Grass Roots Research and Creation India Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 23.10.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th

meeting of the SEAC held on 28.01.2016.

The project proponent presented the case for proposed ToRs. The PP is directed

to prepare the EIA by incorporating the following ToR:

1. Executive summary of the project - giving a prima facie idea of the objectives of the proposal, use of resources, justification, etc. In addition, it should provide a Compilation of EC report including EMP and the post-project monitoring plan in brief.

Project Description:

- 2. Justification for selecting the proposed capacity of the incineration facility.
- 3. Land requirement for the project including its break up and greenbelt inside the project boundary.
- 4. Proposed project layout clearly demarcating the proposed capacities and activities like incinerator facility, Bio-Medical waste storage areas, admin building, maintenance areas, greenbelt, etc.
- 5. Details of the Bio-Medical waste inventory, segregation at source for compatibility with transportation system and subsequent treatment.
- 6. Details of the strategy being followed for transportation, features of the vehicles, frequency of Collection of Bio-Medical Waste and health and safety measures for the proposed project.
- 7. Details on proposed protocol for waste acceptance (verifying the waste quantity through weighing Machine, manifestation systems, etc.)
- 8. Details of the laboratory facilities and statement on adequacy including proposals for accreditation, etc.
- 9. Details for methods to store the Bio-Medical Waste as per protocol with statutory requirements and proposed safety precautions.
- 10. Details of waste type, characteristics, handling, storage, Treatment and Disposal at the proposed facility.
- 12. Design details of the complete incineration system a statement on the compliance to the CPCB guidelines for common Bio-Medical waste Treatment Facility, operating parameters of combustion chambers, flue gas cleaning, ash handling, scrubber bleed management and emission monitoring systems, etc.
- 13. Details of the fuel requirement for incineration in the proposed project.
- 14. Details of the control and monitoring systems during combustion process.
- 15. Details of the flue gas emissions discharge through stack and proposed pollution control technologies.
- 16. Details of the residue/ash generation from incinerator, reuse and management.
- 17. Detailed plan for wastewater management for the proposed project.
- 18. Details of the proposed process and monitoring protocol as per the CPCB guidelines.
- 19. Proposed measures for occupational safety and health of the workers during project design, construction and operations.
- 20. Details on source of water and electricity source to the proposed facility.
- 21. Details of the existing access road(s)/walkways to the designed operations in the site and its layout.
- 22. Traffic management plan including parking and loading/unloading areas may be described.
- 23. Proposed financial model, creation of fund for future liabilities.

- 24. In case of expansion of projects, compliance to the issued EIA clearance conditions and consent for operation conditions for existing facility.
- 25. Any legal cases pending against the existing facility related to the environmental pollution and impacts in the last three years, if so, details thereof.
- 26. Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

Description of the Environment

- 27. The project study area shall be up to a distance of 5 km from the boundary of the proposed project site.
- 28. Location of the incineration facility and nearest habitats with distances from the facility to be demarcated on a topo sheet (1: 50000 scale).
- 29. Land use of study area should include data about the residential/ institutional/nearest village/ township/ locality/ housing society, etc., based on the satellite imagery.
- 30. Demography details of all the villages falling within the study area.
- 31. Topography of the area clearly indicating the presence of pits deeper than one meter, if any. If these pits require to be filled in, details of filling material to be used, quantity required, its source, mode of transport, etc., shall be provided.
- 32. Baseline data of the project area and the area within a 10 km radius with respect to different components of environment viz. air, noise, water, land, and biology and socioeconomic may be collected as per the guidance provided in the Manual.
- 33. Detailed Study of the hydrological and geo-hydrological conditions of the project area including a contour plan indicating slopes and showing drainage pattern and outfall.
- 34. Water quality of nearby River, if any, Source of water supply and nearby water ponds shall be analyzed.
- 35. Details of groundwater monitoring wells, locations, frequency of monitoring, parameters, and Rain Water Harvesting Plan etc. shall be analyzed.
- 36. Proposed baseline monitoring network for the consideration and approval of the Competent Authority.
- 37. Site-specific meteorological data of one season excluding monsoon and secondary data for future predictions.
- 38. Ambient Air Quality (AAQ) data (except monsoon) of one complete season along with the monitoring dates. The parameters to be covered shall include SPM, RSPM, SO2, NOx (ground level). The location of the monitoring stations should be decided in such a way that the pre-dominant downwind direction, population zone and sensitive receptors including reserved forests are considered. There should be at least one monitoring station in the upwind direction and one in down-wind direction where maximum GLC falls.
- 39. Ecological status (terrestrial and aquatic) of the study area such as habitat type and quality, species, diversity, rarity, fragmentation, ecological linkage, age, abundance, etc.
- 40. If any incompatible land use attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC/SEAC.

Incompatible land use attributes include:

- Public water supply areas from rivers/surface water bodies, from ground water Scenic areas/tourism areas/hill resorts.
- Religious places, pilgrim centres that attract over 10 lakh pilgrims a year.
- Protected tribal settlements (notified tribal areas where industrial activity is not permitted)
- Monuments of national significance, World Heritage Sites
- Cyclone, Tsunami prone areas (based on last 25years) Airport areas.
- Any other feature as specified by the State or local government and other features as locally applicable, including prime agricultural lands, pastures, migratory corridors, etc.
- 41. If ecologically sensitive attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on

significance for review and acceptance by the EAC/SEAC. Ecological sensitive attributes include:

- National parks
- Wild life sanctuaries
- Tiger reserve/elephant reserve/turtle nesting ground Mangrove area
- Wetlands
- Reserved and protected forests
- Any other closed/protected area under the Wild Life (Protection) Act, 1972. Any other eco sensitive areas etc.
- 42. If the location falls in Valley, specific issues connected to the natural resources are to be studied and documented in the report.
- 43. If the location falls in CRZ area: A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the project and associate facilities w.r.t. CRZ, coastal features such as mangroves, if any.
 - Provide the CRZ map in 1:10000 scale in general cases and in 1:5000 scale for specific observation
 - Fisheries study should be done w.r.t. Benthos and Marine organic material and coastal fisheries

Anticipated environmental impacts and mitigation measures

- 44. Anticipated generic environmental impacts due to incineration are indicated, evaluated for significance and based on corresponding likely impacts VECs may be identified. Baseline studies may be conducted for all the concerned VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
- 45. Mathematical modelling for calculating the dispersion of air pollutants and ground level concentration along with emissions from incinerators are to be submitted in draft ToR for consideration and approval by EAC/SEAC.
- 46. While identifying the likely impacts, also include the following for analysis of significance and required mitigation measures:
 - impacts due to hazardous waste carrying trucks movement impacts due to air pollution including flue gases impacts due to odour pollution
 - impacts due to noise
 - impacts due to fugitive emissions
 - impact on health of workers due to proposed Bio-Medical wasteTreatment and disposal activities
 - Impacts due to spills, leaks on soil and surface/ground water bodies Impacts due to fire/explosion
 - Impacts due to power shut downs
 - Impacts due to failure of each of the unit in an incineration system Impacts due to ash disposal, etc.
- 47. In case of likely impact from the proposed facility on the surrounding reserve forests, Plan for the conservation of wild fauna in consultation with the State Forest Department.
- 48. For identifying the mitigation measures, please refer Chapter III for source control and treatment. Besides typical mitigation measures which may also be considered.
- 49. Details of greenbelt including details of species, width of plantation, planning schedule, etc; within the project boundary in accordance to CPCB published guidelines and to submit land scape plan for green belt, avenue plantation and green area.

Analysis of alternative resources and technologies

- 50. The Common Bio-Medical Waste Treatment Facility at this site shall have the equipment and infrastructure in confirmation with the CPCB Guidelines issued for installation of CBWTF.
- 51. Details on improved technologies, equipments and operating practices.

Environmental monitoring program

52. Details on monitoring of pollutants, performance of the incinerator including operating hours, fuel consumption, operating parameters (Combustion chamber - temperature, Stack - temperature, total particulate matter, HCI, SO2, NOx etc), managing carbon

monoxide in flue gases as a measure on combustion operations, operation of burners, stack emissions, calibration of instruments, air pollution control systems (such as quencher, Venturi scrubbers, stack, etc.), wastewater management, etc.

- 53. At likely contaminated sites, monitoring of pollutants for all the notified parameters of ambient air quality and stack emissions in the ambient air, groundwater and surface water and soil samples should be done at receiving environment.
- 54. Stack and fugitive emissions may be monitored for SPM, HCI, SO2, CO, NOx, etc
- 55. Specific programmes and monitoring on occupational health and safety to workers.
- 56. Appropriate monitoring network has to be designed and proposed for regulatory compliance and to assess the residual impacts, if any.
- 57. Details of in-house monitoring capabilities and the recognized agencies proposed for conducting the monitoring.

Additional studies

58. Details on risk assessment, damage control and socio-economic development activities such as commercial property values, generation of jobs, education, social conflicts, cultural status, accidents, etc. during different phases of the project.

Environmental management plan

- 59. Proposed post-project monitoring programme to ensure compliance to the approved Management Plan including administrative and technical organizational structure.
- 60. EMP devised to mitigate the adverse impacts of the project should be provided along with item-wise cost of its implementation (Capital and recurring costs).
- 61. Allocation of resources and responsibilities for plan implementation.
- 62. Details of the emergency preparedness plan and on-site & off-site disaster management plan.

8. Bio-Medical Waste

- Growth in population, industrialization and changing life styles and food habits have brought with it various health related issues. More and more people are suffering from ailments. Alongside this is the growing awareness towards utilizing proper medical facilities. To enable effective management and handling of the bio-medical wastes, the Ministry of Environment and Forests (MoEF) has issued regulations for the management and handling of these wastes. The rules are formulated and known as the **Bio-Medical Wastes (Management and Handling) Rules 1998**, enacted under the of Environment (Protection) Act, 1986.
- In response to these rules, Government and major Private Hospitals initiated their arrangements for treatment and disposal of bio-medical wastes. However, the smaller nursing homes, clinics and other similar institutions which do not have or can afford such facilities need alternate modalities and arrangements to dispose their wastes, in accordance with the Rules.

8.1 Waste Classification and Characterization

Wastes generated by the hospitals can primarily be classified into 3 groups:

- Conventional Wastes/ Municipal Solid Wastes: General refuse similar to the domestic/ municipal solid wastes and includes artificial linens, paper, food, cans, diapers, and plastic cups. This waste is non-infectious if it is not brought in contact with the infectious wastes and properly managed.
- Hazardous Wastes: Laboratory and Pharmaceutical Chemicals and containers including off-specification and other chemicals, alcohols, disinfectants, anti-neo plastic agents, heavy metals (e.g. Mercury), etc. These wastes are hazardous in nature and if properly segregated and managed can be transported to hazardous waste management facility for treatment/ storage/ disposal.
- Infectious Wastes: Commonly referred to as Clinical and pathological Wastes and include: isolation wastes (refuse associated with infectious patients), cultures and stocks of infectious agents and associated biological, human blood and blood products, pathological wastes, contaminated sharps, amputated body parts, placenta and others.
- Typical wastes falling under each of the above groups of infectious wastes is presented in the following Table

Table 4: Categorization of Infectious Wastes

Waste Group Typical Wastes

Isolation Wastes

- Wastes from patients with diseases considered communicable and requiring isolation Cultures and Stocks of Infectious agents and associated biological
- Specimens from medical and pathological laboratories
- Cultures and stocks of infectious agents from clinical, research and industrial laboratories, disposable culture dishes, and devices used to transfer, inoculate and mix cultures
- □ □ Wastes from the production of biologicals
- Discarded live and attenuated vaccines Human blood and Blood Products
- Waste blood, serum, plasma and blood products Pathological Wastes
- Tissue organs, body parts, placenta, bloodand body fluids removed during surgery, autopsy and biopsy. Contaminated Sharps
- Contaminated hypodermic needles, syringes, scalpel blades, Pasteur pippettes and brokenglass.

8.2 Collection and Transportation

- Developer shall collect the waste from each health care establishment on a regular basis. Wastes shall be segregated as per the colour coding, properly packed and placed at a secure designated point by the health care establishment from where developer shall collect the waste.
- Upon collection wastes shall be placed into closed containers enclosed in a containerized vehicle. Transportation of the wastes shall also be the responsibility of developer. The proposed vehicles shall be dedicated for the purpose and shall adopt the conditions specified in the BMW (Management & Handling) Rules-1998.

8.3 Disinfection and Destruction

Upon receipt at the facility, wastes containers shall be unloaded. Wastes based on their colour codes shall be separated and properly treated and disposed off. Categories 1, 2, 3 and 6 (as per MoEF rules) shall be directly loaded into the incinerator while categories 4 and 7 shall be loaded into the autoclave for dis-infection. Residue from these units shall be disposed into a landfill. Detailed process description of the treatment technologies is presented in the subsequent sections.

8.4 Disposal

Ash, residue from high temperature incineration and other material residues from the process shall be collected into containers and shall be disposed into a secure landfill through authorised Hazardous Waste Treatment, Storage and Disposal Facility.

8.5 Treatment Technologies

8.5.1 Incineration

- Incineration incorporates the right technology featuring for a complete destruction of the waste into completely safe end products. A process combination of pyrolysis and controlled air combustion, where heat and air for combustion is regulated in such a way as to first volatalise/ gasify the waste in conditions of inadequate air, i.e., below stochiometric air conditions and heat, and then totally destroy it in adequate heat and excess air, thereby making the end products environmentally safe. The process is not only safe but is also today's answer to the rampant problem of hospital waste management and pollution.
- The primary purpose of incineration is to burn the waste to ashes through a combustion process. Developer intends to set up incinerators of optimum capacity at each of the locations. The unit shall be a dual chambered incinerator. The primary chamber's main purpose would be combustion of the waste materials into safe end products (ash). The temperature of the primary chamber would be 8500 C and above wherein wastes are completely destroyed. The primary chamber would have an attached burner with auxiliary fuel supply to augment the fuel requirements and ensure maintenance of temperatures.
- The purpose of the secondary chamber would be to burn the off-gases and ensure safe end products (gaseous). The secondary chamber would operate at a temperature of

10500 C and above. The gases would be completely burnt and safe gases then shall be let out of the incinerator unit. Both the primary and secondary burners proposed are imported Italian burners. The incinerator is completely automated with control panel and continuous recording of temperatures. The entire system is very simple and is easy to operate. The system is environmentally safe without any hazard to human health and environment at large.

PP further stated that they are already generating data from November, 2015 and requested to utilize the baseline data. The Committee after detailed deliberations directed to project proponent to incorporate the baseline data in the EIA Reported generated from December, 2015 onwards.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.20 Environmental Clearance for proposed project for Common Bio-Medical Waste Treatment Facility at VPO Bhatgaon, Tehsil & District-Sonipat, Haryana by M/s Shakti Waste Management Co.

Project Proponent:Yogesh Sharma, Authorised SignatoryConsultant:Vardan EnviroNet Solutions

The project was submitted to the SEIAA, Haryana on 06.11.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th

meeting of the SEAC held on 28.01.2016.

The project proponent presented the case for proposed ToRs. The PP is directed

to prepare the EIA by incorporating the following ToR:

1. Executive summary of the project - giving a prima facie idea of the objectives of the proposal, use of resources, justification, etc. In addition, it should provide a Compilation of EC report including EMP and the post-project monitoring plan in brief.

Project Description:

- 2. Justification for selecting the proposed capacity of the incineration facility.
- 3. Land requirement for the project including its break up and greenbelt inside the project boundary.
- 4. Proposed project layout clearly demarcating the proposed capacities and activities like incinerator facility, Bio-Medical waste storage areas, admin building, maintenance areas, greenbelt, etc.
- 5. Details of the Bio-Medical waste inventory, segregation at source for compatibility with transportation system and subsequent treatment.
- 6. Details of the strategy being followed for transportation, features of the vehicles, frequency of Collection of Bio-Medical Waste and health and safety measures for the proposed project.
- 7. Details on proposed protocol for waste acceptance (verifying the waste quantity through weighing Machine, manifestation systems, etc.)
- 8. Details of the laboratory facilities and statement on adequacy including proposals for accreditation, etc.
- 9. Details for methods to store the Bio-Medical Waste as per protocol with statutory requirements and proposed safety precautions.
- 10. Details of waste type, characteristics, handling, storage, Treatment and Disposal at the proposed facility.
- 12. Design details of the complete incineration system a statement on the compliance to

the CPCB guidelines for common Bio-Medical waste Treatment Facility, operating parameters of combustion chambers, flue gas cleaning, ash handling, scrubber bleed management and emission monitoring systems, etc.

- 13. Details of the fuel requirement for incineration in the proposed project.
- 14. Details of the control and monitoring systems during combustion process.
- 15. Details of the flue gas emissions discharge through stack and proposed pollution control technologies.
- 16. Details of the residue/ash generation from incinerator, reuse and management.
- 17. Detailed plan for wastewater management for the proposed project.
- 18. Details of the proposed process and monitoring protocol as per the CPCB guidelines.
- 19. Proposed measures for occupational safety and health of the workers during project design, construction and operations.
- 20. Details on source of water and electricity source to the proposed facility.
- 21. Details of the existing access road(s)/walkways to the designed operations in the site and its layout.
- 22. Traffic management plan including parking and loading/unloading areas may be described.
- 23. Proposed financial model, creation of fund for future liabilities.
- 24. In case of expansion of projects, compliance to the issued EIA clearance conditions and consent for operation conditions for existing facility.
- 25. Any legal cases pending against the existing facility related to the environmental pollution and impacts in the last three years, if so, details thereof.
- 26. Public hearing to be conducted for the project as per provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan.

Description of the Environment

- 27. The project study area shall be up to a distance of 5 km from the boundary of the proposed project site.
- 28. Location of the incineration facility and nearest habitats with distances from the facility to be demarcated on a topo sheet (1: 50000 scale).
- 29. Land use of study area should include data about the residential/ institutional/nearest village/ township/ locality/ housing society, etc., based on the satellite imagery.
- 30. Demography details of all the villages falling within the study area.
- 31. Topography of the area clearly indicating the presence of pits deeper than one meter, if any. If these pits require to be filled in, details of filling material to be used, quantity required, its source, mode of transport, etc., shall be provided.
- 32. Baseline data of the project area and the area within a 10 km radius with respect to different components of environment viz. air, noise, water, land, and biology and socioeconomic may be collected as per the guidance provided in the Manual.
- 33. Detailed Study of the hydrological and geo-hydrological conditions of the project area including a contour plan indicating slopes and showing drainage pattern and outfall.
- 34. Water quality of nearby River, if any, Source of water supply and nearby water ponds shall be analyzed.
- 35. Details of groundwater monitoring wells, locations, frequency of monitoring, parameters, and Rain Water Harvesting Plan etc. shall be analyzed.
- 36. Proposed baseline monitoring network for the consideration and approval of the Competent Authority.
- 37. Site-specific meteorological data of one season excluding monsoon and secondary data for future predictions.
- 38. Ambient Air Quality (AAQ) data (except monsoon) of one complete season along with the monitoring dates. The parameters to be covered shall include SPM, RSPM, SO2, NOx (ground level). The location of the monitoring stations should be decided in such a way that the pre-dominant downwind direction, population zone and sensitive receptors including reserved forests are considered. There should be at least one monitoring station in the upwind direction and one in down-wind direction where maximum GLC falls.

- 39. Ecological status (terrestrial and aquatic) of the study area such as habitat type and quality,species,diversity,rarity,fragmentation,ecological linkage, age, abundance, etc.
- 40. If any incompatible land use attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC/SEAC.

Incompatible land use attributes include:

- Public water supply areas from rivers/surface water bodies, from ground water Scenic areas/tourism areas/hill resorts.
- Religious places, pilgrim centres that attract over 10 lakh pilgrims a year.
- Protected tribal settlements (notified tribal areas where industrial activity is not permitted)
- Monuments of national significance, World Heritage Sites
- Cyclone, Tsunami prone areas (based on last 25years) Airport areas.
- Any other feature as specified by the State or local government and other features as locally applicable, including prime agricultural lands, pastures, migratory corridors, etc.
- 41. If ecologically sensitive attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance) and propose the additional points based on significance for review and acceptance by the EAC/SEAC. Ecological sensitive attributes include:
 - National parks
 - Wild life sanctuaries
 - Tiger reserve/elephant reserve/turtle nesting ground Mangrove area
 - Wetlands
 - Reserved and protected forests
 - Any other closed/protected area under the Wild Life (Protection) Act, 1972. Any other eco sensitive areas etc.
- 42. If the location falls in Valley, specific issues connected to the natural resources are to be studied and documented in the report.
- 43. If the location falls in CRZ area: A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the project and associate facilities w.r.t. CRZ, coastal features such as mangroves, if any.
 - Provide the CRZ map in 1:10000 scale in general cases and in 1:5000 scale for specific observation
 - Fisheries study should be done w.r.t. Benthos and Marine organic material and coastal fisheries

Anticipated environmental impacts and mitigation measures

- 44. Anticipated generic environmental impacts due to incineration are indicated, evaluated for significance and based on corresponding likely impacts VECs may be identified. Baseline studies may be conducted for all the concerned VECs and likely impacts will have to be assessed for their magnitude in order to identify mitigation measures.
- 45. Mathematical modelling for calculating the dispersion of air pollutants and ground level concentration along with emissions from incinerators are to be submitted in draft ToR for consideration and approval by EAC/SEAC.
- 46. While identifying the likely impacts, also include the following for analysis of significance and required mitigation measures:
 - impacts due to hazardous waste carrying trucks movement impacts due to air pollution including flue gases impacts due to odour pollution
 - impacts due to noise
 - impacts due to fugitive emissions
 - impact on health of workers due to proposed Bio-Medical wasteTreatment and disposal activities
 - Impacts due to spills, leaks on soil and surface/ground water bodies Impacts due to fire/explosion
 - Impacts due to power shut downs

- Impacts due to failure of each of the unit in an incineration system Impacts due to ash disposal, etc.
- 47. In case of likely impact from the proposed facility on the surrounding reserve forests, Plan for the conservation of wild fauna in consultation with the State Forest Department.
- 48. For identifying the mitigation measures, please refer Chapter III for source control and treatment. Besides typical mitigation measures which may also be considered.
- 49. Details of greenbelt including details of species, width of plantation, planning schedule, etc; within the project boundary in accordance to CPCB published guidelines and to submit land scape plan for green belt, avenue plantation and green area.

Analysis of alternative resources and technologies

- 50. The Common Bio-Medical Waste Treatment Facility at this site shall have the equipment and infrastructure in confirmation with the CPCB Guidelines issued for installation of CBWTF.
- 51. Details on improved technologies, equipments and operating practices.

Environmental monitoring program

- 52. Details on monitoring of pollutants, performance of the incinerator including operating hours, fuel consumption, operating parameters (Combustion chamber temperature, Stack temperature, total particulate matter, HCI, SO2, NOx etc), managing carbon monoxide in flue gases as a measure on combustion operations, operation of burners, stack emissions, calibration of instruments, air pollution control systems (such as quencher, Venturi scrubbers, stack, etc.), wastewater management, etc.
- 53. At likely contaminated sites, monitoring of pollutants for all the notified parameters of ambient air quality and stack emissions in the ambient air, groundwater and surface water and soil samples should be done at receiving environment.
- 54. Stack and fugitive emissions may be monitored for SPM, HCI, SO2, CO, NOx, etc
- 55. Specific programmes and monitoring on occupational health and safety to workers.
- 56. Appropriate monitoring network has to be designed and proposed for regulatory compliance and to assess the residual impacts, if any.
- 57. Details of in-house monitoring capabilities and the recognized agencies proposed for conducting the monitoring.

Additional studies

58. Details on risk assessment, damage control and socio-economic development activities such as commercial property values, generation of jobs, education, social conflicts, cultural status, accidents, etc. during different phases of the project.

Environmental management plan

- 59. Proposed post-project monitoring programme to ensure compliance to the approved Management Plan including administrative and technical organizational structure.
- 60. EMP devised to mitigate the adverse impacts of the project should be provided along with item-wise cost of its implementation (Capital and recurring costs).
- 61. Allocation of resources and responsibilities for plan implementation.
- 62. Details of the emergency preparedness plan and on-site & off-site disaster management plan.

8. Bio-Medical Waste

- Growth in population, industrialization and changing life styles and food habits have brought with it various health related issues. More and more people are suffering from ailments. Alongside this is the growing awareness towards utilizing proper medical facilities. To enable effective management and handling of the bio-medical wastes, the Ministry of Environment and Forests (MoEF) has issued regulations for the management and handling of these wastes. The rules are formulated and known as the Bio-Medical Wastes (Management and Handling) Rules 1998, enacted under the of Environment (Protection) Act, 1986.
- In response to these rules, Government and major Private Hospitals initiated their arrangements for treatment and disposal of bio-medical wastes. However, the smaller nursing homes, clinics and other similar institutions which do not have or can afford such facilities need alternate modalities and arrangements to dispose their wastes, in accordance with the Rules.

8.1 Waste Classification and Characterization

Wastes generated by the hospitals can primarily be classified into 3 groups:

- Conventional Wastes/ Municipal Solid Wastes: General refuse similar to the domestic/ municipal solid wastes and includes artificial linens, paper, food, cans, diapers, and plastic cups. This waste is non-infectious if it is not brought in contact with the infectious wastes and properly managed.
- Hazardous Wastes: Laboratory and Pharmaceutical Chemicals and containers including off-specification and other chemicals, alcohols, disinfectants, anti-neo plastic agents, heavy metals (e.g. Mercury), etc. These wastes are hazardous in nature and if properly segregated and managed can be transported to hazardous waste management facility for treatment/ storage/ disposal.
- Infectious Wastes: Commonly referred to as Clinical and pathological Wastes and include: isolation wastes (refuse associated with infectious patients), cultures and stocks of infectious agents and associated biological, human blood and blood products, pathological wastes, contaminated sharps, amputated body parts, placenta and others.
- Typical wastes falling under each of the above groups of infectious wastes is presented in the following Table

Table 4: Categorization of Infectious Wastes

Waste Group Typical Wastes

Isolation Wastes

- Wastes from patients with diseases considered communicable and requiring isolation Cultures and Stocks of Infectious agents and associated biological
- Specimens from medical and pathological laboratories
- Cultures and stocks of infectious agents from clinical, research and industrial laboratories, disposable culture dishes, and devices used to transfer, inoculate and mix cultures
- □ □ Wastes from the production of biologicals
- Discarded live and attenuated vaccines Human blood and Blood Products
- Waste blood, serum, plasma and blood products Pathological Wastes
- Tissue organs, body parts, placenta, bloodand body fluids removed during surgery, autopsy and biopsy. Contaminated Sharps
- Contaminated hypodermic needles, syringes, scalpel blades, Pasteur pippettes and brokenglass.

8.2 Collection and Transportation

- Developer shall collect the waste from each health care establishment on a regular basis. Wastes shall be segregated as per the colour coding, properly packed and placed at a secure designated point by the health care establishment from where developer shall collect the waste.
- Upon collection wastes shall be placed into closed containers enclosed in a containerized vehicle. Transportation of the wastes shall also be the responsibility of developer. The proposed vehicles shall be dedicated for the purpose and shall adopt the conditions specified in the BMW (Management & Handling) Rules-1998.

8.3 Disinfection and Destruction

Upon receipt at the facility, wastes containers shall be unloaded. Wastes based on their colour codes shall be separated and properly treated and disposed off. Categories 1, 2, 3 and 6 (as per MoEF rules) shall be directly loaded into the incinerator while categories 4 and 7 shall be loaded into the autoclave for dis-infection. Residue from these units shall be disposed into a landfill. Detailed process description of the treatment technologies is presented in the subsequent sections.

8.4 Disposal

Ash, residue from high temperature incineration and other material residues from the process shall be collected into containers and shall be disposed into a secure landfill through authorised Hazardous Waste Treatment, Storage and Disposal Facility.

8.5 Treatment Technologies

8.5.1 Incineration

- Incineration incorporates the right technology featuring for a complete destruction of the waste into completely safe end products. A process combination of pyrolysis and controlled air combustion, where heat and air for combustion is regulated in such a way as to first volatalise/ gasify the waste in conditions of inadequate air, i.e., below stochiometric air conditions and heat, and then totally destroy it in adequate heat and excess air, thereby making the end products environmentally safe. The process is not only safe but is also today's answer to the rampant problem of hospital waste management and pollution.
- The primary purpose of incineration is to burn the waste to ashes through a combustion process. Developer intends to set up incinerators of optimum capacity at each of the locations. The unit shall be a dual chambered incinerator. The primary chamber's main purpose would be combustion of the waste materials into safe end products (ash). The temperature of the primary chamber would be 8500 C and above wherein wastes are completely destroyed. The primary chamber would have an attached burner with auxiliary fuel supply to augment the fuel requirements and ensure maintenance of temperatures.
- The purpose of the secondary chamber would be to burn the off-gases and ensure safe end products (gaseous). The secondary chamber would operate at a temperature of 10500 C and above. The gases would be completely burnt and safe gases then shall be let out of the incinerator unit. Both the primary and secondary burners proposed are imported Italian burners. The incinerator is completely automated with control panel and continuous recording of temperatures. The entire system is very simple and is easy to operate. The system is environmentally safe without any hazard to human health and environment at large.

PP further stated that they are already generating data from December, 2015 and

requested to utilize the baseline data. The Committee after detailed deliberations directed to project proponent to incorporate the baseline data in the EIA Reported generated from January, 2016 onwards.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.21 Environmental Clearance for expansion of Group Housing Project 'Atharva' at Sector- 109, Village Panwala, Khusrupur, Gurgaon, Haryana by M/s Raheja Developers Ltd.

The project was submitted to the SEIAA, Haryana on 06.11.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The Project Proponent requested for adjournment and the same was discussed in the meeting. The Committee acceded to the request and decided to issue 30 days notice to the PP. Accordingly the notice will be issued by the Secretary, SEAC to the Project Proponent.

126.22 Environmental Clearance for construction of Residential Project at Sector-53, Gurgaon, Haryana by M/s Vipul Limited.

Project Proponent:Sh. Vipul Singh, Authorized SignatoryConsultant:KADAM Enviro

The project was submitted to the SEIAA, Haryana on 16.11.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The PP is directed to prepare the EIA by incorporating the ToR as per **Annexure**-'B'.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.23 Environmental Clearance for expansion of Group Housing Colony at Sector-48, Sohna Road, Gurgaon, Haryana by M/s Sweta Estates Pvt. Ltd.

Project Proponent:Sh. S.K. Kapoor, Authorized SignatoryConsultant:Perfect Enviro Solutions Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 19.11.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The PP is directed to prepare the EIA by incorporating the ToR as per Annexure-

'B'.

Further, the project proponent will submit the following at the time of appraisal:

- 1. The PP to submit the certified copy of report from Regional Director, MoEF regarding status of compliance of the conditions stipulated in the Environmental Clearance as contained in the MoEF circular dated 30.05.2012.
- 2. The PP to submit Status of compliance of the conditions and environmental safeguards stipulated in the earlier clearance letters.
- 3. The PP to submit Details of the court cases, if any, pending in any court of law against the project as well as any directions passed by the court relating to the project directly or indirectly.
- 4. The PP to submit Details of the notices, if any, given to the project under section 5 of the Environment (Protection) Act, 1986 and section 18 of the Air (Prevention and Control of Pollution) Act, 1981.

The PP will submit Environment Impact Assessment Report by incorporating the

Terms of References (ToR) as approved by the Committee within a time schedule in compliance

of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.24 Environmental Clearance for construction of Residential Plotted Colony at Sector-29, 30, 32 & 33, Tehsil-Sohna, District-Gurgaon, Haryana by M/s St. Patricks Realty Pvt. Ltd.

Project Proponent : Sh. S.K. Kapoor, Authorized Signatory

Consultant : Perfect Enviro Solutions Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 19.11.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The PP is directed to prepare the EIA by incorporating the ToR as per Annexure-

'**Β**'.

Further, the project proponent will submit the following at the time of appraisal:

- 1. The PP to submit the certified copy of report from Regional Director, MoEF regarding status of compliance of the conditions stipulated in the Environmental Clearance as contained in the MoEF circular dated 30.05.2012.
- 2. The PP to submit Status of compliance of the conditions and environmental safeguards stipulated in the earlier clearance letters.
- 3. The PP to submit Details of the court cases, if any, pending in any court of law against the project as well as any directions passed by the court relating to the project directly or indirectly.
- 4. The PP to submit Details of the notices, if any, given to the project under section 5 of the Environment (Protection) Act, 1986 and section 18 of the Air (Prevention and Control of Pollution) Act, 1981.

The PP will submit Environment Impact Assessment Report by incorporating the

Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.25 Environmental Clearance for manufacturing of Pharmaceuticals Suntril Pharmaceutical Pvt. Ltd at Village Alipur, Tehsil & District-Panchkula, Haryana by M/s Suntril Pharmaceuticals Pvt. Ltd,

Project Proponent : Sh. Pardeep Narula, Director

The project was submitted to the SEIAA, Haryana on 20.11.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The case was not heard as the project proponent failed to circulate the documents (Form 1, Form 1A and Conceptual Plan) to all the Members well in time. The project proponent had undertaken to circulate the documents to all the Members well in time and requested for considering their case for appraisal in the next meeting of the SEAC. The Committee agreed with the request and decided to take up their case in the next SEAC meeting i.e. 127th meeting to be held on 15.02.2016. It was also made clear to the Project Proponent that no separate letter will be issued for attending the meeting of the SEAC to be held on 15.02.2016.

126.26 Environmental Clearance for expansion of Group Housing Colony at Village Badshahpur, Sector-68, District Gurgaon, Haryana by M/s Sarv Realtors Pvt. Ltd.

Project Proponent : Sh. Ashok Singh, Authorized Signatory

Consultant : Vardan EnviroNet Solution Pvt. Ltd.

The project was submitted to the SEIAA, Haryana on 20.11.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

It was informed to the PP that the Committee has prepared Terms of Reference taking into consideration various sets of ToR including those by MoEF and accordingly the PP is directed to prepare the EIA by incorporating the ToR as per **Annexure-'B'**.

Further, the project proponent will submit the following at the time of appraisal:

1. The PP to submit the certified copy of report from Regional Director, MoEF regarding status of compliance of the conditions stipulated in the Environmental Clearance as contained in the MoEF circular dated 30.05.2012.

- 2. The PP to submit Status of compliance of the conditions and environmental safeguards stipulated in the earlier clearance letters.
- 3. The PP to submit Details of the court cases, if any, pending in any court of law against the project as well as any directions passed by the court relating to the project directly or indirectly.
- 4. The PP to submit Details of the notices, if any, given to the project under section 5 of the Environment (Protection) Act, 1986 and section 18 of the Air (Prevention and Control of Pollution) Act, 1981.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the Committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.27 Extension of Environmental Clearance for the Group Housing Project "KLJ Greens" at Sector-77, Faridabad, Haryana by M/s KLJ Developers Pvt. Ltd

The project was submitted to the SEIAA, Haryana on 14.12.2015. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

The Project Proponent requested for adjournment and the same was discussed in the meeting. The Committee acceded to the request and decided to issue 30 days notice to the PP. Accordingly the notice will be issued by the Secretary, SEAC to the Project Proponent.

126.28 Environment Clearance for Common Effluent Treatment Plant, Rohtak proposed by HSIIDC having capacity 10 MLD. Project Proponent : Sh. Ravinder Singh, Senior Manager

Consultant : Shivalik Solid Waste Managment

The project was submitted to the SEIAA, Haryana on 06.01.2016. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC.

Thereafter the case was taken up for approval of Terms of Reference in the 126th meeting of the SEAC held on 28.01.2016.

During discussions, it was informed by the project proponent that their case was taken up by the Environmental Appraisal Committee(EAC), Ministry of Environment, Forest and Climate Change, Government of India, wherein Terms of Reference were approved and conveyed to the project proponent. The PP further informed that he is in the process of collecting the baseline data, therefore, it was decided by the Committee that the PP will submit the EIA report after completing the study as per the ToR approved by the Environmental Appraisal Committee, Government of India.

It was unanimously decided by the Committee that project proponent should get the Public Hearing conducted and submit the minutes of the same alongwith the revised EIA/EMP.

The PP will submit Environment Impact Assessment Report by incorporating the Terms of References (ToR) as approved by the committee within a time schedule in compliance of EIA Notification dated 14.09.2006. It was also decided that their project will be considered as received only after receipt of complete information.

126.28(S1) Environmental Clearance for propsed 'GARHI Stone mines Along with Associated Minor Minerals' at Village-Garhi over an area of 6.70 ha in District-Mahendergarh by M/s Haryana Mining Company.

Project Proponent : Sh. Subhash Gupta Consultant : MANTEC

The project was submitted to the SEIAA, Haryana on 06.11.2015. The project

proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC. The

case was taken up for appraisal in the 125th meeting of the SEAC held on 12.01.2016.

After detailed discussions, the following shortcomings were observed:

- 1. The PP should submit final Closure Plan.
- 2. The PP should submit detailed calculation of water requirements and its source.
- 3. The PP should submit site specific ground water details along with schematic diagram of water table (bgl & amsl).
- 4. The PP should submit rain water harvesting plan.
- 5. The PP should submit green area development plan.
- 6. The PP should submit CSR plan.
- 7. The PP should submit Air and Noise Pollution Control Measures.
- 8. The PP should submit NOC from forest and wildlife wind.
- 9. The PP should submit contour sheet of the area.
- 10. The PP should submit the scheme for disposal of domestic water and design of septic tank.
- 11. Looking to the extent of leased area and proposed scale of high excavation, some of the portion of the lease area may attain the ultimate mineable limit even at the end of first year itself. It is, therefore, pertinent on the part of project proponent to initiate restoration/reclamation/rehabilitation measures of the land degraded by mining operation from the beginning of second year itself.
- 12. Issues relating to Systematic Mine Development, Mine Safety and Stability in case of open cast working, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be mentioned. Daily explosive consumption and its legitimate storage are to be assessed. Adequate mitigating measures based on scientific studies in respect of blast induced ground vibration flying fragment and air blast are to be taken alongwith requisite precaution.

The observations of 125th meeting were conveyed to the project proponent vide letter No. 516 dated 27.01.2016. The project proponent submitted the reply of the shortcomings vide letter dated 27.01.2016.

Project proponent informed that their project had earlier been appraised in the 125th meeting and requested the Chairman to take up their case in this meeting as they have complied the observations of 125th meeting. The matter was discussed in detail and the request of the project proponents was considered and accepted unanimously by the Committee in view of Office Memorandum dated 10.11.2015 issued by the MoEF, Government of India.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 11.01.2016 as additional agenda item. The reply submitted by the project proponent was discussed by the Chairman with Sh. K.S. Yadav, Mining Expert during the course of the meeting and Sh.K.S. Yadav has informed that the reply to the observation submitted by the PP is complete.

It is a proposed mining of Stone Alongwith associated Mining Minerals (Minor Mineral) Mining Project with production capacity of 22.50 Lakh MTPA (Khasra No:-7, Area – 6.70 ha). The Mine is located at Village Garhi, Tehsil – Narnaul, District - Mahendergarh, Haryana. The geographical extents of mining lease area are: Latitudes: N 28°26' 21.6'' to N

28º26' 39.6'', Longitudes: E 76º06' 25.7'' to E 76º 06' 36.1''. This is a category 'B2' project. The Letter of Intent has been issued to M/s Haryana Mining Company through Shri Subhash Gupta, 9 Lalit Plaza, Ankhir Badkal Road, Faridabad-121001 (Haryana) by Director Haryana, of Mines & Geology, Government of Chandigarh vide memo no. DMG/HY/ML/Garhi/2015/7195 dated 24/07/2015. The Mining Plan is approved by Director General, Mines and Geology Department, Govt. of Haryana; vide letter no. DMG/HY/MP/Garhi/8372 dated 07.10.2015 for Mining of "Stone along with Associated minor minerals in Garhi over an area of 6.70 hectares in Tehsil- Mahendergarh, District-Mahendergarh, Haryana for a period of 10 Years. Method of mining will be opencast semi mechanized. The total mineable reserves are 225,15,618. Life of mine is 10 years. Total water requirement for the project will be 26.0 KLD which will be used about 3.0 KLD for the drinking purpose, 3.0 KLD for the green area development and 20 KLD for dust suppression and sourced from Tanker supply. Ultimate working depth is at 250 mRL. Ground water table of lease area is at 195-200 mRL. Hence, Mining will not intersect groundwater table. There is no National Park, Wild Life sanctuaries, Biosphere Reserves, Tiger Reserves, Wild life Corridors etc. within 10 km radius. The cost of the project is Rs. 60 Lakh and Environment Protection Cost is Rs. 11.50 Lakh and CSR cost is Rs. 20 Lakh for 5 years.

The project proponent further informed the Committee that they have obtained clarification from the Mining Officer, Narnaul regarding no other operational mine falling within the 500 meters periphery and does not exceed 25 hectares.

The Committee unanimously decided to appraise the case under B2 category project on the basis of Ministry of Environment, Government of India, Office Memorandum dated 24.12.2013, and recommended for grant of Environmental Clearance to SEIAA with the following conditions:

General Conditions

- [i] Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented;
- [ii] An independent study be organized during peak activity, to understand how the actuals compare with the carrying capacities and further decisions taken to maintain sustainability of this essential stone extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of stone;
- [iii] Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The PP shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing;
- [iv] The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry;
- [v] The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUCC only will

be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres;

- [vi] There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board;
- [vii] Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured;
- [viii] A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year;
- [ix] Washing of all transport vehicle should be done inside the mining lease;
- [x] "Environmental Clearance is subject to final outcome of the Court case in Hon'ble High Court of Punjab and Haryana" or any other Court of Law;
- [xi] Native plant species as suggested by villagers/specialist may be planted; and
- [xi] Implementation of Haryana Government Rehabilitation and Resettlement of Land Owners' Policy as per applicability in the area.

SPECIFIC CONDITIONS:-

- [i] The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- [ii] The PP will perform scientific mining as per guidelines issued by the CPCB/SPCB from time to time.
- [iii] The PP will provide tall trees with broad leaves.
- [iv] The PP will obtain Consent to Establish and Consent to Operate from the SPCB.
- [v] The PP will comply with the conditions issued by the Mining Department from time to time
- [vi] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vii] The PP will not spoil the underground water quality.
- [viii] The PP will keep the emissions within prescribed norms
- [ix] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information had been given for getting approval of this project.
- [x] The PP will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.
- [xi] The PP will not obstruct natural drainage/make alternate effective system with prior approval from Competent Authority.

126.28(S2) Environment Clearance "Stone along with associated minor minerals of Kheribattar-I over and tentative area of 7.47 Ha.in Tehsil Dadri, Distt-Bhiwani, Haryana by M/s Quality Earth Minerals Pvt. Ltd.

Project Proponent	:	Sh. Mukesh Kumar,
Consultant	:	Vardan EnviroNet

The project was submitted to the SEIAA, Haryana on 06.01.2016. The project proponent submitted the case to the SEIAA as per check list approved by the SEIAA/SEAC. The case was taken up for appraisal in the 125th meeting of the SEAC held on 12.01.2016 as additional agenda item.

After detailed discussions, the following shortcomings were observed:

1. The PP should submit detailed calculation of water requirements and its source.

- 2. The PP should submit site specific ground water details along with schematic diagram of water table (bgl & amsl).
- 3. The PP should submit rain water harvesting plan.
- 4. The PP should submit green area development plan.
- 5. The PP should submit CSR plan.
- 6. The PP should submit Air and Noise Pollution Control Measures.
- 7. The PP should submit contour sheet of the area.
- 8. The PP should submit the scheme for disposal of domestic water and design of septic tank.
- 9. Looking to the extent of leased area and proposed scale of high excavation, some of the portion of the lease area may attain the ultimate mineable limit even at the end of first year itself. It is, therefore, pertinent on the part of project proponent to initiate restoration/reclamation/rehabilitation measures of the land degraded by mining operation from the beginning of second year itself.
- 10. Issues relating to Systematic Mine Development, Mine Safety and Stability in case of open cast working, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be mentioned. Daily explosive consumption and its legitimate storage are to be assessed. Adequate mitigating measures based on scientific studies in respect of blast induced ground vibration flying fragment and air blast are to be taken alongwith requisite precaution.

The observations of 125th meeting were conveyed to the project proponent vide letter No. 519 dated 27.01.2016. The project proponent submitted the reply of the shortcomings vide letter dated 27.01.2016.

Project proponent informed that their project had earlier been appraised in the 125th meeting and requested the Chairman to take up their case in this meeting as they have complied the observations of 125th meeting. The matter was discussed in detail and the request of the project proponents was considered and accepted unanimously by the Committee in view of Office Memorandum dated 10.11.2015 issued by the MoEF, Government of India.

Thereafter the case was taken up in the 126th meeting of the SEAC held on 11.01.2016 as additional agenda item. The reply submitted by the project proponent was discussed by the Chairman with Sh. K.S. Yadav, Mining Expert during the course of the meeting and Sh. K.S. Yadav has informed that the reply to the observation submitted by the PP is complete.

It is a proposed mining of Stone Alongwith associated Mining Minerals (Minor Mineral) Mining Project with production capacity of 18.00 Lakh MTPA (Khasra No:-136, Area – 7.47 ha). The Mine is located at Village Kheribattar, Tehsil: Dadri, District- Bhiwani, Haryana. The geographical extents of mining lease area are: Latitudes: N 28º34' 2.9'' to N 28º34' 2.0'', Longitudes: E 76º10' 32'' to E 76º 10' 31.3''. This is a category 'B2' project. The Letter of Intent M/s Quality Earth Minerals Private Limited by Mines & Geology department, Haryana vide memo no. DMG/HY/ML/Kheribattar 1/2015/8560 dated 21/10/2015. The Mining Plan is approved by Director General, Mines and Geology Department, Govt. of Haryana; vide letter no. DMG/Hy/MP/Kheribattar-1/2015/10652-10655 dated 22.12.2015 for Mining of " Stone along with Associated minor minerals in over an area of 7.47 hectares in Village Kheribattar, Tehsil: Dadri, District- Bhiwani, Haryana for a period of 10 Years. Method of mining will be opencast fully mechanized. The total mineable reserves are 13844250 MT. Life of mine is 10 years. Total water requirement for the project will be 38 KLD which will be used for the drinking

purpose, green belt development and for dust suppression and sourced from Tanker supply. Ultimate working depth is at 163mRL. Ground water table of lease area is at 80-90mRL. Hence Mining will not intersect groundwater table. There is no National Park, Wild Life sanctuaries, Biosphere Reserves, Tiger Reserves, Wild life Corridors etc. within 10 km radius. The cost of the project is Rs. 10 Crores and Environment Protection Cost is Rs. 13.50 Lakh, CSR cost is Rs. 20 Lakh, Occupational Health and Safety is Rs. 5.0 Lakhs. The project proponent will deposit 10% of the annual contract money *i.e.* Rs. 65.85 Lakhs to the Mines and Minerals Development, Restoration and Rehabilitation Fund.

The project proponent further informed the Committee that they have obtained clarification from the Mining Officer, Bhiwani vide letter NO. 2035 dated 19.11.2015 regarding no other operational mine falling within the 500 meters periphery and does not exceed 25 hectares.

The Committee unanimously decided to appraise the case under B2 category project on the basis of Ministry of Environment, Government of India, Office Memorandum dated 24.12.2013, and recommended for grant of Environmental Clearance to SEIAA with the following conditions:

General Conditions

- [i] Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented;
- [ii] An independent study be organized during peak activity, to understand how the actuals compare with the carrying capacities and further decisions taken to maintain sustainability of this essential stone extraction and supply activity. Project Proponent shall ensure that the road may not be damaged due to transportation of stone;
- [iii] Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The PP shall complete all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing;
- [iv] The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry;
- [v] The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUCC only will be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centres;
- [vi] There shall be planning, developing and implementing facility of rainwater harvesting measures on long term basis and implementation of conservation measures to augment ground water resources in the area in consultation with Central Ground Water Board;
- [vii] Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured;
- [viii] A comprehensive study for slope stabilization of mine benches and OB dumps shall be undertaken within one year;
- [ix] Washing of all transport vehicle should be done inside the mining lease;

- [x] "Environmental Clearance is subject to final outcome of the Court case in Hon'ble High Court of Punjab and Haryana" or any other Court of Law;
- [xi] Native plant species as suggested by villagers/specialist may be planted; and
- [xi] Implementation of Haryana Government Rehabilitation and Resettlement of Land Owners' Policy as per applicability in the area.

SPECIFIC CONDITIONS:-

- [i] The environmental safeguards contained in the EIA/EMP Report should be implemented in letter and spirit.
- [ii] The PP will perform scientific mining as per guidelines issued by the CPCB/SPCB from time to time.
- [iii] The PP will provide tall trees with broad leaves.
- [iv] The PP will obtain Consent to Establish and Consent to Operate from the SPCB.
- [v] The PP will comply with the conditions issued by the Mining Department from time to time
- [vi] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, PLPA, 1900, Forest Act, 1927 etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vii] The PP will not spoil the underground water quality.
- [viii] The PP will keep the emissions within prescribed norms
- [ix] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information had been given for getting approval of this project.
- [x] The PP will not violate any judicial orders/pronouncements issued by the Hon'ble Supreme Court/High Courts.
- [xi] The PP will not obstruct natural drainage/make alternate effective system with prior approval from Competent Authority.

The meeting ended with the vote of thanks to the Chair.

Annexure-'A'

List of Participants

1.	Shri Raj Kumar Sapra, IFS House No. 733, Sector-11, Panchkula	Member
2.	Shri S.C. Mann, House No. 544, Sector-12-A, Panchkula Haryana	Member
3.	Shri A.K. Bhatia, House No. 679, Sector-8, Panchkula, Haryana	Member
4.	Shri Hitender Singh, Architect, Department of Architecture, Haryana	Member
5.	Dr. S.N. Mishra, House No. 220, First Floor, Sector-14, Rohtak, Haryana	Member
6.	Sh. Ajay Kadian, IFS Member Secretary, Haryana State Pollution Control Board, Panchkula	Secretary

Annexure-'B'

Terms of Reference for EIA studies in respect of the proposed Construction Projects 1.0 Introduction

- Profile of the project proponent, name and contact address, implementing organization, organizational chart, project consultants etc., will be mentioned clearly.
- Land description- plot/ survey numbers, village, tehsil, district, state and area of the land will be mentioned clearly.
- Description of Centre/ State/ Local regulations and standards applicable for building and construction projects will be discussed.
- Any litigation(s) pending against the proposed project and/or any directions or orders passed by any Court of Law/any Statutory Authority against the project will be detailed out.

2.0 Project Description

Goal and objectives of the proposed project, significance of the project both at local and regional level, relevance of the project in light of the existing development plans of the region are to be mentioned clearly. Background information and overall scenario of the proposed activity in the Indian context, procedures adopted for selection, criteria for selection of the site for the proposed activity, such as environmental, socio-economic, minimization of impacts, ecological sensitivity, impact of existing activities on the proposed activity etc. should be spelt out. Resource and manpower requirements have to be detailed. Time frame for project initiation, implementation and completion should be detailed. Following details will be given:

- Total site area
- Total built up area (provide area details for each block) and total activity area
- Source of water and consumption, STP requirement/capacity
- Source of power and requirement
- Connectivity to the city center, utilities and transportation networks community facilities
- Parking requirements and provisions
- Type of building materials to be used
- Environmental liability of the site
- Existing structure/ type of material demolition debris etc.

Essential Toposheets / Maps which will be provided with TOR Application, are:

- A map of the study area 500 meter from the boundary of the project area, delineating the major topographical features such as land use, drainage, locations of habitats, major constructions including roads, railways, pipelines, industries if any in the area are to be mentioned.
- A map covering aerial distance of 15 km from the boundary of the proposed project area delineating environmental sensitive areas as specified in Form 1 of EIA notification dated 14th September 2006. In the same map the details of environmental sensitive areas present within a radial distance of 1 km from the project boundary shall be specifically shown.

Remote Sensing Satellite Imagery:

Land use map of the study area in appropriate scale based on Google imagery delineating the forest, agricultural land, water bodies, settlements, and other cultural features.

Digital Elevation Model / Contour Map:

Contour map on 1:10000 scale for the study area showing the various proposed break-up of the land.

- Description of the project site & surroundings, geology, topography, climate, transport and connectivity, demographic aspects, socio, cultural and economic aspects, villages, settlements should be given.
- Details of environmentally sensitive places, land acquisition, rehabilitation of communities/ villages, present status of such activities should be mentioned.
- Historical data on climate conditions such as wind pattern, history of cyclones, storm surges, earthquake etc., for the last 25 years are to be given.
- Detailed layout plan of proposed project development, communication facilities, access/approach roads, landscape, sewage disposal facilities, and waste disposal etc. will be given. Layout plan of proposed development of built up areas with covered construction such as DG set rooms, administrative buildings, utilities such as main and stand by power, water supply installations etc. to be given.
- > Requirement of natural resources and their sources will be detailed out.

Site Selection and Planning

The environmental impacts of construction and operation are established during the early phases of site selection and planning. Planning, site selection and design form an important stage in the development of these projects and will determine their environmental impact(s). Some Important factors for development, which should be addressed, are:

- Status of ownership of land, licence and its validity and its collaboration agreement with the developer.
- The boundaries of the project area
- A map that identifies the locations of all proposed development activities
- A map and photo mosaic showing the area proposed to be disturbed in relation to existing topographic features, wetlands and water bodies.
- Proximity to local communities;
- Proximity to sensitive surface or ground water bodies
- Compatibility with local building regulations
- Exiting drainage pattern
- Any forest-cover within the proposed developmental area.

3.0 Description of the Environment

Environmental data to be considered in relation to building development would be: (a) land, (b) water, (c) air, (d) biological environment, (e) noise and (f) socio-economic environment.

Study Area:

Map of the study area clearly delineating the location of various monitoring stations (air, water, soil and noise) superimposed with location of habitats should be shown. Monitoring should be done as per CPCB guidelines. Primary data should be collected for one season except rainy season. Monitoring of the parameters should be carried out within the study area.

3.1 Land Environment

The first feature which should influence the development of a new project is the existing land use pattern of the neighborhood of the project, whether the proposed development conforms to the development for that area or not.

Study of land use pattern, habitation, cropping pattern, forest cover, environmentally sensitive places etc. will be conducted based on Google's satellite imageries and ground truth and also through secondary data sources.

Geographical latitude and microclimatic factors such as solar access and wind loads have a major impact. The following parameters will be addressed under the baseline data for land environment.

a) Topography

- Slope form

- Landform and terrain analysis

b) Soil

 Type and characteristics 		(i)	0-15	cm
- Porosity and permeability	For 4 different	(ii)	15-30	cm
-Sub soil permeability	depths i.e.	(iii)	30-60	cm
- Inherent fertility		(iv)	60-100	cm

3.2 Air Environment

Climatological data is to be obtained from nearest India Meteorological Department (IMD) station for one full year. Micro meteorological data consisting of wind speed, wind direction, temperature, cloud cover, (amount and height), humidity, inversions, rainfall (peak and average daily rainfall) and wind rose patterns, will be collected and analyzed from secondary sources in the study area.

Baseline data of air pollutant parameters extending an area of 500 meters from the project will be monitored at a number of locations. Description of base line data of ambient air parameters namely PM₁₀, PM_{2.5}, oxides of nitrogen (NOx), sulphur dioxide (SO₂), and carbon monoxide (CO) will be collected. One season data other than monsoon is to be monitored as per the CPCB Norms. Sampling locations are to be located as per CPCB norms.

3.3 Noise Environment

Construction equipment and road traffic are the major sources of noise. Baseline data of noise at the project area and the neighbourhood habitat areas is to be ascertained. Daytime and nighttime data should be collected.

3.4 Water Environment

Identify project activity, including construction phase, which may affect surface water or groundwater. Estimate water intake requirements and identify the source of water to be used. Describe how water will be taken from the surface water/ river and conveyed to the site. Ground water budgeting has to be provided. Rainwater harvesting has to be detailed out.

Baseline water quality from all sources such as ground water, municipal water, surface water needs to be determined and compared to the water quality norms prescribed for drinking water and State PWD specifications for construction water. Quantity of wastewater is to be provided.

3.5 Biological Environment

Baseline data on the flora and fauna for the study area is to be detailed out. An inventory map is to be prepared along with a description of the existing terrestrial, wetland and aquatic vegetation. If there are any rare and endangered species in the study area they are to be clearly mentioned.

3.6 Socio Economic Environment

Baseline data should include the demography, settlements, existing infrastructure facilities in the proposed area.

3.7 Solid Waste

Solid wastes from construction sector can be categorized into two phases i.e. during construction & during operation. Details of the following are to be given:

- Construction or demolition waste, i.e., passive and inert waste
- Municipal waste, i.e., biodegradable and recyclable waste
- Hazardous waste
- E-waste
- Details of authorized municipal solid waste facilities, biomedical treatment facilities and hazardous waste disposal facilities in the area should be included.

4.0 Anticipated Environmental Impacts and Mitigation Measures:

4.1 Land Environment

Anticipated Impacts:

Some of the anticipated impacts, which needs to be addressed, are:

- Impact on the natural drainage system and soil erosion
- Loss of productive soil and impact on natural drainage pattern.
- Study of the problem of landslides and assessment of soil erosion potential and the impact

Mitigation Measures:

Proper mitigation measures have to be suggested:

- If the topsoil is proposed to be preserved, the details relating to the quantity of topsoil stored, demarcated area on plan where it is stored along with preservation plan is to be given
- Details of soil erosion plan are to be given.

4.2 Air Environment

Anticipated Impacts:

Impacts on air quality during the construction and operation phase shuld be predicted. The existing surrounding features of the study area and impact on them should be addressed separately. It is necessary to predict the following, if any:

- Prediction of point source emissions
- Prediction of air emissions from the vehicles during the construction and operation phases

Mitigating Measures:

Mitigative measures are to be proposed during the construction stage as well as the operational stage of the project. Some measures which should be listed include:

- Mitigative measures during construction phase to reduce the emissions during loading, un-loading, transportation and storage of construction materials
- Greenbelt development
- Dust mitigation

4.3 Noise Environment

Impact of project construction/operation on the noise on account of construction equipment and road traffic is to be studied.

Anticipated Impacts:

- Noise due to demolition / construction activities
- Impact due to present and future transportation activities
- Impact of noise due to work at night.

Mitigating Measures:

Site plan and details for construction management showing the layout of noise and dust barriers should be given.

4.4 Water Environment

Impact of construction and operational phases on the surface and ground water on account of the building construction is to be estimated.

Anticipated Impacts:

- Impact of water withdrawal on surface water is to be given.
- Impact on ground water potential is to be detailed.
- Waste water generation

Mitigating Measures:

- Prediction of ground water contamination and suggested mitigating measures to minimize the pollution level.
- Hydro geological information should be clearly detailed
- Details of water conservation within the buildings
- Details of rainwater harvesting to recharge the ground water

4.5 Biological Environment

Impact of project during construction and operational phases on the biological environment on account of project activity is to be detailed.

Anticipated Impacts:

• Impact of construction activity on flora and fauna is to be given.

Mitigating Measures :

- Tree survey plan showing protected/preserved/transplanted/removed trees are to be given.
- Proposed landscape plan with details about species that are to be planted are to be given

4.6 Socio Economic Environment

Anticipated Impacts:

- Predicted impact on the communities of the proposed activity is to be given.
- Impact on surroundings on socio-economic status is to be detailed.

Mitigation Measures:

Mitigation measures to reduce adverse effects are to be given.

4.7 Solid Waste and Environment

Anticipated impacts

Impact of the project during construction and operational phases for generation of waste is to be assessed.

Mitigation Measures:

Options for minimization of solid waste and environmentally compatible disposal are to be given. Management and disposal of temporary structures, made during construction phase are to be addressed. Mitigation measures for handling biomedical wastes, e-wastes and municipal solid wastes are to be detailed.

5.0 Specific Studies

Describe the project energy requirement, infrastructure requirement needed for this activity. Discuss the steps taken to integrate the needs of other stakeholders into the location and design of access infrastructure to reduce and manage overall environmental impacts from resource development.

5.1 Transport

- Estimate any environmental implications from transportation (rail, road) related emissions associated with the construction and operational phases and suggest suitable options.
- Provide a site plan showing the details of connectivity existing and proposed road and rail transport.
- Provide a site plan showing buildings, roads, and open spaces, confirming the hierarchy of roads as per the rules given by UDPFI guidelines.
- Discuss the impacts of increased vehicle traffic and requirements for access improvements on roads in the site development area as a result of the project, considering other existing and planned developments and operations in the region including what measures will be taken to reduce traffic and enhance vehicle safety on external roads
- Discuss any expected change in traffic volume by Average Annual Daily Traffic (AADT) and any seasonal variability in traffic volume (including mitigation measures) prior to construction, during construction and at full site operation

5.2 Building Material and Technologies

• Detail the types of materials use in each component part of the building and landscape (envelope, superstructure, openings, and roads and surrounding landscape).

- Detail out the plans and sections of buildings showing use of new technologies and nonconventional methods
- Detail out the plans and sections of building using new construction techniques

5.3 Energy Conservation

- Use of alternative renewable resources such as solar / wind power etc. is to be discussed
- Discuss the options considered for supplying the power required for the project and the environmental implications, including opportunities to increase the energy efficiency of the project.
- Details of U &R values are to be given.
- Details of the renewable energy systems (sizing and design), building costs and integration details are to be provided

6.0 Environmental Monitoring Program

- Frequency, location, parameters of monitoring
- Compilation and analysis of data and reporting system

7.0 Additional Studies

7.1 Risk Assessment (RA) and Disaster Management Plan (DMP)

Discuss emergency plans for any environmental risks and such as earthquakes:

- Types of emergency; internal and external origin
- Emergency evacuation plan
- Emergency procedures
- Helipad facilities for buildings with height beyond 60 meters

7.2 Natural Resource Conservation

Plan of action for conservation of natural resources and recycle waste materials due to the project activity in the construction and operational phase of the project is to be discussed.

8.0 Project Benefits

This section details out the improvements in physical infrastructure, social infrastructure, if any. Also detail out any employment potential and other benefits that are accrued if the project is taken up.

9.0 Environmental Management Plan (EMP)

Detailed EMP may be formulated to mitigate the residual impacts which should inter alias include the impact due to change in land use; due to loss of agricultural land and grazing land besides other impacts of the projects. Budgeting of the EMP may be included in EIA. The EIA should discuss in detail the following aspects:

a) Sewage Treatment Plant

- Sewage Treatment Plant has been designed to treat the wastewater from the building. The wastewater be treated to tertiary level and after treatment, reused for flushing of toilets in apartment building and gardening.
- Treated water reused for landscaping, car washing etc. and partly discharged.
- Treated sewage should conform to E(P) Rules.
- Sewage Treatment Plants are to be monitored on regular basis.
- Spent oil from DG Sets should be stored in HDPE drums in isolated covered facility and disposed off as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- Spent oil from DG Sets should be disposed off through registered recyclers only.
- Provision of effective controls and building management systems such as Automatic Fire Alarm and Fire Detection and Suppression System etc. must be ensured. Adequate access to fire tenders should be provided
- Provisions should be kept for the integration of solar water heating system and other energy conservation methods

10.0 Summary & Conclusion (Summary EIA)

This document should summarize the significant findings of the EIA report. The summary should describe each significant environmental issue and its resolution in sufficient details so that its importance and scope, as well as the appropriateness of the approach taken to resolve it are well understood. Wherever possible, the summary should make use of base maps, tables and figures given in the report. The following should be addressed in the summary if applicable:

- Potential interruption or limitation of accesses to dwellings, businesses or productive resources either permanently or temporarily;
- Encroachment or reduction of green areas, parks, and other recreational areas. Demolition of buildings high architectural or historical value;
- Potential deterioration of urban quality and property value in the immediate vicinity of the works or deterioration of unique architectural characteristics in the neighbourhood;

11.0 Disclosure of Consultant engaged:

This chapter shall include the names of the consultants engaged with their brief resume and nature of consultancy rendered.

12.0 Corporate Environmental Responsibility:

- 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.
- Does the Environment policy prescribed for standard operation process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norm/conditions? If so, it may be detailed in the EIA.
- What hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
- Does the company have a 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 should be detailed in the EIA report.

Enclosures

Conceptual Plan/Questionnaire/Photos Additional ToRs:-

Project specific additional suggestions:

- 1. The PP should submit a copy of the valid license alongwith collaboration agreement and revenue record of the area of the project.
- 2. The PP should submit contour plan, Master plan, car parking plan, traffic circulation plan, elevation section plan, perspective view plan and area demarcation plan as per the latest definition given by MOEF-GOI alongwith with latest photograph and development in 500 meters of the project site.
- 3. The PP should submit the status of the construction of their project giving a duly notarized affidavit.
- 4. The PP should submit the assurance of the supply of the water during construction phase from safe area through tankers and permission from CGWA for using the ground water of the existing borewell including permission from HUDA for supply of water during operation Phase with detailed clarification from HUDA regarding availability of water in the area.
- 5. The PP will submit detailed dual plumbing system for recycling the treated water.
- 6. The PP should submit NOC from the Forest Department indicating that the area under consideration does not fall under the Forests Acts and Section 4 & 5 of PLPA. The PP should also submit NOC from Deputy Commissioner concerned regarding Aravali Notification dated 07.05.1992.
- 7. The PP should submit the hydraulic design of STP with dimension of each component.
- 8. The PP should submit detailed Solid Waste Management plan.
- 9. The PP should submit landscape plan (Green area, Avenue Plantation, Organised green and Water Body(5%)) indicating minimum area of 30% of the project area. Following details of green belt should be given:
 - a) Width, length and area to be covered;
 - b) Number of rows of trees to be planted; and
 - c) Tree species required to be planted and spacing to be maintained between them depending on the local climate and site conditions.
- 10. The proponent of the building construction project is required to submit risk assessment identifying the detailed/ hazards involved during construction phase and operation phase, causes of such hazards and their mitigating measures.
- 11. The proponent is required to submit the energy (power) balance plan qualitatively and quantitatively taking into account the various aspects like total energy required, sources of energy inputs and outputs. Account for total energy saving incorporated to solar passive techniques in building design, enhanced building material specifications, use of designing energy efficient lighting techniques to minimize the load on conventional systems (heating, cooling ventilation and lighting) use of renewal energy sources like solar water heaters and photovoltaic systems, by adopting various lighting/power control systems and by using advance electrical system like power transformers, energy efficient motors and diesel generators, efficient effluent water treatment systems referred in NBC 2005 and MOEF GI guidelines.
- 12. Prepare complete risk assessment plan of the fire fighting systems (water sprinkling system, water hydrant system, chemical fire extinguishers systems, capacity and storage of water for fire fighting, man power for fire fighting and protective clothing for fire

fighters and liaison with the district fire fighting teams and other district authorities for use) in case of fire fighting and fire rescue system taking into account all the building design features with line diagrams of the fire fighting system and rescue systems indicating the codes, and standards and specification used with reference to NBC 2005

- 13. Explain with line diagrams of sewer, drainage system (septic tank, effluent treatment plant) and ducting system like natural or forced draught to be provided to avoid the accumulation of the hazardous sewer gases and underground explosion in the building construction phase and operation phase.
- 14. Ensure the detailed orientation plan of the site/building pertaining to wind rose and solar orientation to achieve better natural light and ventilation in terms of air changes per hour in all parts of the occupancy, kitchen, toilets, basement, DG Set rooms and staircases etc.
- 15. The PP should submit the dispersion model for ambient air quality on the basis of analysis report as per the latest standard of the November, 2009 and ensure dispersion modeling of 24 hours concentrations for NO₂, SO₂, CO, PM₂₅, PM₁₀.
- 16. As per your project report your project falls in seismic zone, specify the standards and codes used in building construction to minimize the risk of natural calamities like wind, load, seismic load (earthquake), thunder storm/lightning etc. as per NBC 2005.
- 17. The PP should submit ground water site specific hydrogeological details alongwith recharge capacity of recharge pit based on field test and also submit Rain water harvesting maintenance plan.
- 18. The PP should submit the legible reports in all respects.
- 19. The report shall be duly signed by the Project Proponent and the Consultant on all the pages.

