

**STATE EXPERT APPRAISAL COMMITTEE (SEAC), BIHAR**

Ref. No- 251.

Patna- 23, Date- 20/10/2020

To,


1. Shri Murarijee Mishra,  
Vijay Nagar, Near Temple,  
Rukunpura, Patna - 800014
2. Shri Vijay Kumar Sinha, IFS (Retd.),  
Prasad Bhawan, R. K. Path,  
Pirmohani, Kadamkuan, Patna - 800 003
3. Dr. Amar Nath Verma,  
10192 ATS Advantage, Abinsha Khand - 1,  
Near Habitat Centre, Indirapuram.  
Ghaziabad - 201014.
4. Prof. Shardendu,  
Department of Botany,  
Patna Science College, Patna.
5. Prof. Birendra Prasad,  
Department of Botany,  
Patna University,  
Patna - 800 005.
6. Dr. Rakesh Kumar Singh,  
G - 600, 12th Street, GAMA - II, Greater Noida (UP) - 201 310.
7. Dr. Dilip Kumar Paul,  
Assistant Professor & Course Coordinator, M.Sc.  
Environment Science & Management.  
Post Graduation Department of Zoology,  
Patna University, Patna, Bihar - 800 005

Sub :- Proceedings of meeting of State level Expert Appraisal Committee held on 06.10.2020.

Sir,

Please find enclosed herewith proceedings of the State Expert Appraisal Committee (SEAC) meeting held on 06<sup>th</sup> October, 2020.

Yours sincerely,

  
(S. Chandrasekar)  
Member Secretary  
SEAC, Bihar

Proceedings of the State Expert Appraisal Committee (SEAC) meeting dated 06<sup>th</sup> October, 2020-

The meeting of SEAC was held through video conferencing on 06<sup>th</sup> October, 2020 as per schedule (letter No. 225 dated- 23.09.2020). The meeting was held utilizing facilities curtesy Bihar State Pollution Control Board, Patna and attended to in person by Chairman, Member Secretary and the following member.

1. Dr. Amar Nath Verma,

The remaining members participated through video link as under: -

2. Shri Vijay Kumar Sinha,

3. Dr. Rakesh Kumar Singh,

4. Prof. Birendra Prasad,

5. Dr. Dilip Kumar Paul.

6. Prof. Shardendu,

Proposals were considered as per agenda. Project Proponents along with their respective Consultants made presentation before the Committee. Agenda wise details are as under: -

Consideration for Environmental Clearance

1. Stone Mining Project at Village:- Wazidpur & Kare, Tehsil:- Sheikhpura, District:- Sheikhpura, State:- Bihar, Area:- 5.06 Ha, Production Capacity:- 5,86,238 TPA (File No. - SIA/1(a)/525/18). **Online Proposal No.:- SIA/BR/MIN/34115/2019).**

Proponent:- M/s Shri Balaji Infra Developers Private Limited.

Consultant: - M/s Pollution and Ecology Control Services.

Application along with filled up 'Form - I, Pre-feasibility Report and Environment Management Plan in the prescribed format was submitted to SEIAA, Bihar on 16<sup>th</sup> May, 2018 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide No. - SIA/1(a)/525/18, dated 24.07.2019 and Public Consultation for the proposed project was conducted by Bihar State Pollution Control Board on 06.07.2020. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 15.09.2020 for obtaining Environmental Clearance (EC).

The Committee considered final EIA submitted by Project Proponent and decided to recommend the proposal for grant of Environmental Clearance (as Annexure - I) with additional specific conditions mentioned below: -

- a) Stone crusher shall be installed as per CPCB / SPCB norms to control particulate emission from crushing units and transfer points.
- b) The mining lease area facing towards habitation should be properly fenced to prevent fall of human being or cattle in the mining pits.
- c) Proponent will maintain all haul roads to prevent fugitive dust emission due to movement of vehicles.
- d) Project proponent will also maintain all approach road leading to mine lease to prevent development of pot holes and fugitive emission due to plying of vehicles for transportation.

2. Lok Nayak Jai Prakash Narayan Ortho Hospital (LNJP), Mauza:- Sherullahpur, Thana:- Shastri Nagar, Rajbanshi Nagar, District- Patna, State:- Bihar, Total Plot Area - 14,439.17 m<sup>2</sup>, Total Built-up Area - 32,290.36 m<sup>2</sup> (File No. - SIA/8(a)/1236/2020), **Online Proposal No.:- SIA/BR/MIS/156602/2020).**

Proponent:- Lok Nayak Jai Prakash Narayan Ortho Hospital (LNJP)

Consultant:- Center for Environment and Management Consultancy Private Limited.

Application along with filled up 'Form - I', Form - I (A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 15<sup>th</sup> September, 2020 for obtaining Environmental Clearance (EC).

3. Proposed Commercial cum Residential Building Mauza:- Chitkohra, Saritabad, Teshil:- Phulwari, District:- Patna, State:- Bihar by Aparna Architect & Associate, Total Plot Area - 14,520.95 m<sup>2</sup>, Total Built-up Area - 53,888.98 m<sup>2</sup> (File No. - SIA/8(a)/1239/2020), **Online Proposal No.:- SIA/BR/MIS/167660/2020).**

Proponent:- Aparna Architect & Associate.

Consultant: - Center for Envotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I', Form - I (A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 15<sup>th</sup> September, 2020 for obtaining Environmental Clearance (EC).

4. Proposed Commercial cum Residential Building "Sai Creative Enclave" at Patna (Bihar) by Aparna Architect & Associate, Mauza:- Jamsout, Thana:- Shahpur, Teshil:- Phulwari, District:- Patna, State:- Bihar, Total Plot Area - 9,450.15 m<sup>2</sup>, Total Built-up Area - 47,034.01 m<sup>2</sup> (File No. - SIA/8(a)/1238/2020), Online Proposal No.:- SIA/BR/MIS/170829/2020).

Proponent:- M/s Shree Om Sai & Satyarishi.

Consultant: - Center for Envotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I', Form - I (A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 15<sup>th</sup> September, 2020 for obtaining Environmental Clearance (EC).

5. Proposed Commercial cum Residential Building "Crystal Towers" Mauza:- Mustafapur, Teshil:- Phulwari, District:- Patna, State:- Bihar, Total Plot Area - 7,937.113 m<sup>2</sup>, Total Built-up Area - 37,570 m<sup>2</sup> (File No. - SIA/8(a)/1237/2020), Online Proposal No.:- SIA/BR/MIS/172376/2020).

Proponent:- M/s Mundeshwari Multicom Private Limited.

Consultant: - Center for Envotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I', Form - I (A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 15<sup>th</sup> September, 2020 for obtaining Environmental Clearance (EC).

The above-mentioned proposals (Agenda Sl. No. 02 to 05) were considered by the Committee. The Committee decided to do site inspection of the area to assess the situation on the spot before reaching any conclusion.



6. Proposed Commercial cum Residential Building "M/s Surya Nest-build Limited" at Mauza:- Mustafapur, Village:- Mustafapur, Tehsil:- Danapur, District:- Patna, State:- Bihar, Total Plot Area :- 19,675.14 m<sup>2</sup>, Total Built-up Area:- 1,03,891.91 m<sup>2</sup>, (File No. - SIA/8(a)/987/20), Online proposal No.: - SAI/BR/MIS/135121/2020).

Proponent:- M/s Surya Nestbuild Limited.

Consultant: - PARAMARSH (Servicing Environment and Development).

Application along with filled up 'Form - I', Form - I (A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 06<sup>th</sup> February, 2020 for obtaining Environmental Clearance (EC).

Earlier in the meeting dated 11<sup>th</sup> and 12<sup>th</sup> June, 2020, the Committee had directed the Project Proponent to submit revised plan and documents as mentioned in the proceedings of that meeting. The Project Proponent has complied. The Committee considered the compliance as submitted by the Project Proponent and decided to recommend the proposal for grant of prior Environmental Clearance as per conditions given in Annexure - II.

7. Proposed Residential cum Convenience Shopping Project "Lakshmi Heights" at Mauza - Jalalpur, Tehsil - Danapur, District - Patna, State - Bihar, Total Plot Area :- 7,357.17 m<sup>2</sup>, Total Built-up Area:- 29,401.07 m<sup>2</sup>, (File No. - SIA/8(a)/1029/20), Online Proposal No. :- SIA/BR/MIS/155013/2020).

Proponent:- M/s Grih Lakshmi Construction Private Limited.

Consultant: - PARAMARSH (Servicing Environment and Development).

Application along with filled up 'Form - I', Form - I (A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 03<sup>rd</sup> June, 2020 for obtaining Environmental Clearance (EC).

Earlier in the meeting dated 11<sup>th</sup> and 12<sup>th</sup> June, 2020, the Committee had directed the Project Proponent to submit revised plan and documents as mentioned in the proceedings of that meeting. The Project Proponent has complied. The Committee considered the compliance as submitted by the Project Proponent and decided to

recommend the proposal for grant of prior Environmental Clearance as per conditions given in Annexure – III.

Consideration of Scoping

Sand Mining Project – Jamui District

1. Sand Mining Project on Kiul River at Jamui Kiul 29 Balu Ghat, of District- Jamui, Area - 27.0 Ha (File No. - SIA/1(a)/1158/2020), Online Proposal No. :- SIA/BR/MIN/52695/2020).

Proponent:- M/s Ganesh Sai Contractors and Construction Private Limited.

Consultant:- Oceao - Enviro Management Solutions (India) Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 30<sup>th</sup> June, 2020 for obtaining Terms of Reference (ToR).

Sand Mining proposal was considered by the Committee. Looking at the KML files / google imagery it appears that proposed sand mining ghats are located near the Bhimbandh Wildlife Sanctuary, (within 5 km of protected area). As such the Committee decided to defer it for next meeting. In the meanwhile, a report from Chief Wildlife Warden, Bihar Govt. of Bihar on this issue shall be obtained to clarify the exact position.

Sand Mining Project – Supaul District

2. Sand Mining Project on Haiya River at Supaul Haiya Unit 04 Balu Ghat, of District- Supaul, Area – 09.50 Ha (File No. - SIA/1(a)/1127/2020), Online Proposal No. :- SIA/BR/MIN/52699/2020)

Proponent:- Shri Ramanand Singh.

Consultant:- Oceao - Enviro Management Solutions (India) Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 18<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).



3. Sand Mining Project on Parwana River at Supaul Parwana Unit 10 Balu Ghat, of District- Supaul, Area - 05.10 Ha (File No. - SIA/1(a)/1030/2020), Online Proposal No.:- SIA/BR/MIN/52704/2020).

Proponent:- M/s Jai Sheo Construction Company.

Consultant:- Oceao - Enviro Management Solutions (India) Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 18<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

The above-mentioned Sand Mining proposals (Agenda Sl. No. 02 and 03) were considered by the Committee. From Google imagery prima-facie it appears that sand mining ghats are located in active river / channels. These rivers are tributaries of river Bagmati which is the habitat of endangered smooth coated otters, gharial and gangetic dolphin etc. These animals migrate to the tributaries in flood seasons. As such the consultant was asked to relook into the proposals which were deferred for next meeting, when actual site photographs along with satellite images of three seasons of past 3 years shall also be submitted.

#### Sand Mining Project – Bhojpur District

4. Sand Mining Project on Son River at Bhojpur Son 21 Balu Ghat, of District- Bhojpur, Area - 45.3 Ha (File No. - SIA/1(a)/1240/2020), Online Proposal No.:- SIA/BR/MIN/54291/2020).

Proponent :- M/s Starnet Marketing Private Limited.

Consultant :- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

5. Sand Mining Project on Son River at Bhojpur Son 27 Balu Ghat, of District- Bhojpur, Area - 51.90 Ha (File No. - SIA/1(a)/1242/2020), Online Proposal No.:- SIA/BR/MIN/54333/2020).



Proponent:- Shri Ashok Kumar.

Consultant:- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

6. Sand Mining Project on Son River at Bhojpur Son 31 Balu Ghat, of District- Bhojpur, Area - 55.50 Ha (File No. - SIA/1(a)/1244/2020), Online Proposal No.:- SIA/BR/MIN/55333/2020).

Proponent :- M/s Jyoti Mining LLP.

Consultant :- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

7. Sand Mining Project on Son River at Bhojpur Son 24 Balu Ghat, of District- Bhojpur, Area - 48.20 Ha (File No. - SIA/1(a)/1241/2020), Online Proposal No.:- SIA/BR/MIN/54324/2020).

Proponent:- M/s Frontline NCR Business Solutions Private Limited.

Consultant:- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

8. Sand Mining Project on Son River at Bhojpur Son 30 Balu Ghat, of District- Bhojpur, Area - 48.60 Ha (File No. - SIA/1(a)/1243/2020), Online Proposal No.:- SIA/BR/MIN/54337/2020).

Proponent:- M/s Frontline NCR Business Solutions Private Limited.

Consultant:- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

9. Sand Mining Project on Son River at Bhojpur Son 57 Balu Ghat, of District- Bhojpur, Area - 50.20 Ha (File No. - SIA/1(a)/1252/2020), Online Proposal No.:- SIA/BR/MIN/54473/2020).

Proponent:- M/s Vaishanavi Enterprises.

Consultant:- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 18<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

10. Sand Mining Project on Son River at Bhojpur Son 74 Balu Ghat, of District- Bhojpur, Area - 31.0 Ha (File No. - SIA/1(a)/1253/2020), Online Proposal No.:- SIA/BR/MIN/54307/2020).

Proponent:- M/s Deva Infra Developers and Promoters.

Consultant:- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 18<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

11. Sand Mining Project on Son River at Bhojpur Son 33 Balu Ghat, of District- Bhojpur, Area - 28.10 Ha (File No. - SIA/1(a)/1245/2020). Online Proposal No.:- SIA/BR/MIN/55372/2020).

Proponent:- Shri Dilip Kumar.

Consultant:- Chandigarh Pollution Testing Laboratory.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

**Sand Mining Project – Aurangabad District**

- 12.** Sand Mining Project on Son River at Aurangabad Son 28 Balu Ghat, of District- Aurangabad, Area - 63.80 Ha (**File No. - SIA/1(a)/1248/2020**), **Online Proposal No. :- SIA/BR/MIN/54317/2019**).

Proponent:- M/s Jai Maa Vaishano Mining LLP.

Consultant:- Center for Envirotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

- 13.** Sand Mining Project on Son River at Aurangabad Son 24 Balu Ghat, of District- Aurangabad, Area - 100.0 Ha (**File No. - SIA/1(a)/1193/2020**), **Online Proposal No. :- SIA/BR/MIN/51929/2020**).

Proponent:- Shri Ajeet Kumar.

Consultant:- Center for Envirotech and Management Consultancy Private Limited.

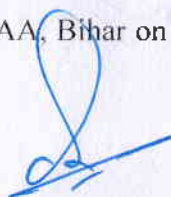
Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 19<sup>th</sup> June, 2020 for obtaining Terms of Reference (ToR).

- 14.** Sand Mining Project on Son River at Aurangabad Son 18 Balu Ghat, of District- Aurangabad, Area - 96.0 Ha (**File No. - SIA/1(a)/1246/2020**), **Online Proposal No. :- SIA/BR/MIN/51402/2020**).

Proponent:- M/s Sisodiya Service Station.

Consultant:- Center for Envirotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).



15. Sand Mining Project on Son River at Aurangabad Son 31 Balu Ghat, of District- Aurangabad, Area - 22.60 Ha (**File No. - SIA/1(a)/1249/2020**), **Online Proposal No.:- SIA/BR/MIN/55307/2020**).

Proponent:- M/s R. P. M. Constructions.

Consultant:- Center for Envirotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

16. Sand Mining Project on Son River at Aurangabad Son 33 Balu Ghat, of District- Aurangabad, Area - 58.30 Ha (**File No. - SIA/1(a)/1250/2020**), **Online Proposal No.:- SIA/BR/MIN/54292/2020**).

Proponent:- M/s Amamath Singh.

Consultant:- Center for Envirotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

17. Sand Mining Project on Son River at Aurangabad Son 27 Balu Ghat, of District- Aurangabad, Area - 73.40 Ha (**File No. - SIA/1(a)/1247/2020**), **Online Proposal No.:- SIA/BR/MIN/54309/2020**).

Proponent:- M/s Parmod Kumar.

Consultant:- Center for Envirotech and Management Consultancy Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 17<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).



**Sand Mining Project – Gaya District**

18. Sand Mining Project on Falgu River at Gaya Falgu 09 Balu Ghat, of District- Gaya, Area - 99.0 Ha (File No. - SIA/1(a)/1251/2020), Online Proposal No.:- SIA/BR/MIN/51560/2020).

Proponent:- M/s Infinity Vanijiya Private Limited.

Consultant:- P & M Solutions.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 30<sup>th</sup> June, 2020 for obtaining Terms of Reference (ToR).

19. Sand Mining Project on Morhar River at Gaya Morhar 40 Balu Ghat, of District- Gaya, Area - 80.60 Ha (File No. - SIA/1(a)/1055/2020), Online Proposal No.:- SIA/BR/MIN/51392/2020).

Proponent:- Md. Irshad.

Consultant:- P & M Solutions.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 19<sup>th</sup> June, 2020 for obtaining Terms of Reference (ToR).

**Sand Mining Project – Lakhisarai District**

20. Sand Mining Project on Kiul River at Lakhisarai Kiul 08 Balu Ghat, of District- Lakhisarai, Area - 76.60 Ha (File No. - SIA/1(a)/1010/2020), Online Proposal No.:- SIA/BR/MIN/51348/2020).

Proponent:-M/s Narendra Kumar Singh.

Consultant:- Oceao - Enviro Management Solutions (India) Private Limited.

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 29<sup>th</sup> June, 2020 for obtaining Terms of Reference (ToR).

The above-mentioned Sand Mining proposals (Agenda Sl. No. 04 to 20) were considered by the Committee. It was decided to recommend the proposals for grant of

Term of Reference as per standard ToR conditions recommended by the MoEF&CC, Govt. of India (as Annexure IV) along with additional specific conditions mentioned below:

- a) Submit a report based on cumulative assessment of increase in air pollutants due to increase in traffic load in view of proposed mining activities on all the roads located within aerial distance of 10 km using suitable air model.
- b) Submit a map on appropriate scale to show extraction paths to be used outside the mining lease boundary to approach / major public roads (Rural / District road or State / National Highway). Alternative route shall be explored if extraction path is passing through dense population / human settlements. Also submit cumulative traffic management plan for cluster sand mining proposal.
- c) Submit a map of the area falling within 2.5 km radius from boundary of each mining lease showing all man-made public utility features such as bridge / public civil structure (including water intake points), culverts etc. and highways, and a table showing distance of the above mentioned man-made features from the mining lease boundary to facilitate decision making pertaining to relevant rules / Guidelines.
- d) Submit District Survey Report (DSR) and other relevant documents prepared in accordance with extant MoEF&CC, Govt. of India Notifications / rules / guidelines.
- e) If the proposed mining lease has overlapping areas with previously allotted mining lease or already working or worked out mining lease the same should be clearly marked on current mining plan. Details about quantity of sand extracted from overlapped area should be furnished duly certified from District Mining Officer.

- f) Satellite imagery of last three years for summer, rainy and winter seasons of each proposed mining lease shall be submitted.
- g) Prepare cluster EIA / EMP of mining ghats / blocks qualified to fall in a cluster on a river within a district.

**Sand Mining Project –Madhepura District**

21. Sand Mining Project on Gomti / Parmane River at Madhepura Gomti / Parmane Unit03Balu Ghat, of District- Madhepura, Area – 17.16 Ha (**File No. - SIA/1(a)/1151/2020**), **Online Proposal No.:-SIA/BR/MIN/53042/2020**).

Proponent:-M/sAbhishek Kumar Singh.

Consultant:-

Application along with filled up'Form - I' and Prefeasibility report in theprescribed format was submitted to SEIAA, Bihar on 19<sup>th</sup> June,2020 for obtaining Terms of Reference (ToR).

Sand Mining proposal was considered by the Committee. From Google imagery prima-facie it appears that sand mining ghats are located in active river / channels. As such the consultant was asked to relook into the proposals which were deferred for next meeting, when actual site photographs along with satellite images of three seasons of past 3 years shall also be submitted.

**Steel Project**

22. "Patwari Steels Private Limited" at Village:- Fatuha Industrial Area, Tehsil:- Fatuha, District:- Patna, State:- Bihar, Total Production Capacity (Existing + Expansion):- 90,000 TPA for Induction Furnance (MS Ingot / Billet), 90,000 TPA for Re-rolling Mill (TMT Bar / Rods),(**File No. - SIA/3(a)/1235/2020**), **Online Proposal No.:- SIA/BR/MIN/55772/2020**).

Proponent:-M/s Patwari Steels Private Limited.

Consultant:-PARAMARSH (Servicing Environment and Development).



Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 10<sup>th</sup> September, 2020 for obtaining Terms of Reference (ToR).

The Project Proponent and Consultant presented the proposal before the Committee. Proponent requested to allow the baseline data for the period of October to December 2019 generated for EIA / EMP study of expansion project of Shivshiva Steels Private Limited which is within 200 meters from the proponent's project site. On verification from records available record it is seen that the monitoring data relating to Shivshiva Steels Private Limited pertains to year 2017 and not 2019 as claimed by the Project Proponent / Consultant in Power Point Presentation. This is a misrepresentation of facts for which they will have to explain their conduct. This may be treated as a show cause notice why this application / proposal should not be rejected and also why suitable action should not be initiated against the Consultant. The matter is deferred for the reason stated above.

### **Pulp and Paper Industry Project**

23. "Smrity Paper Mill" Pulp and paper industry excluding manufacturing of paper from waste at Village:- Mahuli Road, Chhitma, P.O.:- Kothiya, P.S.:- Didarganj, Tehsil:- Patna Sadar, District:- Patna, State:- Bihar, Existing Capacity:- 50 TPD, Proposed expansion:- 30 TPD, Total capacity after expansion (writing paper, printing paper, unbleached paper):- 80 TPD, Total Plot Area:- 0.48 Ha, (File No. - SIA/5(i)/1028/20), **Online proposal No.:- SAI/BR/IND/53170/2020**,  
Proponent:-M/s Smrity Paper Mills Private Limited.  
Consultant:-PARAMARSH (Servicing Environment and Development).

Application along with filled up 'Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 03<sup>rd</sup> June, 2020 for obtaining Terms of Reference (ToR). Earlier in the meeting dated 18<sup>th</sup> and 19<sup>th</sup> June, 2020, the Committee had directed the Project Proponent to submit clarification as mentioned in the proceedings of that meeting. The Committee considered the compliance submitted by the proponent. It is seen that the concerned unit was granted CTE by the B.S.P.C.B, Patna in



the year 2008 and CTO in 2010, and has been operating since then. It appears that the unit existed prior to the coming in force of Patna Master Plan 2031, as also that there is no expansion of area beyond the existing premise.

In the light of above the SEAC is of considered opinion that the proponent is allowed ToR for necessary EIA / EMP studies (as Annexure – V).

**Any Other item**

The matter of application (File No. - SIA/8(a)/700/19) relating to (CRESCENT Residential Building Project) which was recommended for delisting in the SEAC meeting dated 3<sup>rd</sup> and 4<sup>th</sup> August 2020, and which is referred back by the SEIAA, Bihar for reconsideration, was discussed. It is observed that the concerned proponent, despite being given repeated chance /opportunities to present their case did not do the same. In the meeting referred to above the proponent or his consultant did not appear either. The letter received in the SEIAA office does not contained any satisfactory reasoning and it is not acceptable to the Committee. Mere the reason of sickness of architect is not adequate to justify the absence of the proponent and consultant from the meeting as the option of attending via video conferencing (VC) was available to them.

In the light of the above, the SEAC decided to stand by its earlier decision to delist / reject the proposal. However, the Regulatory Authority may accept a fresh proposal from the proponent for consideration if submitted.

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

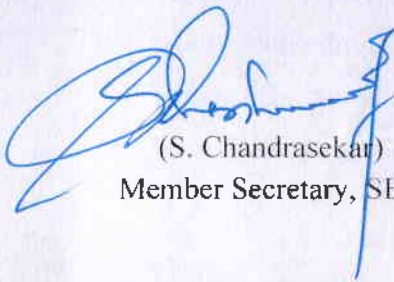
Sd/-  
(Dr. Rakesh Kumar Singh)  
(Member, SEAC)

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

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

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

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

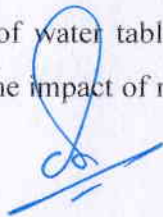
  
(S. Chandrasekar)  
Member Secretary, SEAC

  
(Murarijee Mishra)  
Chairman, SEAC

## Annexure – I (For Stone Mining Projects – EC)

### A. Specific Conditions

1. Prior to stone mining, the proponent shall get the studies done on vibration due to blasting (Zone of influence) and best suitable blasting method specific to location of project shall be done by a recognized Institute e.g. Indian Institute of Mines (ISM), Dhanbad or Central Mine and Fuel Research Institute, Dhanbad and submit a report to SEIAA office before commencing mining operation. If mining activities is carried out without the vibration studies, the Environmental Clearance shall be considered revoked automatically.
2. The Project proponent will obtain CTE from the BSPCB before preparing site for mining if applicable and CTO before starting mining and crushing activity.
3. The project proponent before starting any activity /preparation of ground, on the leased area shall demarcate his lease hold by RCC pillar erected at the cost of lease holder after certification by the mining officer. On each pillar Geo-Coordinate shall be written with permanent paint mark as described in the mining plan.
4. Human Habilitation if any within the zone of influence (500-meter radius from the periphery) of the project site shall have to be rehabilitation and resettlement before commissioning mining activity on the proposed site. The cost of rehabilitation will be borne by the Project Proponent.
5. The project proponent shall adopt best mining practice. In the mining area, adequate numbers of check dams, retaining walls, garland drains and settling ponds should be provided to arrest the mine wash-off with rain water in catchment area.
6. The natural water bodies and streams which are flowing in and around the village should not be disturbed. The water table should be nurtured so as not to go down below the pre-mining period. Regular monitoring of water table in the open dug well located in the villages should be done to ascertain the impact of mining over the ground water table.



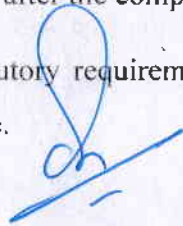
7. The Proponent must ensure that specifically at night noise levels are kept within prescribed limits as fixed by MoEF&CC, Gol.
8. The Project proponent shall not disturb grazing ground.
9. Main Haulage road in the mine should be provided with permanent water sprinklers and other roads shall also be wetted with water tankers fitted with sprinklers.
10. The Project proponent shall ensure that the mine-wash or dust from mine or crusher unit (if installed) do not spread out and effect adversely to Agriculture crop / field.
11. Transportation of the minerals by road passing through the village should be carried only by the consent of the villages or else Project Proponent shall construct by pass road at his own expense of the proponent. Proponent shall bear the cost towards widening and strengthening the existing public road network in case the same is used for the project.
12. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1A.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
13. The environmental clearance is coterminous with mining lease by the Department of Mines, Government of Bihar to Project Proponent and all other Statutory Conditions as imposed by various concerned Authorities / regulator.
14. No mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance. Minimum distance shall be maintained from Reserved / Protected Forest as stipulated in MoEF&CC Guidelines.
15. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project (in case any endangered fauna occurs / is found in the Project area). No damage shall be caused to any fauna / flora enlisted in schedules of Wildlife (Protection) Act if found in and around mining lease area. In case found they should be given protection, collected alive with the help of the expert and transferred them or handing over them to the concerned authorities. Conservation Plan, if applicable has to be adhered to.



16. The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
17. There shall be no external dump(s). Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the SEIAA, Bihar Patna/ BSPCB, Patna, its nearest Regional Office on six monthly basis.
18. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, sub-grade and mineral dump(s) to prevent run off of water and flow of sediments directly into the agricultural fields, and other water bodies. The water so collected should be utilized for watering the mine area, haul roads, green belt development etc. The drains shall be regularly desilted particularly after the monsoon and maintained properly.
19. Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
20. Greenbelt shall be developed all along the mine lease area. The Project proponent shall do tree plantation in an area at least equivalent to 33 % of the lease area Fast growing and local species will be planted. Plantation should be completed within 2 Years.
21. Toilet for BPL families residing near-by project site must be provided and facilities of drinking water for villagers must be developed on the cost of Project Proponent within 6 months of the issue of this Environmental Clearance.
22. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and transfer points. Extensive water sprinkling shall be carried out on haul roads which should be made pucca with suitable water drainage arrangements. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.



23. The project proponent should implement suitable conservation measures to augment ground water resources in the area in consultation with the Ground Water Directorate, Government of Bihar / Central Ground Water Board.
24. Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. No transportation of mined out materials outside the mine lease area shall be carried out after the sunset.
25. No blasting shall be carried out after the sunset. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.
26. Drills shall either be operated with the dust extractors or equipped with water injection system.
27. Effective safeguard measures should be taken to control fugitive emissions so as to ensure that concentration of PM<sub>10</sub> and PM<sub>2.5</sub> levels are within the national Ambient Air Quality Standards.
28. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out by registered medical practitioner / specialized occupational health and records maintained.
29. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, septic tanks, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
30. Proper safety measures as per statutory requirement are to be implemented around the mined out Pit prior to closure of site.



31. Progressive mine reclamation plan approved by competent authority shall be implemented on the ground.
32. The project proponent shall obtain NOC and Consent to establish/Consent to Operate from the Bihar State Pollution Control Board, Patna and effectively implement all the conditions stipulated therein.
33. Groundwater shall not be abstracted without prior permission of competent authority i.e., CGWC / SGWC as applicable.
34. The proponent in consultation with CGWC / SGWC will install Piezometer to monitor the fluctuation in ground water level due to mining and date shall be submitted CGWC / SGWC, SPCB, SEIAA and MoEF&CC.
35. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
36. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which should in the vernacular language, informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority, Bihar, and the same may also be sent to Bihar State Pollution Control Board (B.S.P.C.B.), Patna. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of MoEF&CC at Ranchi.

**B. General conditions**

1. No change in mining technology and scope of working should be made without prior approval of the Statutory authorities / Department of Mines, Government of Bihar, SEIAA, Bihar, Bihar State Pollution Control Board, Patna during the currency of EC period.



2. No change in the calendar plan including excavation, quantum of mineral and waste shall be made without obtaining prior and revised EC from SEIAA.
3. The Project proponent shall maintain register for production and dispatch and submit return to the Board. He shall also show the production detail in his six-monthly compliance report required submission to SEIAA regularly.
4. The Project proponent shall not cut trees / carry out tree felling in leased out area without the permission of competent authority.
5. Measures should be taken for control of noise levels below prescribed norms in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
6. Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed. Oil and grease trap should be installed before discharge of workshop effluents.
7. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
8. Dispensary facilities for First Aid shall be provided at site.
9. A separate "Environmental Management / Monitoring Cell" with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
10. The SEIAA, Bihar directly shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) by furnishing the requisite data / information / monitoring reports etc. and facilitating inspection / monitoring.



11. The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as soft copy by e-mail) to the SEIAA, Bihar.
12. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the project proponent.
13. Environmental clearance shall remain valid for a maximum period of 5 years or till expiry of lease period whichever is earlier.
14. All specific and general conditions which are of public concern at large shall be permanently displayed at a prominent place for public along with addresses and contact details of authorities where the violation of EC conditions can be reported.
15. All statutory clearances shall be obtained before start of mining operations.

**C. Other points**

1. The responsibility for implementation of environmental safeguards rest fully with the project proponent.
2. Project Proponent shall submit (to the SEIAA, Bihar, Regional Office of MoEF&CC at Ranchi, Bihar State Pollution Control Board) six monthly compliance report of the conditions within a fortnight after the end of every six month till validity period of E C
3. EC shall be liable to be revoked if furnished information provided description / Certificates / Affidavits / Undertaking etc. are found false / concocted at any stage of its validity.
4. This EC is issued without affecting any court order / statutory instructions as well as relevant other laws enacted by MoEF&CC, Gol, New Delhi.

5. Mining and transportation of mined material from mine site to stock yard shall be done in the day time only to avoid noise pollution in the nearby human habitation area.
6. SEIAA reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority; if that be so, legal action as per the provisions of Environment (Protection) Act, 1986 shall be taken against the Project Proponent.
7. The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance.
8. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Bihar for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.
9. The above stipulations would be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Tran boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Bihar and any other Court of Law relating to the subject matter.
10. Any Appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



## Annexure - II (Surya Nest - EC)

### I. Statutory compliance:

1. The project proponent shall obtain all necessary clearance / permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. The Project proponent will obtain CTE from the BSPCB before preparing site for construction if applicable and CTO before giving occupancy.
3. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
4. All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied with.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
7. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
10. The project proponent shall follow the ECBC / ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

11. The facilities provided for collection, segregation, handling, on site storage & processing of solid waste such as chute system for multi-storey buildings, wet & dry bins, collection center & mechanical composter etc. shall be properly maintained. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers.
12. Hazardous waste / E-waste should be disposed off as per Rules applicable and with the necessary approval of the Bihar State Pollution Control Board.
13. Solar power plant or other solar energy related equipment's shall be operated and maintained properly.
14. Provisions shall be made for the integration of solar water heating system.
15. EC conditions applicable for construction and operation phase which are in the interest of public at large must be displayed at prominent place which can be easily accessible to public along with address and contact number of authority to whom violation of EC conditions can be reported.

Project site shall be adequately barricaded before the start of construction activity by erecting suitable windscreen upto. 1/3<sup>rd</sup> of the building height or 10 meters height whichever is more to prevent dispersion of particulate matter from the construction site.

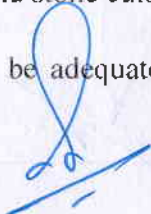
16. Free Parking facility for visitors shall be provided within the project premises to avoid congestions on public road.
17. Construction of appropriate civil structure and creation of other facilities shall be undertaken to provide benefit of persons suffering from disability in accordance with Hon'ble Supreme Court of India order dated 15<sup>th</sup> December 2017 in Writ Petition (Civil) 292 of 2006 with WP (Civil) 997 of 2013 (Disabled Rights Gout & Anr. Vs Union of India & Ors).

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## II. Air quality monitoring and preservation

1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
2. Project site shall be adequately barricaded before the start of construction activity by erecting suitable windscreen upto.  $1/3^{\text{rd}}$  d of the building height or upto 10 meters height whichever is more to prevent dispersion of particulate matter from the construction site' Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. Plastic / tarpaulin sheet covers shall be provided for vehicles bringing all loose construction material e.g sand, cement, muffam and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
3. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
4. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Diesel to be used should have lower in sulphur content. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
5. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. Plastic / tarpaulin sheet covers shall be provided for vehicles bringing all loose construction material e.g sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. All loose construction material e.g sand, soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.



9. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
10. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
12. For indoor air quality the ventilation provisions as per National Building Code of India shall be implemented.

### **III. Water quality monitoring and preservation:**

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project

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

5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
9. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where

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

13. All recharge should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
16. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health



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

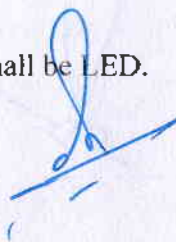
22. Separate drainage system shall be developed for storm water so that end point discharge to nearest nallah / river is ensured to avoid water logging without any increase in the pollution load in receiving system.
23. Possibilities needs to be explored to use STP waste water during construction phase. Fresh water shall be used only after exhausting the possibility of obtaining STP waste water located in municipal jurisdiction

**IV. Noise monitoring and prevention:**

1. Ambient noise levels shall conform to residential area silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
2. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

**V. Energy Conservation measures:**

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

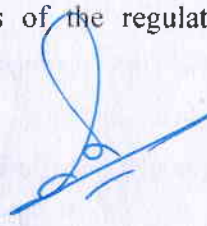


3. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
4. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
5. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

#### **VI. Waste Management:**

1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
2. Proper composting / vermi-composting of municipal and biodegradable solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000 (As amended).
3. All the top soil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site.

4. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
5. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
6. Organic waste compost / Vermiculture pit / Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
7. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
8. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
9. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
10. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016, Ready mixed concrete must be used in building construction.
11. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
12. Used CFLs and TFLs should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.



## **VII. Green Cover:**

1. No tree should be felled unless exigencies demand. Wherever absolutely necessary, tree felling shall be done with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured in the ratio of species cut to species planted.
2. 9,141 m<sup>2</sup> (46% of the total plot area) shall be kept under green belt cover within the project site.
3. All the affords shall be made not to fell any tree however if any tree need to be removed necessarily a prior permission from concerned local Authority shall be obtained. In case of felling plantations to be insured in the ratio of species cut / removed to species planted. Area for green belt development shall be provided as per the details provided in the Project document.
4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## **VIII. Transport:**

1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
2. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.



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

**IX. Human health issues:**

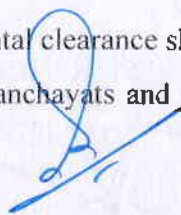
1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.
7. Ensure to create permanent housing facility to station at least two 3-4 fire tender vehicle with experienced man power within the developed premises to control fire in case of any eventualities.

**X. Corporate Environment Responsibility:**

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
3. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA/ Ministry, Regional Office along with the Six Monthly Compliance Report.

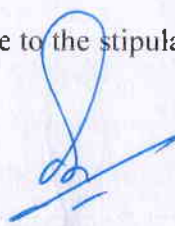
**XI. Miscellaneous:**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC / SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant



offices of the Government who in turn has to display the same for 30 days from the date of receipt.

3. All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.
4. Rest room facilities shall be provided for service population.
5. Permission shall be made for food waste management facility / Bio-composting unit preferably in the campus.
6. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
7. The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during their presentation to the State Expert Appraisal Committee.
8. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
9. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
10. The project proponent shall inform the SEIAA, Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.



12. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA.
13. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
14. The EC granted on submitted basis of the layout plan of the proposed construction of buildings / establishments of industries shall be provisional for a period of one year or till its approved by the competent authority whichever is earlier. Should there be any deviation / change in the layout plan (as contained in the project proposal on which EC is granted), the Project Proponent shall furnish a copy along with a request to SEIAA, Bihar to make necessary correction / revision in the EC accordingly. Any failure on part of the Project Proponent in doing so will be treated as a violation of EC condition.
15. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
16. The SEIAA reserves the right to stipulate additional conditions if found necessary which shall be implemented in a time bound manner.
17. The Regional Office of the MoEF&CC, GoI / SEIAA shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
18. Project proponent shall erect a signboard on his project site and display information regarding name of the project, No. date and validity period of EC, and EC conditions which affect general public at large along with name of authority to whom violation of EC conditions can be reported.
19. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other



orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

20. Environmental clearance shall remain valid for a maximum period of 7 years or completion of project whichever is earlier.
21. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



### **Annexure - III (Laxmi Heights - EC)**

#### **I. Statutory compliance:**

1. The project proponent shall obtain all necessary clearance / permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. The Project proponent will obtain CTE from the BSPCB before preparing site for construction if applicable and CTO before giving occupancy.
3. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
4. All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied with.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
7. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
10. The project proponent shall follow the ECBC / ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

11. The facilities provided for collection, segregation, handling, on site storage & processing of solid waste such as chute system for multi-storey buildings, wet & dry bins, collection center & mechanical composter etc. shall be properly maintained. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers.
12. Hazardous waste / E-waste should be disposed off as per Rules applicable and with the necessary approval of the Bihar State Pollution Control Board.
13. Solar power plant or other solar energy related equipment's shall be operated and maintained properly.
14. Provisions shall be made for the integration of solar water heating system.
15. EC conditions applicable for construction and operation phase which are in the interest of public at large must be displayed at prominent place which can be easily accessible to public along with address and contact number of authority to whom violation of EC conditions can be reported.

Project site shall be adequately barricaded before the start of construction activity by erecting suitable windscreen upto. 1/3<sup>rd</sup> of the building height or 10 meters height whichever is more to prevent dispersion of particulate matter from the construction site.

16. Free Parking facility for visitors shall be provided within the project premises to avoid congestions on public road.
17. Construction of appropriate civil structure and creation of other facilities shall be undertaken to provide benefit of persons suffering from disability in accordance with Hon'ble Supreme Court of India order dated 15<sup>th</sup> December 2017 in Writ Petition (Civil) 292 of 2006 with WP (Civil) 997 of 2013 (Disabled Rights Group & Anr. Vs Union of India & Ors).



## II. Air quality monitoring and preservation

1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
2. Project site shall be adequately barricaded before the start of construction activity by erecting suitable windscreen upto.  $1/3^{\text{rd}}$  of the building height or upto 10 meters height whichever is more to prevent dispersion of particulate matter from the construction site. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. Plastic / tarpaulin sheet covers shall be provided for vehicles bringing all loose construction material e.g sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
3. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
4. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Diesel to be used should have lower sulphur content. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
5. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. Plastic / tarpaulin sheet covers shall be provided for vehicles bringing all loose construction material e.g sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. All loose construction material e.g sand, soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.



9. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
10. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
11. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
12. For indoor air quality the ventilation provisions as per National Building Code of India shall be implemented.

### **III. Water quality monitoring and preservation:**

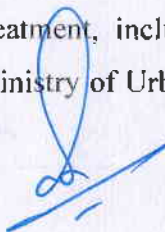
1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project

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

5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
9. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where

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

13. All recharge should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
16. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. **Natural treatment systems shall be promoted.**
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health



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

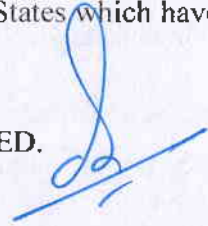
22. Separate drainage system shall be developed for storm water so that end point discharge to nearest nallah / river is ensured to avoid water logging without any increase in the pollution load in receiving system.
23. Possibilities needs to be explored to use STP waste water during construction phase. Fresh water shall be used only after exhausting the possibility of obtaining STP waste water located in municipal jurisdiction

#### **IV. Noise monitoring and prevention:**

1. Ambient noise levels shall conform to residential area silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
2. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### **V. Energy Conservation measures:**

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

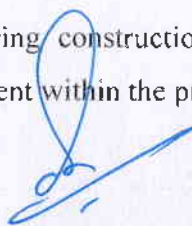




3. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
4. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
5. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
6. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

**VI. Waste Management:**

1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
2. Proper composting / vermi-composting of municipal and biodegradable solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Municipal Solid Wastes (Management and Handling) Rules, 2000 (As amended).
3. All the top soil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site.



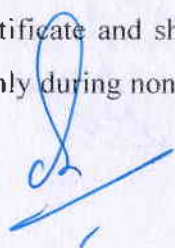
4. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
5. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
6. Organic waste compost / Vermiculture pit / Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
7. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
8. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
9. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
10. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016, Ready mixed concrete must be used in building construction.
11. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
12. Used CFLs and TFLs should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.

## VII. Green Cover:

1. No tree should be felled unless exigencies demand. Wherever absolutely necessary, tree felling shall be done with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured in the ratio of species cut to species planted.
2. 1,475.23 m<sup>2</sup> (20% of the total plot area) shall be kept under green belt cover within the project site.
3. All the affords shall be made not to fell any tree however if any tree need to be removed necessarily a prior permission from concerned local Authority shall be obtained. In case of felling plantations to be insured in the ratio of species cut / removed to species planted. Area for green belt development shall be provided as per the details provided in the Project document.
4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

## VIII. Transport:

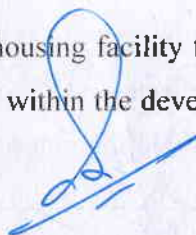
1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
2. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.



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

**IX. Human health issues:**

1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.
7. Ensure to create permanent housing facility to station at least two 3-4 fire tender vehicle with experienced man power within the developed premises to control fire in case of any eventualities.



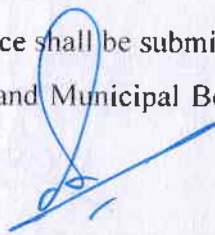


**X. Corporate Environment Responsibility:**

1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
3. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA/ Ministry, Regional Office along with the Six Monthly Compliance Report.

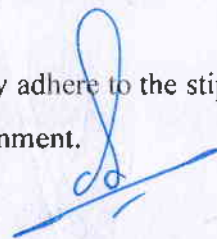
**XI. Miscellaneous:**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC / SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant



offices of the Government who in turn has to display the same for 30 days from the date of receipt.

3. All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.
4. Rest room facilities shall be provided for service population.
5. Permission shall be made for food waste management facility / Bio-composting unit preferably in the campus.
6. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
7. The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during their presentation to the State Expert Appraisal Committee.
8. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
9. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
10. The project proponent shall inform the SEIAA, Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
11. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.



12. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA.
13. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
14. The EC granted on submitted basis of the layout plan of the proposed construction of buildings / establishments of industries shall be provisional for a period of one year or till its approved by the competent authority whichever is earlier. Should there be any deviation / change in the layout plan (as contained in the project proposal on which EC is granted), the Project Proponent shall furnish a copy along with a request to SEIAA, Bihar to make necessary correction / revision in the EC accordingly. Any failure on part of the Project Proponent in doing so will be treated as a violation of EC condition.
15. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
16. The SEIAA reserves the right to stipulate additional conditions if found necessary which shall be implemented in a time bound manner.
17. The Regional Office of the MoEF&CC, Govt / SEIAA shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
18. Project proponent shall erect a signboard on his project site and display information regarding name of the project, No. date and validity period of EC. and EC conditions which affect general public at large along with name of authority to whom violation of EC conditions can be reported.
19. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other

orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

20. Environmental clearance shall remain valid for a maximum period of 7 years or completion of project whichever is earlier.
21. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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#### Annexure -IV (Sand Mining Projects – ToR)

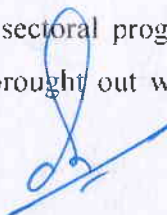
1. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3. All documents including approved mine plan, EIA and Public Consultation should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
6. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also

be given. The 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, may also be detailed in the EIA Report.

8. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA.
9. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
10. An NOC from the Divisional Forest Officer under whose jurisdiction the mining lease area fall shall be obtained regarding forest area cutting of tree if any and the Flora and Fauna (Protected Species) found in the area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
11. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
12. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
13. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
14. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding

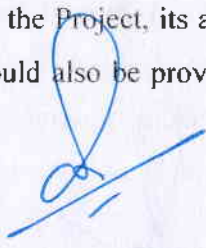
and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

15. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger / Elephant Reserves / (existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
16. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and Rare Endangered and Threatened (RET) Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled - I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
17. Proximity to Areas declared as 'Critically Polluted' or the Project areas attracting court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
18. R&R Plan / compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the



mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

19. One season (non-monsoon) primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM<sub>10</sub>, particularly for free silica, should be given.
20. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. Details of the model used and input parameters used for modeling should be provided for both mining and non-mining scenario. The air quality contours should be shown on a location map clearly indicating the location of the site, location of sensitive receptors, and the habitation. The wind roses showing pre-dominant wind direction also be indicated on the map.
21. Soft copy of geo-tagged site photographs of each locations used of collection of data for various environmental parameters for each monitoring dates shall be submitted separately in CD.
22. The Project Proponent shall prepare report with the provisions contained in Ministry of Environment, Forest & Climate Change OM Vide F. No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibilities.
23. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

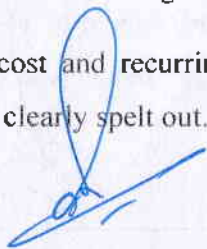




24. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
25. Description of water conservation measures proposed to be adopted in the Project should be given.
26. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
27. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
28. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
29. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
30. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck / tractor and other vehicular traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.



31. A detailed report shall be submitted using suitable model used to predict increase in air pollutants due to increased traffic load due to proposed project.
32. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
33. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
34. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
35. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
36. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
37. The issues raised in Public Consultation Process and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA / EMP Report of the Project.
38. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
39. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.



40. A Disaster management Plan shall be prepared and included in the EIA / EMP Report.
41. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
42. Besides the above, the below mentioned general points are also to be followed:-
- a) All documents to be properly referenced with index and continuous page numbering.
  - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
  - c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC / NABL accredited laboratories. All the original analysis / testing reports should be available during appraisal of the Project.
  - d) Where the documents provided are in a language other than English, an English translation should be provided.
  - e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
  - f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
  - g) Changes, if any made in the basic scope and project parameters (as submitted in Form - I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Consultation changes in structure and content of the draft EIA / EMP (other than modifications arising out of the Public Consultation process) will entail conducting the Public Consultation again with the revised documentation.

- h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, and (ii) geological maps and sections clearly showing the land features of the adjoining area.





## Annexure – V (Pulp and Paper Industry – ToR)

### A. TERMS OF REFERENCE

#### 1. Executive Summary.

#### 2. Introduction.

- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent.
- iii. Importance and benefits of the project.

#### 3. Project Description.

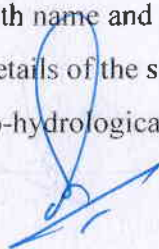
- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities.
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion / modernization proposals.
  - a) Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC / SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing

existing operation of the project from SPCB shall be attached with the EIA - EMP report.

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

#### 4. Site Details.

- i. Location of the project site covering village, Taluka / Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10 km and site location on 1:50,000 / 1:25,000 scale on an A3 / A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).
- iii. Details w.r.t. option analysis for selection of site.
- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area / Estate / Complex, layout of Industrial Area indicating location of unit within the Industrial area / Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation / greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government / private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10 km radius) shall be incorporated. Land use details of the study area.
- x. Geological features and Geo-hydrological status of the study area shall be included.



- xi. Details of Drainage of the project upto 5 km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects).
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy.

## 5. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100 meter upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB / MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB / MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule - I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

## 6. Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based onsite-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E (P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MoU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste -



- minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
  - ix. Action plan for the green belt development plan in 33% area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
  - x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
  - xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
  - xii. Action plan for post-project environmental monitoring shall be submitted.
  - xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

## 7. Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far& Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are

not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.

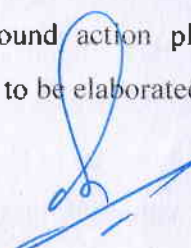
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

## 8. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
  - ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
  - iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
  - iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.
9. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

## 10. Enterprise Social Commitment (ESC)

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



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

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

**B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR PULP & PAPER INDUSTRY EXCLUDING MANUFACTURING OF PAPER FROM WASTE PAPER AND MANUFACTURE OF PAPER FROM READY PULP WITHOUT BLEACHING**

1. For major Pulp and Paper Units, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
2. MRL details of project site and RL of nearby sources of water shall be indicated.
3. A note on pulp washing system capable of handling wood pulp shall be included.
4. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln.
5. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus / Casuarina to produce low kappa (bleachable) grade of pulp.

6. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
7. A commitment that no extra bleaching chemicals (more than being used now) will be employed and AOX will remain within limits as per CREP for used based mills.
8. Plan for reduction of water consumption.

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